

Inventory of Paleozoic radiolarian species (1880-2016)

Jonathan C. AITCHISON

School of Earth and Environmental Sciences,
University of Queensland, St Lucia, Qld 4072 (Australia)
jona@uq.edu.au (corresponding author)

Noritoshi SUZUKI

Department of Earth Science, Graduate School of Science,
Tohoku University, 6-3 Aoba, Aramaki, Aoba-ku, Sendai 980-8578 (Japan)
norinori@m.tohoku.ac.jp

Luis O'DOGHERTY

Facultad de Ciencias del Mar, Universidad de Cádiz,
E-11510 Puerto Real (Spain)
luis.odogherty@uca.es

Published on 29 September 2017

urn:lsid:zoobank.org:pub:9072CEF3-2F28-415D-A239-24E6A55DC3E6

Aitchison J. C., Suzuki N. & O'Dogherty L. 2017. — Inventory of Paleozoic radiolarian species (1880-2016), in Danelian T., Caridroit M., Noble P. & Aitchison J. C. (eds), Catalogue of Paleozoic radiolarian genera. *Geodiversitas* 39 (3): 533-637.
<https://doi.org/10.5252/g2017n3a6>

ABSTRACT

This paper presents, for the first time, a complete list of Paleozoic radiolarian species (mainly Polycystina) described between 1880 and early 2016. It records 2323 names of taxa described originally as new species or subspecies that have been assigned to radiolarians. This list attempts to only provide an objective record without revision of taxonomic status, and thus includes invalid taxa, junior objective or subjective synonyms, *nomina dubia* and *nomina nuda*.

RÉSUMÉ

Inventaire des espèces de radiolaires du Paléozoïque (1880-2016).

Cet article présente, pour la première fois, une liste complète d'espèces de radiolaires du Paléozoïque (principalement des polycystines) décrites entre 1880 et début 2016. Il contient 2323 noms de taxons, décrits à l'origine comme des nouvelles espèces ou sous-espèces, affectées aux radiolaires. Cette liste vise donc à en fournir un état objectif, sans révision de leur statut taxonomique, et comprend donc des taxons valides, des synonymes juniors objectifs ou subjectifs, des *nomina dubia* et *nomina nuda*.

KEY WORDS

Paleozoic,
radiolarians,
polycystina,
inventory.

MOTS CLÉS
Paléozoïque,
radiolaires,
polycystines,
inventaire.

OBJECTIVES

Following the publication of the Inventory of Mesozoic radiolarian species (O'Dogherty 2009) there was general agreement of participants in workshops held by the Paleozoic Working Group that it would be useful for the community of researchers if a similar document could be produced for Paleozoic radiolarians.

Here we present a comprehensive list of all the Paleozoic radiolarian species of which we are aware that have been described between the late 1800s and early 2016. The intention is to provide in a single file, the names of all Paleozoic species that have been published. All names listed are the original names given in the original publication, and do not reflect any subsequent taxonomic revision or evaluation as to their validity and assignment at higher taxonomic levels. The list records 2323 taxa described originally as either new species or subspecies. Although every attempt has been made to be as complete as possible it is perhaps inevitable that some taxa may be missing. The purpose of this list is to provide information on: 1) the original Linnean combination used when a species was erected as new in Paleozoic material; 2) the author(s) and page(s) on which it is described; 3) the age of the holotype or of the name-bearing type as originally published (note in some cases there may have been considerable revision of the original age determination); and 4) the order to which the species or sub-species belongs (the numbers of which are indicated in parentheses with each order): Al, Albaillellaria (363); Ar, Archaeospicularia (154); E, Entactinaria (726); L, Latentifistularia (194); ?N, possible Nassellaria (111); S, Spumellaria (207); IS, incertae sedis within orders (72), incertae sedis in both order and family (35), with 368 names that can be regarded as *nomina dubium* (n.d.) and 158 names introduced as *nomina nuda* (n.n.). Forty-four taxa are clearly not radiolarians (n.r.) with 15 of these Calcarea and five others that can be assigned as sponge spicules (s.s.) also identified. Eleven names are invalid. Type species (T, valid type species; Td, types that are *nomina dubia*; Th, types that are homonyms; Ti, type species that are invalid names; and Ts, types that are synonyms) are indicated.

COMPILATION OF SPECIES NAMES

The list of taxa has been compiled following a detailed search of >1250 publications dealing with Paleozoic radiolarians of which 259 introduce new taxa. Synonyms and species descriptions are not included because this is beyond the scope of the project and would require several years of work by many research groups. The general agreement of participants at the workshops was that it would be useful to take this opportunity to make a step towards addressing species-level taxonomy of species once the revision of genera has been fully achieved. Such a work would have the additional benefit of providing a better-defined starting point for future taxonomists.

FUTURE WORK

Objective evaluation of each species with respect to its taxonomic status and the subjective assignment to valid genera is the next step towards attaining a full proper standard of taxonomy and stratigraphy for Paleozoic radiolarians. Evaluation of each species, unless one is personally familiar with it, is a time-consuming task depending on the availability of literature and given that there are 2323 species names to be evaluated is well beyond the scope of this particular work, which is meant to focus on the genera. However, we emphasize that the species treatment is a logical future task of the Paleozoic Working Group. It is our intention herein to simply provide this list as a useful starting point for any such study.

Acknowledgements

We thank all our fellow radiolarian researchers who have, in various ways, contributed to the accumulation of the body of data that has allowed development of this biozonation. JA thanks Sarah Kachovich for her help in editing this list and he also acknowledges financial support towards investigation of Early Paleozoic radiolarian evolution in the form of a grant from the Australian Research Council (ARC DP 1501013325). We also gratefully acknowledge reviews by Taniel Danelian and Paula Noble.

REFERENCES

- ABERDEEN E. 1940. — Radiolarian fauna of the Caballos Formation, Marathon Basin, Texas. *Journal of Paleontology* 14 (2): 127-139. <http://www.jstor.org/stable/1298566>
- AFANASIEVA M. S. 1986. — Radiolarians of the family Pylentonemidae. *Paleontological Journal* 3: 22-34.
- AFANASIEVA M. S. 1993. — New data on the Early Paleozoic radiolarian genus *Caspiazza*. *Paleontological Journal* 4: 115-118.
- AFANASIEVA M. S. 1997a. — Early Frasnian Radiolarians and their biostratigraphical significance. *Doklady Akademii Nauk* 355 (2): 217-222.
- AFANASIEVA M. S. 1997b. — *Moscovistella victoralis*, the victorious star of Moscow. *Izvestija Vysshikh Uchebnykh Zavedeniy. Geologiya i Razvedka* 5: 38-41.
- AFANASIEVA M. S. 2000a. — *Atlas of Paleozoic Radiolaria of the Russian Platform*. Scientific World, Moscow, 477 p.
- AFANASIEVA M. S. 2000b. — New radiolarians of the superfamily Entactinoidea from the Upper Devonian of Timan-Pechora Province, Russia. *Paleontological Journal* 34 (2): 131-146.
- AFANASIEVA M. S. 2000c. — New radiolarians of the orders Aculearia and Sphaerellaria from the Upper Devonian of the Timan-Pechora Province (Russia). *Paleontological Journal* 34 (4): 359-376.
- AFANASIEVA M. 2011. — Revision of the genus *Entactinosphaera* Foreman, 1963 and the new genus *Retientactinosphaera* gen. nov. (Paleozoic radiolaria). *Paleontological Journal* 45 (2): 117-129. <https://doi.org/10.1134/S003103011102002X>
- AFANASIEVA M. S. & AMON E. 2008. — New radiolarians from the Devonian of the southern Ural Mountains: 1. Early-Middle Devonian (Late Emsian-Early Eifelian). *Paleontological Journal* 42 (2): 451-467.
- AFANASIEVA M. S. & AMON E. O. 2009a. — New Radiolarians from the Devonian of the Southern Ural Mountains: 2. Middle-Late Devonian. *Paleontological Journal* 43 (1): 34-49.
- AFANASIEVA M. S. & AMON E. O. 2009b. — Evolution of Devonian biodiversity of radiolarians with two porous spheres and one main spine. *Paleontological Journal* 43 (5): 483-498. <https://doi.org/10.1134/S0031030109050037>

- AFANASIEVA M. S. & AMON E. O. 2011. — Devonian Radiolarians of Russia. *Paleontological Journal* 45 (11): 1313-1532. <https://doi.org/10.1134/S0031030111110013>
- AFANASIEVA M. S. & AMON E. O. 2012. — New Middle Devonian radiolarians from western Mugodzhary. *Paleontological Journal* 46 (6): 549-551. <https://doi.org/10.1134/S0031030112060020>
- AFANASIEVA M. S. & AMON E. O. 2016. — New radiolarian genera and species from the Lower Permian of the Southern Urals and Northern Mugodzhary. *Paleontological Journal* 50 (3): 209-221. <https://doi.org/10.1134/S0031030116020027>
- AITCHISON J. C. 1993a. — *Albaillellaria* from the New England orogen, Eastern NSW, Australia. *Marine Micropaleontology* 21 (4): 353-367. [https://doi.org/10.1016/0377-8398\(93\)90026-T](https://doi.org/10.1016/0377-8398(93)90026-T)
- AITCHISON J. C. 1993b. — Devonian (Frasnian) Radiolarians from the Gogo Formation, Canning Basin, Western Australia. *Palaeographica Abteilung A: Palaeozoologie-Stratigraphie* 228 (4-6): 105-128.
- AITCHISON J. C. 1998. — A Lower Ordovician (Arenig) radiolarian fauna from the Ballantrae Complex, Scotland. *Scottish Journal of Geology* 34 (1): 73-81. <https://doi.org/10.1144/sjg34010073>
- AITCHISON J. C., HADA S., IRELAND T. & YOSHIKURA S. 1996. — Ages of Silurian radiolarians from the Kurosegawa terrane, Southwest Japan constrained by U/Pb shrimp data. *Journal of Southeast Asian Earth Sciences* 14 (1-2): 53-70. [https://doi.org/10.1016/S0743-9547\(96\)00045-1](https://doi.org/10.1016/S0743-9547(96)00045-1)
- AITCHISON J. C., FLOOD P. G. & MALPAS J. 1998. — Lowermost Ordovician (basal Tremadoc) radiolarians from the Little Port Complex, western Newfoundland (Lower Ordovician radiolarians, Newfoundland). *Geological Magazine* 135 (3): 413-419. <https://doi.org/10.1017/S001675689800867X>
- AITCHISON J. C., DAVIS A. M., STRATFORD J. M. C. & SPILLER F. C. P. 1999. — Lower and Middle Devonian radiolarian biozonation of the Gamilaroi terrane New England Orogen, eastern Australia. *Micropaleontology* 45 (2): 138-162. <https://doi.org/10.2307/1486110>
- AMON E. O. & BRAUN A. 1994. — Radiolarians from lower Permian deposits of the Belskaya depression, Bashkiria (west slope of southern Urals; Artinskian stage, Burtsevsky horizon), in NAIRN A. E. M. & KOROTEEV A. V. (eds), *Contributions to Eurasian Geology; Permian Conference Papers*. Occasional Publications ESRI, Columbia, USA 9: 1-7.
- AMON E. O., BRAUN A. & CHUVASHOV B. I. 1990. — Lower Permian (Artinskian) Radiolaria from the Sim type section, Southern Urals. *Geologica et Palaeontologica* 24: 115-137.
- AMON E. O., BRAUN A. & IVANOV K. S. 1995. — Upper Silurian radiolarians from the southern Urals. *Geologica et Palaeontologica* 29: 1-18.
- BELYANSKY G. S., NIKITA A. P. & RUDENKO V. S. 1984. — About Sebuchaz suite of Primorye, in POYARKOVA Z. N. (ed.), *New Data an Detail Biostratigraphy of Phanerozoic of Far East*. DVNC Akademii Nauk SSSR, Vladivostok: 43-57.
- BENGTON S. 1986. — Siliceous microfossils from the Upper Cambrian of Queensland. *Alcheringa* 10 (3): 195-216. <https://doi.org/10.1080/03115518608619155>
- BOUNDY-SANDERS S. Q., SANDBERG A. A., MURCHEY B. L. & HARRIS A. G. 1999. — A late Frasnian (Late Devonian) radiolarian, sponge spicule, and conodont fauna from the Slaven Chert, northern Shoshone Range, Roberts Mountains allochthon, Nevada. *Micropaleontology* 45 (1): 62-68. <https://doi.org/10.2307/1486203>
- BRAUN A. 1989. — Neue unterkarbonische Radiolarien-Taxa aus Kieselschiefer-Gerollen des unteren maintales bei Frankfurt a. M. *Geologica et Palaeontologica* 23: 83-99.
- BRAUN A. 1990. — Radiolarien aus dem Unter-Karbon Deutschlands. *Courier Forschungs Institut Senckenberg* 133: 1-177.
- BRAUN A., MAASS R. & SCHMIDT-EFFING R. 1992. — Oberdevonische Radiolarien aus dem Breuschtal (Nord-Vogesen, Elsass) und ihr regionaler und stratigraphischer Zusammenhang. *Neues Jahrbuch für Geologie und Paläontologie, Abhandlungen* 185 (2): 161-178.
- BYKOVA E. V. 1955. — Foraminifery i radiolyarpii devona volgo-uralskoi oblasti i tsentralnogo devonskogo polya i izznachenie dlya stratigrafi [Foraminifera and radiolarians of the Devonian of the Volga-Ural area]. *Proceedings of the All Union Petroleum Scientific Research Institute for Geological Survey (VNIGRI), new series* 87: 5-189.
- CARIDROIT M. & DE WEVER P. 1984. — Description de quelques nouvelles espèces de Follicullidae et d'Entactinidae (Radiolaires polycystines) du Permien du Japon. *Geobios* 17 (5): 639-644. [https://doi.org/10.1016/S0016-6995\(84\)80035-2](https://doi.org/10.1016/S0016-6995(84)80035-2)
- CARIDROIT M. & DE WEVER P. 1986. — Some late Permian radiolarians from pelitic rocks of the Tatsunoformation (Hyogo Prefecture), Southwest Japan. *Marine Micropaleontology* 11: 55-90. [https://doi.org/10.1016/0377-8398\(86\)90005-8](https://doi.org/10.1016/0377-8398(86)90005-8)
- CARIDROIT M., DANELIAN T., O'DOGHERTY L., CUVELIER J., AITCHISON J. C., POUILLE L., NOBLE P., DUMITRICA P., SUZUKI N., KUWAHARA K., MALETZ J. & FENG Q. 2017. — An illustrated catalogue and revised classification of Paleozoic radiolarian genera, in DANELIAN T., CARIDROIT M., NOBLE P. & AITCHISON J. C. (eds), Catalogue of Paleozoic radiolarian genera. *Geodiversitas* 39 (3): 363-417. <https://doi.org/10.5252/g2017n3a3>
- CATALANO R., DI STEFANO P. & KOZUR H. 1989. — Lower Permian Albaillellacea (Radiolaria) from Sicily and their stratigraphic and paleogeographic significance. *Rendiconto dell'Accademia delle Scienze fisiche e matematiche, Serie IV* 56: 1-24.
- CHAPMAN F. 1923. — Report on fossils from an Upper Cambrian horizon at Loyola, near Mansfield. *Bulletin of the Geological Survey of Victoria* 46: 34-45.
- CHENG Y.-N. 1986. — *Taxonomic Studies on Upper Paleozoic Radiolaria*. National Museum of Natural Science, Taiwan, Special Publication, vol. 1, 310 p.
- CONWAY MORRIS S. & CHEN M. 1990. — *Blastulospongia polytreta* n.sp. an enigmatic organism from the Lower Cambrian of Hubei, China. *Journal of Paleontology* 64 (1): 26-30. <https://doi.org/10.1017/S0022336000042207>
- CORDEY F. 1998. — Radiolaires des complexes d'accrétion de la Cordillère Canadienne (Colombie-Britannique). *Geological Survey of Canada, Bulletin* 509: 1-209.
- CORNELL W. C. & SIMPSON R. D. 1985. — New Permian albaillellid radiolarians from West Texas. *Micropaleontology* 31 (3): 271-279. <https://doi.org/10.2307/1485545>
- CORNELL W. C. & SIMPSON R. D. 1986. — *Nabespecha leonardia*, n. gen., n. sp.: An unusual radiolarian from the Permian of West Texas. *Micropaleontology* 32 (3): 286-288. <https://doi.org/10.2307/1485623>
- DANELIAN T. & FLOYD J. D. 2001. — Progress in describing Ordovician siliceous biodiversity from the Southern Uplands (Scotland, U.K.). *Transactions of the Royal Society of Edinburgh: Earth Sciences* 91 (3-4): 489-498. <https://doi.org/10.1017/S0263593300008336>
- DANELIAN T. & POPOV L. 2003. — Ordovician radiolarian biodiversity: insights based on new and revised data from Kazakhstan. *Bulletin de la Société géologique de France, Série VIII* 174 (4): 325-335. <https://doi.org/10.2113/174.4.325>
- DANELIAN T., POPOV L. E., TOLMACHEVA T. Y., GHOBADI POUR M. G., NEYEVIN A. V. & MIKOLAICHUK A. V. 2011. — Ordovician radiolaria and conodonts from the peri-Gondwanan Karatau-Naryn microplate (Sarydzhab, eastern Kyrgyzstan). *Geobios* 44 (6): 587-599. <https://doi.org/10.1016/j.geobios.2011.02.006>
- DE WEVER P. & CARIDROIT M. 1984. — Description de quelques nouveaux Latentifistulidae (radiolaires polycystines) Paléozoïques du Japon. *Revue de Micropaléontologie* 27 (2): 98-106.
- DEFLANDRE G. 1952. — *Albaillella* nov. gen., radiolaire fossile du Carbonifère inférieur, type d'une lignée aberrante éteinte. *Comptes Rendus hebdomadaires des Séances de l'Académie des Sciences (Paris), Série D: Sciences naturelles* 234: 872-874. <http://gallica.bnf.fr/ark:/12148/bpt6k3186w>
- DEFLANDRE G. 1953. — Radiolaires fossiles, in GRASSE P. P. (ed.), *Traité de Zoologie*. Masson, Paris: 389-436.
- DEFLANDRE G. 1955. — *Palaeocryptidium* n.g. *cayeuxi* n.sp., microorganismes incertae sedis des phanites briovériens bretons. *Comptes Rendus sommaire de la Société géologique de France* 9-10: 182-185.

- DEFLANDRE G. 1958. — *Lapidopiscum* nov. gen., type nouveau de Radiolaire viséen, famille des Lapidopiscidae fam. nov., de l'ordre des Albaillellidae Defl. 1953. *Comptes Rendus hebdomadaires des Séances de l'Académie des Sciences (Paris)*, Série D: *Sciences naturelles* 246: 2278-2280. <http://gallica.bnf.fr/ark:/12148/bpt6k723q>
- DEFLANDRE G. 1960. — À propos du développement des recherches sur les Radiolaires fossiles. *Revue de Micropaléontologie* 2 (4): 212-218.
- DEFLANDRE G. 1963. — *Pylentonema*, nouveau genre de Radiolaire du Viséen : Sphaerellaire ou Nassellaire ? *Comptes Rendus hebdomadaires des Séances de l'Académie des Sciences (Paris)*, Série D: *Sciences naturelles* 257: 3981-3984. <http://gallica.bnf.fr/ark:/12148/bpt6k4009k>
- DEFLANDRE G. 1964. — La famille des Popofskyellidae fam. nov. et le genre *Popofskyllum* Defl., Radiolaires viséens de la Montagne Noire. *Comptes Rendus hebdomadaires des Séances de l'Académie des Sciences (Paris)*, Série D: *Sciences naturelles* 259: 3055-3058. <http://gallica.bnf.fr/ark:/12148/bpt6k4015m>
- DEFLANDRE G. 1972a. — Le système trabéculaire interne chez les Pylentonémidés et les Popofskyellidés, Radiolaires du Paléozoïque. Phylogénèse des Nassellaires. *Comptes Rendus hebdomadaires des Séances de l'Académie des Sciences (Paris)*, Série D: *Sciences naturelles* 274 (26): 3535-3540. <http://gallica.bnf.fr/ark:/12148/bpt6k5682741m>
- DEFLANDRE G. 1972b. — Remarques complémentaires sur la morphologie et la nomenclature de quelques genres de Radiolaires du Paléozoïque. *Comptes Rendus hebdomadaires des Séances de l'Académie des Sciences (Paris)*, Série D: *Sciences naturelles* 275 (1): 13-16. <http://gallica.bnf.fr/ark:/12148/bpt6k57786873>
- DEFLANDRE G. 1973a. — Sur quelques nouveaux types de radiolaires Polycystines viséens, d'attribution systématique ambiguë, certains évoquant à la fois des Plectellaires et des Spumellaires. *Comptes Rendus hebdomadaires des Séances de l'Académie des Sciences (Paris)*, Série D: *Sciences naturelles* 276: 289-293. <http://gallica.bnf.fr/ark:/12148/bpt6k5803214k>
- DEFLANDRE G. 1973b. — Compléments historiques et taxinomiques sur les Radiolaires viséens. Remarques critiques sur les Plectellaires. *Comptes Rendus hebdomadaires des Séances de l'Académie des Sciences (Paris)*, Série D: *Sciences naturelles* 276 (1): 497-500. <http://gallica.bnf.fr/ark:/12148/bpt6k5803214k>
- DEFLANDRE G. 1973c. — Observations et remarques sur les Radiolaires Sphaerellaires du Paléozoïque, à propos d'une nouvelle espèce, viséenne, du genre *Foremaniella* Defl., parfait intermédiaire entre les Périaixoplastidiés et les Pylentonémidés. *Comptes Rendus hebdomadaires des Séances de l'Académie des Sciences (Paris)*, Série D: *Sciences naturelles* 276 (1): 1147-1151. <http://gallica.bnf.fr/ark:/12148/bpt6k5803214k>
- DEFLANDRE G. 1973d. — Sur quelques nouvelles espèces d'*Archocyrtium*, radiolaires Pylentonemidae du Viséen de Cabrières. *Comptes Rendus hebdomadaires des Séances de l'Académie des Sciences (Paris)*, Série D: *Sciences naturelles* 277: 149-152. <http://gallica.bnf.fr/ark:/12148/bpt6k5474901n>
- DEFLANDRE G. & DEFLANDRE-RIGAUD M. 1958. — Données paléontologiques sur l'ontogenèse de la coque des radiolaires Sphaerellaires. Conséquences taxonomiques. *Comptes Rendus hebdomadaires des Séances de l'Académie des Sciences (Paris)*, Série D: *Sciences naturelles* 246 (6): 968-970. <http://gallica.bnf.fr/ark:/12148/bpt6k3198s>
- DEMANET F. 1938. — La faune des Couches de passage du Dinantien au Namurien dans le synclinorium de Dinant. *Mémoires du Musée royal d'Histoire naturelle de Belgique* 84: 1-201.
- DONG X. P., KNOLL A. H. & LIPPS J. H. 1997. — Late Cambrian Radiolaria from Hunan, China. *Journal of Paleontology* 71 (5): 753-758. <https://doi.org/10.1017/S002233600003571X>
- FENG Q. 1992. — Permian and Triassic radiolarian biostratigraphy in south and southwest China. *Journal of China University of Geosciences* 3 (1): 51-62.
- FENG Q. & LIU B. 1992. — One new species of early Devonian radiolarian from west Yunnan. *Science in China, Series D: Earth Sciences* 35 (5): 549-553.
- FENG Q. & LIU B. 1993. — Permian radiolarian in southwest Yunnan. *Earth Science, Journal of China University of Geosciences* 18 (5): 540-564.
- FENG Q. & YE M. 1996. — Radiolarian stratigraphy of Devonian through Middle Triassic in southwestern Yunnan, in FANG N. & FENG Q. (eds), *Devonian to Triassic Tethys in Western Yunnan, China*. China University of Geosciences Press, Wuhan: 15-22.
- FENG Q. & GU S. 2002. — Uppermost Changxingian (Permian) radiolarian fauna from southern Guizhou, southwestern China. *Journal of Paleontology* 76 (5): 797-809. <https://doi.org/10.1017/S0022336000037483>
- FENG Q., MEI Y. & ZHANG Z. 1997. — Early Carboniferous radiolarians from western Yunnan. *Acta Micropalaeontologica Sinica* 14 (1): 79-92.
- FENG Q., FANG N., ZHANG Z. & HUANG J. 1998. — Uppermost Permian Radiolaria from southwestern China. *Journal of China University of Geosciences* 9 (3): 238-245.
- FENG Q., GU S., JIANG M. & JIN Y. 2004a. — Two new radiolarian genera from the uppermost Permian of southern China. *Revue de Micropaléontologie* 47 (3): 135-143. [https://doi.org/10.1016/S0035-1598\(04\)00033-9](https://doi.org/10.1016/S0035-1598(04)00033-9)
- FENG Q., HELMCKE D., CHONGLAKMANI C., INGAVAT-HELMCKE R. & LIU B. 2004b. — Early Carboniferous radiolarians from northwest Thailand: palaeogeographical implications. *Palaeontology* 47 (2): 377-393. <https://doi.org/10.1111/j.0031-0239.2004.00370.x>
- FENG Q., HE W., GU S., JIN Y. & MENG Y. 2006a. — Latest Permian Spumellaria and Entactinaria (Radiolaria) from South China. *Revue de Micropaléontologie* 49 (1): 21-43. <https://doi.org/10.1016/j.revmic.2005.11.003>
- FENG Q., HE W., ZHANG S. & GU S. 2006b. — Taxonomy of order Latentifistularia (Radiolaria) from the Latest Permian in Southern Guangxi, China. *Journal of Paleontology* 80 (5): 826-848. [https://doi.org/10.1666/0022-3360\(2006\)80\[826:TOOLRF\]2.0.CO;2](https://doi.org/10.1666/0022-3360(2006)80[826:TOOLRF]2.0.CO;2)
- FENG Q., MENG Y., HE W. & GU S. 2006c. — A new genus of Entactiniidae (Radiolaria) from the Upper Permian of South China. *Ectogae geologicae Helvetiae* 99 (supplement 1): S67-S78. <https://doi.org/10.1007/s00015-006-0608-z>
- FENG Q., GU S., HE W. & JIN Y. 2007. — Latest Permian Entactinaria (Radiolaria) from southern Guangxi, China. *Journal of Micropalaeontology* 26 (1): 19-40. <https://doi.org/10.1144/jm.26.1.19>
- FENG Q., MEI Y. & CRASQUIN S. 2009. — Latest Permian Palaeolithocyliidae (Radiolaria) from South China. *Revue de Micropaléontologie* 52 (2): 141-148. <https://doi.org/10.1016/j.revmic.2007.08.008>
- FOREMAN H. P. 1963. — Upper Devonian Radiolaria from the Huron member of the Ohio shale. *Micropaleontology* 9 (3): 267-304. <https://doi.org/10.2307/1484751>
- FURUTANI H. 1983. — Middle Palaeozoic Palaeoscenidiidae (Radiolaria) from Mt. Yokokura, Shikoku, Japan. Part 1. *Transactions and Proceedings of the Palaeontological Society of Japan, New Series* 130: 96-116. https://doi.org/10.14825/prpsj1951.1983.130_96
- FURUTANI H. 1990. — Middle Paleozoic radiolarians from Fukujii Area, Gifu Prefecture, central Japan. *Journal of Earth Sciences Nagoya University* 37: 1-56.
- GOODBODY Q. H. 1986. — Wenlock Palaeoscenidiidae and Entactiniidae (Radiolaria) from the Cape Phillips Formation of the Canadian Arctic Archipelago. *Micropaleontology* 32 (2): 129-157. <https://doi.org/10.2307/1485627>
- GOTO H., UMEDA M. & ISHIGA H. 1992. — Late Ordovician Radiolarians from the Lachlan Fold Belt, Southeastern Australia. *Memoirs of the Faculty of Science, Shimane University* 26: 145-170.
- GORUMELON F. 1986. — Étude des radiolaires d'un nodule phosphaté du Carbonifère inférieur de Bareilles, Hautes-Pyrénées, France. *Geobios* 19 (2): 179-206. [https://doi.org/10.1016/S0016-6995\(86\)80044-4](https://doi.org/10.1016/S0016-6995(86)80044-4)

- GOURMELON F. 1987. — Les Radiolaires tournaisiens des nodules phosphatés de la Montagne Noire et des Pyrénées centrales. *Biostratigraphie du Paléozoïque* 6: 1-172.
- GUI B., FENG Q. & YUAN A. 2009. — Late Changhsingian (Latest Permian) radiolarians from Chaohu, Anhui. *Journal of Earth Science* 20 (5): 797-810. <https://doi.org/10.1007/s12583-009-0069-1>
- HAO Y. & SHU D. 1987. — The oldest known well-preserved Phaeodarina (Radiolaria) from southern Shensi. *Geoscience (Beijing)* 1 (3-4): 301-310.
- HE W., FENG Q., GU S. & JIN Y. 2005. — Changxingian (Upper Permian) radiolarian fauna from Meishan D Section, Changxing, Zhejiang, China, and its possible paleoecological significance. *Journal of Paleontology* 79 (2): 209-218. [https://doi.org/10.1666/0022-3360\(2005\)079<0209:CUPRFF>2.0.CO;2](https://doi.org/10.1666/0022-3360(2005)079<0209:CUPRFF>2.0.CO;2)
- HE W., ZHANG Y., ZHANG Q., ZHANG K., YUAN A. & FENG Q. 2011. — A latest Permian radiolarian fauna from Hushan, South China, and its geological implications. *Alcheringa* 35 (4): 471-496. <https://doi.org/10.1080/03115518.2010.536649>
- HINDE G. J. 1890. — Notes on Radiolaria from the Lower Palaeozoic rocks (Llandeilo-Caradoc) of the South of Scotland. *Annals and Magazine of Natural History, sixth series*, 6: 40-59. <https://doi.org/10.1080/00222939008693993>
- HINDE G. J. 1899a. — On the Radiolaria in the Devonian rocks of New South Wales. *Quarterly Journal of the Geological Society of London* 55: 38-64. <https://doi.org/10.1144/GSL.JGS.1899.05.01-04.06>
- HINDE G. J. 1899b. — On Radiolaria in chert from Chypons Farm, Mullion Parish (Cornwall). *Quarterly Journal of the Geological Society of London* 55: 214-219. <https://doi.org/10.1144/GSL.JGS.1899.05.01-04.14>
- HINDE G. J. & FOX H. 1895. — On a well-marked horizon of radiolarian rocks in the Lower Culm Measures of Devon, Cornwall and West Somerset. *Quarterly Journal of the Geological Society of London* 51: 609-668. <https://doi.org/10.1144/GSL.JGS.1895.051.01-04.45>
- HINZ-SCHALLREUTER I. & SCHALLREUTER R. 2003. — Radiolarians from the Sularp shale (Ordovician of Scania). *Geschiebekunde Aktuell* 19 (3): 69-85.
- HOLDSWORTH B. K. 1966. — A preliminary study of the palaeontology and palaeoenvironment of some Namurian limestone 'bullions'. *The Mercian Geologist* 1 (4): 315-337.
- HOLDSWORTH B. K. 1969. — Namurian Radiolaria of the genus *Ceratoikiscum* from Staffordshire and Derbyshire, England. *Micro-paleontology* 15 (2): 221-229. <https://doi.org/10.2307/1484921>
- HOLDSWORTH B. K. & JONES D. L. 1980. — Preliminary radiolarian zonation for late Devonian through Permian time. *Geology* 8 (6): 281-285. [https://doi.org/10.1130/0091-7613\(1980\)8<281:PRZFLD>2.0.CO;2](https://doi.org/10.1130/0091-7613(1980)8<281:PRZFLD>2.0.CO;2)
- HOLDSWORTH B. K. & MURCHEY B. L. 1988. — Paleozoic radiolarian biostratigraphy of the northern Brooks Range, Alaska, in GRYC G. (ed.), *Geology and Exploration of the National Petroleum Reserve in Alaska, 1974 to 1982*. United States Geological Survey, professional Paper, Report 1399: 777-797.
- ISAKOVA T. N. & NAZAROV B. B. 1986. — Late Carboniferous-Early Permian stratigraphy and microfauna of the Southern Urals. *Doklady Akademii Nauk SSSR* 402: 1-183.
- ISHIGA H. 1982. — Late Carboniferous and Early Permian radiolarians from the Tamba Belt, Southwest Japan. *Earth Science, Journal of the Association for the Geological Collaboration in Japan* 36 (6): 333-339.
- ISHIGA H. 1983. — Morphological change in the Permian Radiolaria, *Pseudoalbaillella scalprata* in Japan. *Transactions and Proceedings of the Palaeontological Society of Japan, New Series* 129: 1-8. https://doi.org/10.14825/prpsj1951.1983.129_1
- ISHIGA H. 1988. — Middle and Late Paleozoic Radiolarian Biostratigraphy of Japan. *Geological Report Shimane University* 7: 69-76. <http://ir.lib.shimane-u.ac.jp/6303>
- ISHIGA H. 1991. — Description of a new *Follicucullus* species from southwest Japan. *Memoirs of the Faculty of Science, Shimane University* 25: 107-118.
- ISHIGA H. 1992. — Middle Paleozoic radiolarians of the genus *Ceratoikiscum* from Japan, in ISHIZAKI K. & SAITI T. (eds), *Centenary of Japanese Micropaleontology*. Terra Scientific Publishing Company, Tokyo: 389-397.
- ISHIGA H. & IMOTO N. 1980. — Some Permian radiolarians in the Tamba District, Southwest Japan. *Earth Science, Journal of the Association for the Geological Collaboration in Japan* 34 (6): 333-345.
- ISHIGA H., KITO T. & IMOTO N. 1982a. — Late Permian radiolarian assemblages in the Tamba District and an adjacent area, Southwest Japan. *Earth Science, Journal of the Association for the Geological Collaboration in Japan* 36 (1): 10-22.
- ISHIGA H., KITO T. & IMOTO N. 1982b. — Middle Permian radiolarian assemblages in the Tamba District and an adjacent area, Southwest Japan. *Earth Science, Journal of the Association for the Geological Collaboration in Japan* 36 (5): 272-281.
- ISHIGA H., IMOTO N., YOSHIDA M. & TANABE T. 1984. — Early Permian radiolarians from the Tamba Belt, Southwest Japan. *Earth Science, Journal of the Association for the Geological Collaboration in Japan* 38 (1): 44-54.
- ISHIGA H., WATASE H. & NAKA T. 1986. — Permian radiolarians from Nishiki Group in Sangun-Chugoku Belt, Southwest Japan. *Earth Science, Journal of the Association for the Geological Collaboration in Japan* 40 (2): 124-136.
- ISHIGA H., LEITCH E. C., NAKA T., WATANABE T. & IWASAKI M. 1987. — Late Devonian Paleoscenidiidae from the Hastings Block, New England Fold Belt, N.S.W., Australia. *Earth Science, Journal of the Association for the Geological Collaboration in Japan* 41 (6): 297-302.
- JIN Y., FENG Q., MENG Y., HE W. & GU S. 2007. — Albaillellidae (Radiolaria) from the latest Permian in southern Guangxi, China. *Journal of Paleontology* 81 (1): 9-18. [https://doi.org/10.1666/0022-3360\(2007\)81\[9:ARFTLP\]2.0.CO;2](https://doi.org/10.1666/0022-3360(2007)81[9:ARFTLP]2.0.CO;2)
- JONES M. K. & NOBLE P. J. 2006. — Sheinwoodian (uppermost Lower Silurian) Radiolaria from the Cape Phillips Formation, Nunavut, Canada. *Micropaleontology* 52 (4): 289-315. <https://doi.org/10.2113/gsmicropal.52.4.289>
- KHABAKOV A. V. 1932. — O nakhodke fauny radiolyarii v kremnistykh slantsakh i yashmakh paleozoya Kavkazskogo khrebeta i ee paleogeograficheskym znachenii [On the discovery of radiolarians in the Paleozoic cherts and jaspers of the Caucasus Range and its paleogeographic significance]. *Bulletin of the United Geological and Prospecting Service of USSR* 51 (12): 219-225.
- KIESSLING W. & TRAGELEHN H. 1994. — Devonian Radiolarian Faunas of Conodont-dated localities in the Frankenwald (Northern Bavaria, Germany). *Abhandlungen der geologischen Bundesanstalt in Wien* 50: 219-255.
- KOZUR H. 1980. — Ruzhencevispongidae, eine neue Spumellaria Familie aus dem oberen Kungurian (Leonardian) und Sakmarian des Vorurals. *Geologisch Paläontologische Mitteilungen Innsbruck* 10 (6): 235-242.
- KOZUR H. 1981. — Albaillellidae (Radiolaria) aus dem Unterperm des Vorurals. *Geologisch Paläontologische Mitteilungen Innsbruck* 10 (8): 263-274.
- KOZUR H. 1993. — Upper Permian Radiolarians from the Sosio Valley Area, Western Sicily (Italy) and from the Uppermost Lamar Limestone of West Texas. *Jahrbuch der geologischen Bundesanstalt, Wien* 136 (1): 99-123.
- KOZUR H. 1997. — First discovery of Muellerisphaerida (inc. sedis) and *Eoalbaillella* (Radiolaria) in Turkey and the age of the siliciclastic sequence (clastic series) in Karaburun Peninsula. *Freiberger Forschungshefte C, Geowissenschaften Geologie* 4: 33-59.
- KOZUR H. & MOSTLER H. 1989. — Radiolarien und schwammskleren aus dem Unterperm des Vorurals. *Geologisch Paläontologische Mitteilungen Innsbruck, Sonderband* 2: 147-275.
- KOZUR H. W., MOSTLER H. & REPETSKI J. E. 1996. — Well-preserved Tremadocian primitive Radiolaria from the Windfall Formation of the Antelope Range, Eureka County, Nevada, U.S.A. *Geologisch Paläontologische Mitteilungen Innsbruck* 21: 245-271.

- KURIHARA T. 2007. — Uppermost Silurian to Lower Devonian radiolarians from the Hitoegane area of the Hida-Gaien terrane, central Japan. *Micropaleontology* 53 (3): 221-237. <https://doi.org/10.2113/gsmicropal.53.3.221>
- KURIHARA T. & SASHIDA K. 2000. — Taxonomy of Late Silurian to Middle Devonian radiolarians from the Kuzuryu Lake district of the Hida Gaien Belt, Fukui Prefecture, central Japan. *Micropaleontology* 46 (1): 51-71. <http://www.jstor.org/stable/1486025>
- KUWAHARA K. 1999. — Phylogenetic Lineage of Late Permian *Albaillella* (Albaillellaria, Radiolaria). *Journal of Geosciences, Osaka City University* 42 (6): 85-101.
- KUWAHARA K. & SAKAMOTO M. 1992. — Late Permian *Albaillella* (Radiolaria) from a bedded chert section in the Gujo-hachiman area of the Mino Belt, central Japan: preliminary report on morphometry and cluster analysis. *Journal of Geosciences, Osaka City University* 35 (3): 33-52.
- LI H. 1991. — First discovery of Middle Silurian Radiolaria fossils in Xinjiang. *Scientia Geologica Sinica* 1: 75.
- LI H. 1994. — Middle Silurian radiolarians from Keerhada, Xinjiang. *Acta Micropalaentologica Sinica* 11 (2): 259-272.
- LI H. 1995. — New genera and species of middle Ordovician Nasellaria and Albaillellaria from Baijingsi, Quilian Mountains, China. *Scientia Geologica Sinica* 4 (3): 331-346.
- LI Y. X. & WANG Y. J. 1991. — Upper Devonian (Frasnian) radiolarian fauna from the Liukiang Formation, eastern and southeastern Guangxi. *Acta Micropalaentologica Sinica* 8 (4): 395-404.
- LING H. Y. & FORSYTHE R. D. 1987. — Late Paleozoic pseudo-albaillellid radiolarians from southernmost Chile and their geological significance, in MCKENZIE G. D. (ed.), *Gonwanda Six: Structure, Tectonics, and Geophysics*. American Geophysical Union (Geophysical Monograph vol. 40): 253-260. <https://doi.org/10.1029/GM040p0221>
- LIU H. 1992. — Fossil radiolarians from the turbidite of the Middle Carboniferous east Tianshan Mountain, Xinjiang. *Journal of Northwest University, Natural Science Education* 22: 123-130, 169-170.
- LIU Y. & HAO S. 2006. — Evolutionary significance of pyletonemid radiolarians and their Late Devonian species from southwestern Tianshan, China. *Acta Geologica Sinica* 80 (5): 647-655.
- LUO H., AITCHISON J. C. & WANG Y. J. 2002. — Devonian (upper Emsian-lower Givetian) radiolarians from the Tanhe Formation, Nanning, Guangxi, Southwest China. *Micropaleontology* 48 (supplement 1): 113-127. <http://www.jstor.org/stable/1486015>
- MACDONALD E. W. 1998. — Llandovery Secuicollactinae and Rotasphaeridae (Radiolaria) from the Cape Phillips Formation, Cornwallis Island, Arctic Canada. *Journal of Paleontology* 72 (4): 585-604. <https://doi.org/10.1017/S0022336000040324>
- MACDONALD E. W. 1999. — *Insolitignum* n.gen. and *Palaeoephippium* Goodbody 1986 (Radiolaria) from the Lower Silurian of the Cape Phillips Formation, Arctic Canada. *Canadian Journal of Earth Science* 36 (12): 2051-2057. <https://doi.org/10.1139/e99-101>
- MACDONALD E. W. 2004. — Palaeoscenidiidae (Radiolaria) from the Lower Silurian of the Cape Phillips Formation, Cornwallis Island, Nunavut, Canada. *Journal of Paleontology* 78 (2): 257-274. [https://doi.org/10.1666/0022-3360\(2004\)078<0257:PRFTLS>2.0.CO;2](https://doi.org/10.1666/0022-3360(2004)078<0257:PRFTLS>2.0.CO;2)
- MACDONALD E. W. 2006. — Haplotaeniatumidae and Inaniguttidae (Radiolaria) from the Lower Silurian of the Cape Phillips Formation, Cornwallis Island, Nunavut, Canada. *Journal of Paleontology* 80 (1): 19-37. [https://doi.org/10.1666/0022-3360\(2006\)080\[0019:HAIRFT\]2.0.CO;2](https://doi.org/10.1666/0022-3360(2006)080[0019:HAIRFT]2.0.CO;2)
- MALDONADO A. L. & NOBLE P. J. 2010. — Radiolarians from the upper Guadalupian (Middle Permian) Reef Trail Member of the Bell Canyon Formation, West Texas and their biostratigraphic implications. *Micropaleontology* 56 (1-2): 69-115. <http://www.jstor.org/stable/40607077>
- MALETZ J. 2007. — The Early Ordovician *Beothuka terranova* (Radiolaria) faunal assemblage in western Newfoundland. *Palaearktische Zeitschrift* 81 (1): 71-82. <https://doi.org/10.1007/BF02988380>
- MALETZ J. & BRUTON D. L. 2005. — The *Beothuka terranova* (Radiolaria) assemblage and its importance for the understanding of early Ordovician radiolarian evolution. *Geological Magazine* 142 (6): 711-721. <https://doi.org/10.1017/S0016756805001391>
- MALETZ J. & BRUTON D. L. 2007. — Lower Ordovician (Chewtonian to Castlemainian) radiolarians of Spitsbergen. *Journal of Systematic Palaeontology* 5 (3): 245-288. <https://doi.org/10.1017/S1477201907002039>
- MALETZ J. & BRUTON D. L. 2008. — The Middle Ordovician *Proventocitum procerulum* radiolarian assemblage of Spitsbergen and its biostratigraphic correlation. *Palaontology* 51 (5): 1181-1200. <https://doi.org/10.1111/j.1475-4983.2008.00803.x>
- NAZAROV B. B. 1973a. — First occurrences of Radiolaria of the Entactiniidae and Ceratoikiscidae families in the upper Devonian of the Southern Urals. *Doklady Akademii Nauk SSSR* 210 (3): 696-699.
- NAZAROV B. B. 1973b. — Radiolaria from the lower horizons of the Cambrian of Bazhenev Ridge, in Problems of paleontology and biostratigraphy of the Lower Cambrian of Siberia and the Far Eastern USSR. *Transactions of the Institute of Geology and Geophysics, Siberian Branch of the Academy of Sciences* 49: 5-13.
- NAZAROV B. B. 1974a. — Albaillellidae and Paleoscenidiidae from the Upper Devonian deposits of the Southern Urals, in ZHAMOIDA A. I. (ed.), *Biostratigraphy and Paleontology of the Lower Cambrian of Europe and Middle Asia*. Publication of the All-Union Institute of Geology, new series, Leningrad, vol. 226: 41-47.
- NAZAROV B. B. 1974b. — Problematic siliceous formations from the lower Paleozoic of Kazakhstan, in ZHAMOIDA A. I. (ed.), *Biostratigraphy and Paleontology of the Lower Cambrian of Europe and Middle Asia*. Publication of the All-Union Institute of Geology, new series, Leningrad, vol. 226: 110-112.
- NAZAROV B. B. 1975. — Lower and Middle Paleozoic radiolarians of Kazakhstan (methods of investigation, systematics and stratigraphic significance), in RAABEN M. E. (ed.), *Transactions of the Academy of Sciences of the USSR, Geological Institute. Izdatelstvo Nauka, Moscow*, vol. 275: 1-203.
- NAZAROV B. B. 1977. — A new radiolarian family from the Ordovician of Kazakhstan. *Paleontological Journal* 11 (2): 165-171.
- NAZAROV B. B. 1980. — Class Sarcodina; subclass Radiolaria, in APOLLONOV M. K., BANDALETOV S. M. & NIKITIN I. F. (eds), *The Ordovician-Silurian Boundary in Kazakhstan*. Nauka, Alma-Ata, Kazakhstan, USSR: 22-24.
- NAZAROV B. B. 1988. — Paleozoic radiolaria, in ZHAMOIDA A. I. (ed.), *Practical Manual of Microfauna of the USSR*. Nedra, Leningrad, vol. 2, 232 p.
- NAZAROV B. B. & SHKOLNIK E. L. 1974. — On the question of the age of the siliceous-volcanogenic sequences in the Ud-Selenshin interfluve, in SYSSOIEV V. (ed.), *Biostratigraphy and Paleontology of the Lower Cambrian of Europe and Central Asia*. Nauka, Moscow: 104-109.
- NAZAROV B. B. & KRUYCHECK S. A. 1977. — Upper Devonian Radiolaria of the Russian Platform. *Transaction of Doklady of the Russian Academy of Science: Earth Science Sections* 6 (237): 1445-1448.
- NAZAROV B. B. & RUDENKO V. S. 1981. — Some radiolarians with bilateral symmetry of the upper Paleozoic of the Southern Urals. *Systematics and Morphology of Microorganisms: Problems of Micropaleontology* 24: 129-139.
- NAZAROV B. B. & NOLVAK J. 1983. — Radiolarians from the Upper Ordovician of Estonia. *Izvestiya Akademii Nauk Estonskoy SSR, Geologiya* 32 (1): 1-8.
- NAZAROV B. B. & ORMISTON A. 1983a. — Upper Devonian (Frasnian) radiolarian fauna from the Gogo Formation, Western Australia. *Micropaleontology* 29 (4): 454-466. <https://doi.org/10.2307/1485519>

- NAZAROV B. B. & ORMISTON A. 1983b. — A new superfamily of stauraxon polycystine Radiolaria from the Late Paleozoic of the Soviet Union and North America. *Senckenbergiana Lethaea* 64 (2-4): 363-379.
- NAZAROV B. B. & ORMISTON A. 1984. — Tentative system of Paleozoic Radiolaria, in PETRUSHEVSKAYA M. G. & STEPANJANTS S. D. (eds), *Morphology, Ecology and Evolution of Radiolarians. Material from the IV Symposium of European Radiolarists EURORAD IV*. Akademiya Nauk SSSR, Zoological Institute, Leningrad, USSR: 64-87.
- NAZAROV B. B. & ORMISTON A. R. 1985. — Radiolaria from the Late Paleozoic of the Southern Urals, USSR and West Texas, USA. *Micropaleontology* 31 (1): 1-54. <https://doi.org/10.2307/1485579>
- NAZAROV B. B. & ORMISTON A. R. 1987. — A new Carboniferous radiolarian genus and its relation to the multishelled entactiniids. *Micropaleontology* 33 (1): 66-73. <https://doi.org/10.2307/1485527>
- NAZAROV B. B. & ORMISTON A. R. 1989. — New radiolarian species from the Permian of the Southern Urals and Nevada. *Paleontological Journal* 23 (2): 10-20.
- NAZAROV B. B. & ORMISTON A. R. 1990. — The biostratigraphic potential of radiolarians from the Palaeozoic, in CHUVASHOV B. I., ZHAMOIDA A. I. & AMON E. O. (eds), *Radiolaria in Biostratigraphy: Collected Proceedings*. Ural'skoe otdelenie AN SSSR; Sverdlovsk: 3-25, 121, 125, 126.
- NAZAROV B. B. & ORMISTON A. R. 1993. — New biostratigraphically important Paleozoic Radiolaria of Eurasia and North America, in BLUEFORD J. R. & MURCHEY B. L. (eds), Radiolaria of Giant and Subgiant Fields in Asia. Nazarov Memorial Volume. *Micropaleontology, Special Publication* 6: 22-60.
- NAZAROV B. B. & POPOV L. Y. 1976. — Radiolarians, ecardine brachiopods and organisms of uncertain systematic position from the Middle Ordovician of eastern Kazakhstan. *Paleontological Journal* 4: 407-416.
- NAZAROV B. B. & POPOV L. Y. 1980. — Stratigraphy and fauna of the siliceous-carbonate sequence of the Ordovician of Kazakhstan (Radiolaria and inarticulate brachiopods). *Transactions of the Geological Institute of the Soviet Academy of Sciences* 331: 1-192.
- NAZAROV B. B., POPOV L. Y. & APOLLONOV M. 1975. — Lower Paleozoic Radiolaria in Kazakhstan. *Izvestija Akademii Nauk SSSR, serija geologičeskaja* 10: 96-105.
- NAZAROV B. B., POPOV L. Y. & APOLLONOV M. 1977. — Lower Paleozoic radiolarians of Kazakhstan. *International Geology Review* 19 (8): 913-920. <https://doi.org/10.1080/00206817709471089>
- NAZAROV B. B., TKACHENKO V. I. & SHULGINA V. S. 1981. — Radiolaria and age of terrigenous siliceous beds of the Kolyma region. *Izvestija Akademii Nauk SSSR, serija geologičeskaja* 10: 79-89.
- NAZAROV B. B., COCKBAIN A. E. & PLAYFORD P. E. 1982. — Late Devonian Radiolaria from the Gogo Formation, Canning Basin, Western Australia. *Alcheringa* 6 (3): 161-173. <https://doi.org/10.1080/03115518208565408>
- NESTELL G. P. & NESTELL M. K. 2010. — Late Capitanian (latest Guadalupian, Middle Permian) radiolarians from the Apache Mountains, West Texas. *Micropaleontology* 56 (1-2): 7-68. <https://www.jstor.org/stable/40607076>
- NESTELL G. P., POPE J. P. & NESTELL M. K. 2012. — Middle Pennsylvanian (Desmoinesian) Radiolaria from the Midcontinent of North America. *Micropaleontology* 58 (3): 217-257. <https://www.jstor.org/stable/23250632>
- NISHIMURA K. & ISHIGA H. 1987. — Radiolarian biostratigraphy of the Maizuru Group in Yanahara area, Southwest Japan. *Memoirs of the Faculty of Science, Shimane University* 21: 169-188.
- NITECKI M. H. 1963. — Catalogue of type specimens in the Walker Museum of Paleontology and Chicago Natural History Museum – Radiolaria and Eurypterida. *Fieldiana: Geology (New Series)* 13 (3): 163-183. <http://biodiversitylibrary.org/page/4260689>
- NOBLE P. J. 1994. — Silurian Radiolarian Zonation for the Caballos Novaculite, Marathon Uplift, West Texas. *Bulletins of American Paleontology* 106 (2): 1-55. <http://biodiversitylibrary.org/page/10684913>
- NOBLE P. & RENNE P. 1990. — Paleoenvironmental and biostratigraphic significance of siliceous microfossils of the Permo-Triassic Redding Section, Eastern Klamath Mountains, California. *Marine Micropaleontology* 15 (3-4): 379-391. [https://doi.org/10.1016/0377-8398\(90\)90021-D](https://doi.org/10.1016/0377-8398(90)90021-D)
- NOBLE P. J. & MALETZ J. 2000. — Radiolaria from the Telychian (Llandovery, Early Silurian) of Dalarna, Sweden. *Micropaleontology* 46 (3): 265-275. <https://doi.org/10.2113/46.3.265>
- NOBLE P. J. & LENZ A. C. 2007. — Upper Wenlock Ceratoikiscidae (Radiolaria) from the Cape Phillips Formation, Arctic Canada. *Journal of Paleontology* 81 (5): 1044-1052. <https://doi.org/10.1666/pleo05-053.1>
- NOBLE P. J. & WEBBY B. D. 2009. — Katian (Ordovician) radiolarians from the Malongulli Formation, New South Wales, Australia, a re-examination. *Journal of Paleontology* 83 (4): 548-561. <https://doi.org/10.1666/08-179R.1>
- NOBLE P. J. & JIN Y. 2010. — Radiolarians from the Lamar Limestone, Guadalupe Mountains, West Texas. *Micropaleontology* 56 (1-2): 117-147. <https://www.jstor.org/stable/40607078>
- NOBLE P. J., KETNER K. B. & MCCLELLAN W. 1997. — Early Silurian Radiolaria from Northern Nevada, USA. *Marine Micropaleontology* 30 (1-3): 215-223. [https://doi.org/10.1016/S0377-8398\(96\)00026-6](https://doi.org/10.1016/S0377-8398(96)00026-6)
- NOBLE P. J., TEKİN U. K., GEDIK I. & SUKRU P. 2008. — Middle to Upper Tournasian Radiolaria of the Baltalimanı Formation, Istanbul, Turkey. *Journal of Paleontology* 82 (1): 37-56. <https://doi.org/10.1666/06-046.1>
- O'DOGHERTY L. 2009. — Inventory of Mesozoic radiolarian species (1867-2008). *Geodiversitas* 31 (2): 371-481. <https://doi.org/10.5252/g2009n2a6>
- OBUT O. T. & IWATA K. 2000. — Lower Cambrian Radiolaria from the Gorny Altai (southern West Siberia). *Novosti Paleontologii i Stratigrafi 2-3*: 33-37.
- OBUT O. T. & SHCHERBANEKO T. A. 2008. — Late Devonian radiolarians from the Rudny Altai (SW Siberia). *Bulletin of Geosciences* 83 (4): 371-382. <https://doi.org/10.3140/bull.geosci.2008.04.371>
- ORMISTON A. R. & LANE H. R. 1976. — A unique radiolarian fauna from the Sycamore Limestone (Mississippian) and its biostratigraphic significance. *Palaeontographica Abteilung A: Paleozoologie-Stratigraphie* 154: 158-180.
- ORMISTON A. R. & BABCOCK L. 1979. — *Follicucullus*, new radiolarian genus from the Guadalupian (Permian) Lamar limestone of the Delaware Basin. *Journal of Paleontology* 53 (2): 328-334. <http://www.jstor.org/stable/1303874>
- PARK I.-Y. & WON M.-Z. 2012. — Tropical radiolarian assemblages from the Lower Carboniferous Delle Phosphatic Member of the Woodman Formation of Utah, USA. *Journal of the Paleontological Society of Korea* 28 (1-2): 29-101.
- PICKETT J. & JELL P. A. 1983. — Middle Cambrian Sphinctozoa (Porifera) from New South Wales. *Memoirs of the Association of Australian Palaeontologists* 1: 85-92.
- POUILLE L., DANELIAN T., POUR M. G. & POPOV L. E. 2013. — New and Revised Inaniguttid Radiolaria and Associated Trilobites from the Upper Darriwilian (Ordovician) Shundy Formation of Kazakhstan. *Journal of Paleontology* 87 (6): 1143-1159. <https://doi.org/10.1666/12-106>
- POUILLE L., DANELIAN T. & POPOV L. E. 2014. — A diverse Upper Darriwilian radiolarian assemblage from the Shundy Formation of Kazakhstan: insights into late Middle Ordovician radiolarian biodiversity. *Journal of Micropaleontology* 33 (2): 149-163. <https://doi.org/10.1144/jmpaleo2014-008>
- PULFREY W. 1932. — The occurrence of radiolarian-bearing nodules at the base of the Edale Shales, near Calver Sough, North Derbyshire. *Proceedings of the Geologists' Association* 43 (2): 192-198. [https://doi.org/10.1016/S0016-7878\(32\)80027-1](https://doi.org/10.1016/S0016-7878(32)80027-1)
- RENZ G. W. 1990. — Late Ordovician (Caradocian) radiolarians from Nevada. *Micropaleontology* 36 (4): 367-377. <https://doi.org/10.2307/1485476>

- ROTHPLETZ A. 1880. — Radiolarien, Diatomaceen und Spharosomatiten im silurischen Kieselschiefer von Langenstriegis Sachsen. *Zeitschrift der deutschen geologischen Gesellschaft* 32: 447-467.
- RUDENKO V. S. & PANASENKO E. S. 1990a. — A new findings of the Upper Permian radiolarians in Primorye region, in ZAKHAROV Y. D., BELYAEVA G. V. & NIKITINA A. P. (eds), *New Data on Palaeozoic and Mesozoic Biostratigraphy of the South Far East (IUGS Project 272)*. Far Eastern Branch of the USSR Academy of Sciences, Vladivostok: 117-124.
- RUDENKO V. S. & PANASENKO E. S. 1990b. — Permian Albaillellaria (Radiolaria) of the Pantovian sequence in Primorye, in ZAKHAROV Y. D., BELYAEVA G. V. & NIKITINA A. P. (eds), *New Data on Palaeozoic and Mesozoic Biostratigraphy of the South Far East (IUGS Project 272)*. Far Eastern Branch of the USSR Academy of Sciences, Vladivostok: 181-193.
- RUEDEMANN R. & WILSON T. Y. 1936. — Eastern New York Ordovician cherts. *Geological Society of America, Bulletin* 74 (10): 1535-1586. <https://doi.org/10.1130/GSAB-47-1535>
- RÜST D. 1892. — Beiträge zur Kenntniss der fossilen Radiolarien aus Gesteinen der Trias und der palaeozoischen Schichten. *Palaeontographica* 38: 107-179. <http://biodiversitylibrary.org/page/33193870>
- SASHIDA K. & TONISHI K. 1985. — Permian radiolarians from the Kanto Mountains, central Japan; some Upper Permian Spumellaria from Itsukaichi, western part of Tokyo Prefecture. *Science Reports of the Institute of Geoscience, University of Tsukuba, Section B: Geological Sciences* 6: 1-19.
- SASHIDA K. & TONISHI K. 1986. — Upper Permian stauraxon polycystine Radiolaria from Itsukaichi, western part of Tokyo Prefecture. *Science Reports of the Institute of Geoscience, University of Tsukuba, Section B: Geological Sciences* 7: 1-13.
- SASHIDA K. & TONISHI K. 1988. — Additional note on Upper Permian radiolarian fauna from Itsukaichi, western part of Tokyo Prefecture, central Japan. *Transactions and Proceedings of the Palaeontological Society of Japan, New Series* 151: 523-542. https://doi.org/10.14825/prpsj1951.1988.151_523
- SASHIDA K. & TONISHI K. 1991. — An Upper Permian coiled radiolarian from Itsukaichi, central Japan. *Micropaleontology* 37 (1): 86-94. <https://doi.org/10.2307/1485747>
- SASHIDA K., ADACHI S., IGO H., NAKORNSRI N. & AMPORNMAHA A. 1997. — Middle to Upper Permian and Middle Triassic radiolarians from Eastern Thailand. *Science Reports of the Institute of Geoscience, University of Tsukuba, Section B: Geological Sciences* 18: 1-17.
- SASHIDA K., IGO H., ADACHI S., UENO K., KAJIWARA Y., NAKORNSRI N. & SARDSUD A. 2000a. — Late Permian to Middle Triassic radiolarian faunas from Northern Thailand. *Journal of Paleontology* 74 (5): 789-811. <https://doi.org/10.1017/S0022336000033011>
- SASHIDA K., NAKORNSRI N., UENO K. & SARDSUD A. 2000b. — Carboniferous and Triassic radiolarian faunas from the Saba Yoi area, southernmost part of peninsular Thailand and their paleogeographic significance. *Science Reports of the Institute of Geoscience, University of Tsukuba, Section B: Geological Sciences* 21: 71-99.
- SASHIDA K., SALYAPONGSE S. & NAKORNSRI N. 2000c. — Latest permian radiolarian fauna from Klaeng, eastern Thailand. *Micropaleontology* 46 (3): 245-263. <https://doi.org/10.2113/46.3.245>
- SCHWARTZAPFEL J. A. & HOLDSWORTH B. K. 1996. — Upper Devonian and Mississippian radiolarian zonation and biostratigraphy of the Woodford, Sycamore, Caney and Goddard Formations, Oklahoma. *Cushman Foundation for Foraminiferal Research, Special Publication* 33: 1-275.
- SEO E.-H. & WON M.-Z. 2009. — Review of the genus *Polytentactinia* and the family Polytentactiniidae. *Micropaleontology* 55 (1): 61-74. <https://www.jstor.org/stable/20627972>
- SHANG Q.-H., CARDROIT M. & WANG Y. J. 2001. — Radiolarians from the uppermost Permian Changhsingiang of southern Guangxi. *Acta Micropalaeontologica Sinica* 18 (3): 229-240.
- SHENG J. Z. & WANG Y. J. 1982. — Fossil Radiolaria of the Middle Devonian of Qiziqiao Formation, Xintian, Hunan. *Acta Palaeontologica Sinica* 21 (1): 58-66.
- SHENG J. Z. & WANG Y. J. 1985. — Fossil Radiolaria from Kufeng Formation at Longtan, Nanjing. *Acta Palaeontologica Sinica* 24 (2): 171-183.
- SHU D. & CHEN L. 1989. — Discovery of Early Cambrian Radiolaria and its significance. *Science in China, Series B: Chemistry* 32 (8): 986-994.
- SIVETER D. J., AITCHISON J. C., SIVETER D. J. & SUTTON M. D. 2007. — The Radiolaria of the Herefordshire Konservat-Lagerstätte (Silurian), England. *Journal of Micropalaeontology* 26 (1): 86-95. <https://doi.org/10.1144/jm.26.1.87>
- SPILLER F. C. P. 2002. — Radiolarian biostratigraphy of peninsular Malaysia and implications for regional palaeotectonics and palaeogeography. *Palaeontographica Abteilung A: Paleozoologie-Stratigraphie* 266 (1-3): 1-91.
- STRATFORD J. M. C. & AITCHISON J. C. 1997. — Lower to Middle Devonian radiolarian assemblages from the Gamilaroi Terrane, Glenrock Station, NSW, Australia. *Marine Micropaleontology* 30 (1-3): 225-250. [https://doi.org/10.1016/S0377-8398\(96\)00027-8](https://doi.org/10.1016/S0377-8398(96)00027-8)
- TAKEMURA A. & NAKASEKO K. 1981. — A new Permian radiolarian genus from the Tamba Belt, Southwest Japan. *Transactions and Proceedings of the Palaeontological Society of Japan, New Series* 124: 208-214. https://doi.org/10.14825/prpsj1951.1981.124_208
- TAKEMURA A., MORIMOTO T., AITA Y., HORI R. S., HIGUCHI Y., SPÖRLI K. B., CAMPBELL H. J., KODAMA K. & SAKAI T. 1999. — Permian Albaillellaria (Radiolaria) from a limestone lens at the Arrow Rocks in the Waipapa Terrane (Northland, New Zealand). *Geodiversitas* 21 (4): 751-765.
- TERS M. & DEFLANDRE G. 1966. — Sur l'âge cambro-silurien des terrains anciens de la Vendée Littorale (ex-Briovérien). *Comptes Rendus hebdomadaires des Séances de l'Académie des Sciences (Paris), Série D: Sciences naturelles* 262 (3): 339-342. <http://gallica.bnf.fr/ark:/12148/bpt6k5489696x>
- TERTARD M., NOBLE P. J., DANELIAN T., MONNET C. & LENZ A. C. 2015. — A new Gorstian radiolarian fauna from the upper Silurian of the Cape Phillips Formation, Cornwallis and Bathurst islands, Canadian Arctic. *Canadian Journal of Earth Sciences* 52 (10): 863-879. <https://doi.org/10.1139/cjes-2015-0028>
- UMEDA M. 1997. — Late Silurian and Early Devonian radiolarians from the Konomori area in the Kurosegawa Terrane, southwest Japan. *Earth Science, Journal of the Association for the Geological Collaboration in Japan* 51: 413-432.
- UMEDA M. 1998a. — Early to Middle Devonian Ceratoikiscidae (Radiolaria) from the Yokokurayama Group in the Kurosegawa Terrane, Southwest Japan. *Paleontological Research* 2 (2): 96-107. <https://doi.org/10.2517/prpsj.2.96>
- UMEDA M. 1998b. — Some Late Silurian characteristic radiolarians from the Yokokurayama Group in the Kurosegawa Terrane, southwest Japan. *Earth Science, Journal of the Association for the Geological Collaboration in Japan* 52 (3): 203-209.
- UMEDA M. & SUZUKI Y. 2005. — Aeronian (Llandovery, Early Silurian) Radiolarians from the Kallholn Formation in Siljan district, Sweden. *Micropaleontology* 51 (1): 83-92. <https://doi.org/10.2113/51.1.83>
- VISHNEVSKAYA V. S. 1998. — The domanikoid facies of the Russian platform and basin paleogeography, in CRASQUIN-SOLEAU S. & BARRIER É. (eds), *Peri-Tethys Memoir 3: Stratigraphy and Evolution of Peri-Tethyan Platforms*. Muséum national d'Histoire naturelle, Paris (Mémoires du Muséum national d'Histoire naturelle; 177): 45-69.
- WAKAMATSU H., SUGIYAMA K. & FURUTANI H. 1990. — Silurian and Devonian radiolarians from the Kurosegawa Tectonic Zone, southwest Japan. *Journal of Earth Sciences Nagoya University* 37: 157-192.
- WANG N. W. 1989. — Micropaleontological study of Lower Palaeozoic siliceous sequences of the Yangtze Platform and Eastern

- Qinling Range. *Journal of Southeast Asian Earth Sciences* 3 (1-4): 141-161. [https://doi.org/10.1016/0743-9547\(89\)90018-4](https://doi.org/10.1016/0743-9547(89)90018-4)
- WANG R. J. 1993a. — Fossil Radiolaria from Kufeng formation of Chaohu, Anhui. *Acta Palaeontologica Sinica* 32 (4): 442-457.
- WANG R. J. 1993b. — Morphological change of the *Ruzbhencavisponges uralicus* in Gufeng Formation (Lower Permian) from Jiangsu and Anhui provinces. *Shanghai Geology* 4: 5-12.
- WANG R. J. 1995. — Radiolarian fauna from Gufeng Formation (Lower Permian) in Hushan area of Nanjing, Jiangsu Province. *Scientia Geologica Sinica* 30 (2): 139-148.
- WANG Y. J. 1993c. — Middle Ordovician radiolarians from the Pingliang Formation of Gansu Province, China. *Micropaleontology, Special Publication* 6: 98-114.
- WANG Y. J. 1997. — An Upper Devonian (Famennian) radiolarian fauna from carbonate rocks, northern Xinjiang. *Acta Micropalaeontologica Sinica* 14 (2): 149-160.
- WANG Y. J. & SHANG Q. 2001. — Discovery of the *Neobailletella* radiolarian fauna in the Shaiwa Group of Ziyun District, Guizhou. *Acta Micropalaeontologica Sinica* 18 (2): 111-121.
- WANG Y. J., CHENG Y. N. & YANG Q. 1994. — Biostratigraphy and systematics of Permian Radiolarians in China, in YUGAN J., UTTING J. & WARDLAW B. R. (eds), Permian Stratigraphy, Environments and Resources. *Palaeoworld Special Issue* 4: 172-202.
- WANG Y. J., FANG Z., YANG Q., ZHOU Z., CHENG Y., DUAN Y. & XIAO Y. 2000. — Middle-Late Devonian strata with cherty facies and radiolarian faunas in western Yunnan, China. *Acta Micropalaeontologica Sinica* 17 (3): 235-254.
- WANG Y. J., AITCHISON J. C. & LUO H. 2003. — Devonian radiolarian faunas from south China. *Micropaleontology* 49 (2): 127-145. <https://doi.org/10.2113/49.2.127>
- WANG Y. J., CHENG J. F. & ZHANG Y. D. 2008. — New radiolarian genera and species of Heituao Formation (Ordovician) in the Kuruktag Region, Xinjiang. *Acta Palaeontologica Sinica* 47 (4): 393-404.
- WANG Y. J., CHENG J. F. & ZHANG Y. D. 2010. — Fossil preservation modes and functional discussion of the basic structures of a new radiolarian genus *Gansuceratoikiscum* Wang gen. nov. *Acta Palaeontologica Sinica* 49 (4): 472-476.
- WANG Y. J. & KUANG G. 1993. — Early Carboniferous radiolarians from Qinzhou, southeastern Guangxi. *Acta Micropalaeontologica Sinica* 10 (3): 275-287.
- WANG Y. J. & LI J. X. 1994. — Discovery of the *Follicucullus bipartitus*-*F. charveti* radiolarian assemblage zone and geological significance. *Acta Micropalaeontologica Sinica* 11 (2): 201-212.
- WANG Y. J. & LUO H. 2009. — Upper Devonian (Frasnian) *Hele-nifore robustum* Radiolarian Fauna from the Bazhai Village in Ziyun County, Guizhou Province. *Acta Micropalaeontologica Sinica* 26 (2): 129-138.
- WANG Y. J., LUO H. & YANG Q. 2012. — *Late Paleozoic Radiolarians in the Qinfang Area, Southeast Guangxi*. University of Science and Technology of China Press, Anhui, 123 p.
- WEBBY B. D. & BLOM W. 1986. — The first well-preserved radiolarians from the Ordovician of Australia. *Journal of Paleontology* 60 (1): 145-157. <https://doi.org/10.1017/S0022336000021594>
- WON M.-Z. 1983. — Radiolarien aus dem Unterkarbon des Rheinischen Schiefergebirges (Deutschland). *Palaeontographica Abteilung A: Palaeozoologie-Stratigraphie* 182 (4-6): 116-175.
- WON M.-Z. 1990. — Lower Carboniferous radiolarians from Riescheid (Germany). *Journal of the Paleontological Society of Korea* 6 (2): 111-143.
- WON M.-Z. 1991a. — Phylogenetic study of some species of genus *Albaillella* Deflandre 1952 and a radiolarian zonation in the Rheinische Schiefergebirge, West Germany. *Journal of the Paleontological Society of Korea* 7 (1): 13-25.
- WON M.-Z. 1991b. — Lower Carboniferous radiolarians from siliceous boulders in Western Germany. *Journal of the Paleontological Society of Korea* 7 (1): 77-106.
- WON M.-Z. 1992. — The biostratigraphic age of the transitional beds of the Riescheid section, Germany, by means of the radiolarian fauna. *Journal of Science, Pusan National University* 53: 195-210.
- WON M.-Z. 1997a. — Review of family Entactiniidae (Radiolaria), and taxonomy and morphology of Entactiniidae in the late Devonian (Frasnian) Gogo Formation, Australia. *Micropaleontology* 43 (4): 333-369. <https://doi.org/10.2307/1485930>
- WON M.-Z. 1997b. — The proposed new radiolarian subfamily Retentactiniinae (Entactiniidae) from the late Devonian (Frasnian) Gogo Formation, Australia. *Micropaleontology* 43 (4): 371-418. <https://doi.org/10.2307/1485931>
- WON M.-Z. 1998. — A Tournaisian (Lower Carboniferous) radiolarian zonation and radiolarians of the *A. pseudoparadoxa* zone from Oese (Rheinische Schiefergebirge), Germany. *Journal of the Korean Earth Science Society* 19 (2): 216-259.
- WON M.-Z. & BELOW R. 1999. — Cambrian Radiolaria from the Georgina Basin, Queensland, Australia. *Micropaleontology* 45 (4): 325-363. <https://doi.org/10.2307/1486119>
- WON M.-Z., BLODGETT R. B. & NESTOR V. 2002. — Llandoverian (Early Silurian) radiolarians from the Road River Formation of east-central Alaska and the new family Haplostaeniatumidae. *Journal of Paleontology* 76 (6): 941-964. <https://doi.org/10.1017/S0022336000057796>
- WON M.-Z. & IAMS W. J. 2002. — Late Cambrian radiolarian faunas and biostratigraphy of the Cow Head Group, western Newfoundland. *Journal of Paleontology* 76 (1): 1-33. <https://doi.org/10.1017/S0022336000017315>
- WON M.-Z. & SEO E.-H. 2010. — Lower Carboniferous radiolarian biozones and faunas from Bergishes land, Germany. *Journal of the Palaeontological Society of Korea* 26 (2): 193-269.
- WON M.-Z. & IAMS W. J. 2011. — Earliest Arenig Radiolarians from the Cow Head Group, Western Newfoundland. *Journal of Paleontology* 85 (1): 156-177. <https://doi.org/10.1666/10-102.1>
- WON M.-Z. & IAMS W. J. 2013. — Early Ordovician (early Arenig) radiolarians from the Cow Head Group and review of the Little Port Complex fauna, Western Newfoundland. *Palaeoworld* 22 (1-2): 10-31. <https://doi.org/10.1016/j.palwor.2012.11.001>
- WON M.-Z. & IAMS W. J. 2015a. — Early/Middle Arenig (Late Floian) Radiolarian Faunal Assemblages from Cow Head Group, Western Newfoundland. *Palaeontographica Abteilung A* 304 (1-6): 1-63.
- WON M.-Z. & IAMS W. J. 2015b. — Review of the *Beothuka terranova* assemblage and characteristics of the middle Arenig (Ordovician, latest Floian) radiolarian assemblage from the Cow Head Group, Newfoundland. *Neues Jahrbuch für Geologie und Paläontologie-Abhandlungen* 278 (1): 1-21. <https://doi.org/10.1127/njpa/2015/0513>
- WON M.-Z., IAMS W. J. & REED K. 2005. — Earliest Ordovician (Early to Middle Tremadocian) radiolarian faunas of the Cow Head Group, Western Newfoundland. *Journal of Paleontology* 79 (3): 433-459. [https://doi.org/10.1666/0022-3360\(2005\)079<433:EOETMT>2.0.CO;2](https://doi.org/10.1666/0022-3360(2005)079<433:EOETMT>2.0.CO;2)
- WON M.-Z., IAMS W. J. & REED K. 2007. — Late Tremadocian Radiolarian Faunas and Biostratigraphy of the Cow Head Group, Western Newfoundland, Canada. *Journal of the Korean Earth Science Society* 28 (4): 497-540. <https://doi.org/10.5467/JKESS.2007.28.4.497>
- WONGANAN N. & CARIDROIT M. 2005. — Middle and Upper Devonian radiolarian faunas from Chiang Dao area, Chiang Mai province, northern Thailand. *Micropaleontology* 51 (1): 39-57. <https://doi.org/10.2113/51.1.39>
- WU H. R. & LI H. S. 1989. — Carboniferous and Permian Radiolaria in the Menglian area, Western Yunnan. *Acta Micropalaeontologica Sinica* 6 (4): 337-343.
- WU J., FENG Q., GUI B. & LIU G. 2010. — Some New Radiolarian Species and Genus from Upper Permian in Guangxi Province, South China. *Journal of Paleontology* 84 (5): 879-894. <https://doi.org/10.1666/09-057.1>

- XIAN W. & ZHANG N. 1998. — Early to Middle Permian radiolarians from the Kuhfeng Formation in southeastern Guangxi, South China. *Earth Science, Journal of the Association for the Geological Collaboration in Japan* 52 (3): 188-202.
- YAO A. & KUWAHARA K. 1999. — Permian and Triassic radiolarian assemblages from the Yangzi Platform, in YAO A., EZAKI Y., HAO W. & WANG X. (eds), *Biotic and Geological Development of the Paleo-Tethys in China*. Peking University Press: 1-16.
- ZHANG K., WU S. & LIU Y. 1992. — Radiolarians and Conodonts from the Dalong Formation at Hushan of Nanjing and their Faciesological significance. *Earth Science, Journal of China University of Geosciences* 17 (3): 295-300.
- ZHANG N., HENDERSON C. M., XIA W., WANG G. & SHANG H. 2010. — Conodonts and radiolarians through the Cisuralian-Guadalupian boundary from the Pingxiang and Dachongling sections, Guangxi region, South China. *Alcheringa* 34 (2): 135-160. <https://doi.org/10.1080/03115510903523292>
- ZHANG N., XIA W., DONG Y. & SHANG H. 2008. — Conodonts and radiolarians from pelagic cherts of the Frasnian-Famennian boundary interval at Bancheng, Guangxi, China: Global recognition of the upper Kellwasser event. *Marine Micropaleontology* 67 (1-2): 180-190. <https://doi.org/10.1016/j.marmicro.2008.01.011>
- ZHURALEVA I. T. 1975. — *Kembriyskaya Fauna i Flora khrepta Dzhagdyi (Dal'niy Vostok)* [The Cambrian fauna and flora of the Dzahagda Ridge]. Trudy Instituta, Geologii i Geogiziki, Sibirskoe Otdelenie, Akademiya Nauk SSSR 226: 52-56.

Submitted on 25 October 2016;
accepted on 17 March 2017;
published on 29 September 2017.

APPENDIX

APPENDIX 1. — Inventory of Paleozoic radiolarian species (1880-2016). Abbreviations, orders: **Al**, Albailellaria; **Ar**, Archaeospicularia; **E**, Entactinaria; **L**, Latentifilaria; **?N**, possible Nassellaria; **S**, Spumellaria; **IS**, incertae sedis. Status: **n.d.**, *nomina dubia*; **n.n.**, *nomina nuda*; **n.r.**, not radiolarians; **s.s.**, sponge spicules; **inv.**, invalid. Types species: **T**, valid type species; **Td**, types that are *nomina dubia*; **Th**, types that are homonyms; **Ti**, type species that are invalid names; **Ts**, types that are synonyms. **n-b type**, name-bearing type. The numbers in brackets after genus names correspond to the figure's numbers in Cardiroit et al. 2017 (this issue). XLS version of this list is available on the website of Geodiversitas.

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Acanthopyle							
<i>Acanthopyle antiqua</i>	E	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Acanthopyle antiqua</i>	E	—	T	Deflandre 1963: 3981	Lower Carboniferous	Visean	Cabrières, Hérault, France
Acanthosphaera							
<i>Acanthosphaera antiqua</i>	—	n.d.	—	Hinde 1890: 51	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK
<i>Acanthosphaera australis</i>	—	n.d.	—	Hinde 1899a: 48	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Acanthosphaera cyclocera</i>	—	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Acanthosphaera dodecaspinosa</i>	—	n.d.	—	Aberdeen 1940: 137	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Acanthosphaera entactinia</i>	—	n.d.	—	Rüst 1892: 147	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Acanthosphaera etheridgei</i>	—	n.d.	—	Hinde 1899a: 49	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Acanthosphaera grandispinosa</i>	—	n.d.	—	Aberdeen 1940: 138	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Acanthosphaera hirsuta</i>	—	n.d.	—	Aberdeen 1940: 138	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Acanthosphaera laxa</i>	—	n.d.	—	Hinde & Fox 1895: 637	Carboniferous	Serpukhovian-Bashkirian	Codden Hill bed, Devon, England, UK
<i>Acanthosphaera macracantha</i>	—	n.d.	—	Rüst 1892: 147	Lower Silurian	—	Cabrières, Hérault, France
<i>Acanthosphaera microspinosa</i>	—	n.d.	—	Aberdeen 1940: 138	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Acanthosphaera minuta</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1571	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Acanthosphaera perspinosa</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1571	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Acanthosphaera polygonophora</i>	—	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Acanthosphaera robusta</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1571	Lower Ordovician	Floian	Normanskill chert, Ghent, Columbia County, New York, USA
Aciferopylorum (254)							
<i>Aciferopylorum admirandum</i>	E	—	—	Nazarov & Ormiston 1990: 22	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Aciferopylorum admirandum</i>	S	inv.	—	Nazarov & Ormiston 1993: 43	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Aciferopylorum admirandum</i>	E	n.n.	Th, Ts	Nazarov 1988: 71	Middle Silurian	Homerian	Maksyutov Complex, Tarangul River, 10 km N of Kosistek Village, S Urals, Russia
Acrosphaera							
<i>Acrosphaera xinhui</i>	—	n.n.	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuigou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Acrosphaera glitzii</i>	—	n.d.	—	Rüst 1892: 140	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Acrosphaera herzynica</i>	—	n.d.	—	Rüst 1892: 140	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
Actinomma							
<i>Actinomma schaebenholzianum</i>	—	n.d.	—	Rüst 1892: 148	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Adamas (289)							
<i>Adamas cathedrarius</i>	IS	n.c. (O&F)	T, Th	Afanasieva 2000a: 85	Upper Devonian	Famennian	Zadonsk Formation, W Lekkeyaginsk-65, Saremboi-Lekkeyaga, Timan-Pechora Basin, Russia
Afanasievella (76)							
<i>Afanasievella apachensis</i>	E	—	T	Nestell & Nestell 2010: 23	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
Aitchisonellum (48)							
<i>Aitchisonellum aspinosus</i>	Ar	—	Ts	Won in Won & Below 1999: 356	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia
Albaillella (1)							
<i>Albaillella amplificata</i>	Al	—	Ts	Nazarov & Ormiston 1985: 46	Upper Carboniferous	Gzhelian	E of Saraktash, Nikol Village, Ural River, Bashkir Region, Urals, Russia
<i>Albaillella amygdalaspinosa</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 59	Lower Carboniferous	Visean	Sycamore Limestone, southern Arbuckle Mountains, Murray County, Oklahoma, USA
<i>Albaillella angusta</i>	Al	—	—	Kuwahara 1999: 91	Upper Permian	Wuchiapingian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Mino Valley, Seki City, Gifu, Japan
<i>Albaillella apporrecta</i>	Al	—	—	Nazarov & Ormiston 1985: 47	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Albaillella asymmetrica</i>	Al	—	—	Ishiga & Imoto in Ishiga et al. 1982b: 276	Lower Permian	Kungurian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Ashimi-dani section, Ukyo-ku, Kyoto, Japan
<i>Albaillella bialata</i>	Al	—	—	Wu & Feng in Wu et al. 2010: 882	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Albaillella bipennata</i>	Al	—	—	Cheng 1986: 50	Upper Carboniferous	Bashkirian	Johns Valley Shale, Pittsburg County, eastern Oklahoma, USA
<i>Albaillella brauni</i>	Al	—	—	Won 1998: 224	Lower Carboniferous	Tournaisian	Oese, Rheinische Schiefergebirge, Germany
<i>Albaillella brushensis</i>	Al	—	—	Cheng 1986: 51	Upper Carboniferous	Bashkirian	Johns Valley Shale, Pittsburg County, eastern Oklahoma, USA
<i>Albaillella cartalla</i>	Al	—	Ts	Ormiston & Lane 1976: 171	Lower Carboniferous	Tournaisian	Sycamore Limestone, southern Arbuckle Mountains, Oklahoma, USA
<i>Albaillella cavitata</i>	Al	—	—	Kuwahara 1999: 90	Upper Permian	Wuchiapingian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Mino Valley, Seki City, Gifu, Japan
<i>Albaillella cornuta</i>	Al	—	—	Deflandre 1952: 872	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
<i>Albaillella crenulata</i>	Al	—	—	Won 1991a: 18	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Albaillella cylindra</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 53	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Phillips Creek Section, Carter County, Oklahoma, USA
<i>Albaillella deflandrei</i>	Al	—	—	Gourmelon 1987: 85	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
<i>Albaillella dellensis</i>	Al	—	—	Park & Won 2012: 42	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Albaillella demenita</i>	Al	—	—	Nazarov in Isakova & Nazarov 1986: 112	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Albaillella eliasi</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 56	Lower Carboniferous	Serpukhovian	Goddard Formation, Oil Creek section, Johnston County, Oklahoma, USA
<i>Albaillella excelsa</i>	Al	—	—	Ishiga, Kito & Imoto 1982a: 17	Upper Permian	Changhsingian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Ubara section, Fukuchiyama City, Kyoto, Japan
<i>Albaillella fida</i>	Al	—	—	Jin & Feng in Jin et al. 2007: 14	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Albaillella flabellata</i>	Al	—	—	Jin & Feng in Jin et al. 2007: 11	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Albaillella</i> (1) continuation							
<i>Albaillella flexa</i>	Al	—	—	Kuwahara <i>in</i> Kuwahara & Sakamoto 1992: 39	Upper Permian	Changhsingian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Mino Valley, Seki City, Gifu, Japan
<i>Albaillella flexiloqua</i>	Al	—	—	Nazarov <i>in</i> Isakova & Nazarov 1986: 111	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Albaillella foremanae</i>	Al	—	—	Cornell & Simpson 1985: 273	Middle Permian	Roadian	Bone Spring Formation, Guadalupe Mts., Culbertson County, W Texas, USA
<i>Albaillella furcata</i>	Al	—	—	Won 1983: 126	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Albaillella gordoni</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 77	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Phillips Creek Section, Carter County, Oklahoma, USA
<i>Albaillella graciliforma</i>	Al	—	—	Won & Seo 2010: 235	Lower Carboniferous	Tournaisian	Bergisches Land, N Westfalia, Germany
<i>Albaillella groessensi</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 64	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Phillips Creek Section, Carter County, Oklahoma, USA
<i>Albaillella harrisae</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 70	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Phillips Creek Section, Carter County, Oklahoma, USA
<i>Albaillella hassi</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 80	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Phillips Creek Section, Carter County, Oklahoma, USA
<i>Albaillella higginsi</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 83	Lower Carboniferous	Serpukhovian	Goddard Formation, Oil Creek section, Johnston County, Oklahoma, USA
<i>Albaillella hushanensis</i>	Al	—	—	He & Feng <i>in</i> He et al. 2011: 477	Upper Permian	Changhsingian	Talung Formation, Hushan section, Nanjing, Jiangsu Region, China
<i>Albaillella indensis</i>	Al	—	—	Won 1983: 127	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Albaillella indensis ambigua</i>	Al	—	—	Braun 1989: 86	Lower Carboniferous	upper Tournaisian	Pebbles of siliceous shale from the lower Main-valley near Frankfurt a. M., Germany
<i>Albaillella indensis brauni</i>	Al	—	—	Feng & Ye 1996: 20	Lower Carboniferous	Tournaisian	Yiliu Formation, Menxin section, S of Menglian, SW Yunnan, China
<i>Albaillella inferioalata</i>	Al	—	—	Nazarov <i>in</i> Isakova & Nazarov 1986: 113	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Albaillella inflata</i>	Al	—	—	Cheng 1986: 52	Upper Carboniferous	Bashkirian	Wesley Formation, Turnpike section, Pittsburg County, Oklahoma, USA
<i>Albaillella ishigai</i>	Al	—	—	Cheng 1986: 53	Lower Carboniferous	Serpukhovian	Sand Branch Member of Caney Formation, Pittsburg County, Oklahoma, USA
<i>Albaillella kayai</i>	Al	—	—	Noble, Tekin, Gedik & Pehlivan 2008: 46	Lower Carboniferous	Tournaisian	Baltalimanı Formation, İstanbul, Turkey
<i>Albaillella ladarezensis</i>	Al	—	—	Gourmelon 1987: 88	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
<i>Albaillella lanceolata</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 61	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Phillips Creek Section, Carter County, Oklahoma, USA
<i>Albaillella lauta</i>	Al	—	—	Kuwahara <i>in</i> Kuwahara & Sakamoto 1992: 40	Upper Permian	Wuchiapingian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Mino Valley, Seki City, Gifu, Japan
<i>Albaillella levis</i>	Al	—	Ts	Ishiga, Kito & Imoto 1982a: 17	Upper Permian	Changhsingian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Ubara section, Fukuchiyama City, Kyoto, Japan
<i>Albaillella longoriai</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 58	Lower Carboniferous	Serpukhovian	Goddard Formation, Oil Creek section, Johnston County, Oklahoma, USA
<i>Albaillella macrocephalata</i>	Al	—	—	Cheng 1986: 54	Upper Carboniferous	Bashkirian	Johns Valley Shale, Pittsburg County, eastern Oklahoma, USA
<i>Albaillella magnifica</i>	Al	—	—	Cheng 1986: 55	Upper Devonian	Famennian	Johns Valley Shale, Pittsburg County, eastern Oklahoma, USA
<i>Albaillella mameti</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 63	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Phillips Creek Section, Carter County, Oklahoma, USA
<i>Albaillella minuta</i>	Al	—	—	Won & Seo 2010: 235	Lower Carboniferous	Tournaisian	Bergisches Land, N Westfalia, Germany
<i>Albaillella mucronulata</i>	Al	—	—	Nestell, Pope & Nestell 2012: 230	Upper Carboniferous	Moscovian	Mouse Creek Formation, Excello Shale Member, south-central Iowa, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Albaillella</i> (1) continuation							
<i>Albaillella multisegmenta</i>	Al	—	—	Wang in Wang et al. 2012: 107	Lower Carboniferous	Visean	Shijia Formation, Bancheng, Qinzhou area, Guangxi Zhuang Region, SW China
<i>Albaillella murcheyae</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 84	Lower Carboniferous	Serpukhovian	Goddard Formation, Oil Creek section, Johnston County, Oklahoma, USA
<i>Albaillella nazarovi</i>	Al	—	—	Cheng 1986: 55	Upper Carboniferous	Bashkirian	Johns Valley Shale, Pittsburg County, eastern Oklahoma, USA
<i>Albaillella nigriniae</i>	Al	—	—	Cheng 1986: 56	Upper Carboniferous	Bashkirian	Johns Valley Shale, Pittsburg County, eastern Oklahoma, USA
<i>Albaillella ouachitaensis</i>	Al	—	—	Cheng 1986: 57	Lower Carboniferous	Bashkirian	Jones Valley Shale, Le Flore County, eastern Oklahoma, USA
<i>Albaillella palmeri</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 67	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Phillips Creek Section, Carter County, Oklahoma, USA
<i>Albaillella paradoxa</i> var. <i>globosa</i>	Al	—	—	Deflandre 1952: 872	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
<i>Albaillella paradoxa</i>	Al	—	T	Deflandre 1952: 872	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
<i>Albaillella pennata</i>	Al	—	—	Holdsworth 1966: 323	Upper Carboniferous	Bashkirian	Upper Dove Valley, SW Derbyshire, England, UK
<i>Albaillella perforata</i>	Al	—	—	Won 1991b: 85	Lower Carboniferous	Tournaisian	Boulders in Quaternary Rhine Terrace, near Oberkassel, Bonn
<i>Albaillella perforata</i> <i>perforata</i>	Al	—	—	Won 1991b: 86	Lower Carboniferous	Tournaisian	Boulders in Quaternary Rhine Terrace, near Oberkassel, Bonn
<i>Albaillella perforata</i> <i>uniramosa</i>	Al	—	—	Won 1991b: 87	Lower Carboniferous	Tournaisian	Boulders in Quaternary Rhine Terrace, near Oberkassel, Bonn
<i>Albaillella pessagnoi</i>	Al	—	—	Cheng 1986: 58	Upper Carboniferous	Bashkirian	Wesley Formation, Turnpike section, Pittsburg County, Oklahoma, USA
<i>Albaillella philipsensis</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 66	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Phillips Creek Section, Carter County, Oklahoma, USA
<i>Albaillella prava</i>	Al	—	—	Cheng 1986: 59	Upper Carboniferous	Bashkirian	Johns Valley Shale, Pittsburg County, eastern Oklahoma, USA
<i>Albaillella procera</i>	Al	—	—	Cheng 1986: 60	Upper Carboniferous	Bashkirian	Johns Valley Shale, Pittsburg County, eastern Oklahoma, USA
<i>Albaillella protoforemanae</i>	Al	—	—	Zhang, Henderson & Xia in Zhang et al. 2010: 154	Lower Permian	Kungurian	Dachongling section, Qinzhou City, Guangxi, S China
<i>Albaillella protolevis</i>	Al	—	—	Kuwahara 1999: 90	Upper Permian	Wuchiapingian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Mino Valley, Seki City, Gifu, Japan
<i>Albaillella pseudoparadoxa</i>	Al	—	—	Won 1991a: 21	Lower Carboniferous	Tournaisian	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Albaillella pseudoparadoxa</i> <i>spongiosa</i>	Al	—	—	Won 1998: 225	Lower Carboniferous	Tournaisian	Oese, Rheinische Schiefergebirge, Germany
<i>Albaillella ramsbottomi</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 74	Lower Carboniferous	Serpukhovian	Goddard Formation, Oil Creek section, Johnston County, Oklahoma, USA
<i>Albaillella riescheidensis</i>	Al	—	—	Won 1990: 115	Lower Carboniferous	Visean	Riescheid Section, Wuppertal-Barmen, Germany
<i>Albaillella robusta</i>	Al	—	—	Cheng 1986: 60	Upper Carboniferous	Bashkirian	Johns Valley Shale, Pittsburg County, eastern Oklahoma, USA
<i>Albaillella rockensis</i>	Al	—	—	Cheng 1986: 61	Lower Carboniferous	Bashkirian	Jones Valley Shale, Le Flore County, eastern Oklahoma, USA
<i>Albaillella saltatoria</i>	Al	—	—	Cheng 1986: 62	Upper Carboniferous	Bashkirian	Wesley Formation, Turnpike section, Pittsburg County, Oklahoma, USA
<i>Albaillella sandbergi</i>	Al	—	—	Won 1991a: 23	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Albaillella saundersi</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 82	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Phillips Creek Section, Carter County, Oklahoma, USA
<i>Albaillella shijaensis</i>	Al	—	—	Wang in Wang et al. 2012: 107	Lower Carboniferous	Tournaisian	Shijia Formation, Bancheng, Qinzhou area, Guangxi Zhuang Region, SW China

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Albaillella</i> (1) continuation							
<i>Albaillella sinuata</i>	Al	—	—	Ishiga & Watase in Ishiga et al. 1986: 126	Middle Permian	Capitanian	Nishiki Group, Sangun-Chugoku Belt, Muikaichi area, Japan
<i>Albaillella sinuosa</i>	Al	—	—	Won & Seo 2010: 241	Lower Carboniferous	Tournaisian	Bergisches Land, N Westfalia, Germany
<i>Albaillella spinosa</i>	Al	—	—	Cheng 1986: 63	Upper Carboniferous	Bashkirian	Wesley Formation, Turnpike section, Pittsburg County, Oklahoma, USA
<i>Albaillella tela</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 73	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Phillips Creek Section, Carter County, Oklahoma, USA
<i>Albaillella thomasi</i>	Al	—	—	Braun 1990: 92	Lower Carboniferous	upper Tournaisian	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Albaillella tooelensis</i>	Al	—	—	Park & Won 2012: 44	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Albaillella triangularis</i>	Al	—	—	Ishiga, Kito & Imoto 1982a: 17	Upper Permian	Changhsingian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Ubara section, Fukuchiyama City, Kyoto, Japan
<i>Albaillella tuboforma</i>	Al	—	—	Won 1991b: 91	Lower Carboniferous	Tournaisian	Boulders in Quaternary Rhine Terrace, near Oberkassel, Bonn
<i>Albaillella tumida</i>	Al	—	—	Cheng 1986: 64	Upper Carboniferous	Bashkirian	Johns Valley Shale, Pittsburg County, eastern Oklahoma, USA
<i>Albaillella turgida</i>	Al	—	—	Cheng 1986: 65	Upper Carboniferous	Bashkirian	Wesley Formation, Turnpike section, Pittsburg County, Oklahoma, USA
<i>Albaillella u-forma reflexa</i>	Al	n.c.	—	Ling & Forsythe 1987: 257	Lower Permian	Sakmarian	Denaro Complex, Magallanes y Antartica Chilena, Chile
<i>Albaillella uncus</i>	Al	—	—	Won 1983: 127	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Albaillella undulata</i>	Al	—	—	Deflandre 1952: 872	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
<i>Albaillella unusualata</i>	Al	—	—	Cheng 1986: 66	Upper Carboniferous	Bashkirian	Wesley Formation, Turnpike section, Pittsburg County, Oklahoma, USA
<i>Albaillella utahensis</i>	Al	—	—	Park & Won 2012: 44	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Albaillella xiaodongensis</i>	Al	—	—	Wang in Wang et al. 1994: 185	Lower Permian	Kungurian	Dachongling section, Qinzhou City, Guangxi, S China
<i>Albaillella yamakitai</i>	Al	—	—	Kuwahara 1999: 89	Upper Permian	Wuchiapingian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Mino Valley, Seki City, Gifu, Japan
<i>Albaillella yaoi</i>	Al	—	—	Kuwahara 1999: 92	Upper Permian	Changhsingian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Mino Valley, Seki City, Gifu, Japan
<i>Albaillella yaoi longa</i>	Al	—	—	Jin & Feng in Jin et al. 2007: 11	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Albaillella?</i> <i>protractosegmentata</i>	Al	—	—	Nazarov in Isakova & Nazarov 1986: 113	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Albaillella?</i> <i>zhui</i>	Al	—	—	Feng & Liu 1993: 555	Upper Permian	Changhsingian	Jinghong Formation, NE of Jinghong City, Xishuang-bannadai County, SW Yunnan, China
<i>Altaiespheara</i> (49)							
<i>Altaiespheara acanthophora</i>	Ar	—	T	Obut & Iwata 2000: 35	Lower Cambrian	Stage 4	Shashkunar Formation, Gorny Altai, SW Siberia, Russia
<i>Altaiespheara sparsispinosa</i>	Ar	—	—	Obut & Iwata 2000: 35	Lower Cambrian	Stage 4	Shashkunar Formation, Gorny Altai, SW Siberia, Russia
<i>Amphibrachium</i>							
<i>Amphibrachium bacillum</i>	—	n.d.	—	Rüst 1892: 169	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
<i>Amphibrachium desecatum</i>	—	n.d.	—	Rüst 1892: 169	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Amphibrachium devoniense</i>	—	n.d.	—	Rüst 1892: 169	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Amphibrachium (continuation)							
<i>Amphibrachium inaequale</i>		—	n.d.	—	Rüst 1892: 169	Lower Devonian	—
<i>Amphibrachium pulchellum</i>		—	n.d.	—	Rüst 1892: 169	Upper Devonian	—
Amphymenium							
<i>Amphymenium alienum</i>	E	n.d.	T	Rüst 1892: 170	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
<i>Amphymenium krautii</i>	E	—	—	Rüst 1892: 170	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
Ampulla							
<i>Ampulla tubulata</i>		n.r.	i.s.	Ti	Rudenko & Panasenko 1990a: 123	Upper Permian	Changhsingian
Anakrusa (335)							
<i>Anakrusa conspersa</i>		n.r.	s.s	—	Nazarov 1977: 169	Middle Ordovician	Darriwilian
<i>Anakrusa miriacantha</i>		n.r.	s.s	T	Nazarov 1977: 169	Middle Ordovician	Darriwilian
Antygopora (234)							
<i>Antygopora bella</i>	S	—	—	Maletz & Bruton 2007: 271	Lower Ordovician	Floian	Valhallfonna Formation, Buldrebreen arm, Ny Frieslan, Spitsbergen, Norway
<i>Antygopora compacta</i>	S	—	—	Maletz & Bruton 2007: 271	Lower Ordovician	Floian	Valhallfonna Formation, Buldrebreen arm, Ny Frieslan, Spitsbergen, Norway
<i>Antygopora intermediata</i>	S	—	—	Won & Iams 2015b: 10	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Antygopora irregularia</i>	S	—	—	Maletz 2007: 80	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Antygopora labyrinthina</i>	S	—	—	Maletz & Bruton 2007: 273	Lower Ordovician	Floian	Valhallfonna Formation, Buldrebreen arm, Ny Frieslan, Spitsbergen, Norway
<i>Antygopora littleportensis</i>	S	—	—	Won & Iams 2013: 15	Lower Ordovician	Floian	Little Port Complex Newfoundland, Canada
<i>Antygopora littleportensis littleportensis</i>	S	—	—	Won & Iams 2013: 15	Lower Ordovician	Floian	Little Port Complex Newfoundland, Canada
<i>Antygopora littleportensis sigillata</i>	S	—	—	Won & Iams 2013: 15	Lower Ordovician	Floian	Little Port Complex Newfoundland, Canada
<i>Antygopora microspina</i>	S	—	—	Maletz & Bruton 2007: 271	Lower Ordovician	Floian	Valhallfonna Formation, Buldrebreen arm, Ny Frieslan, Spitsbergen, Norway
<i>Antygopora ordovicica</i>	S	—	T	Maletz & Bruton 2005: 5	Lower Ordovician	Floian	Valhallfonna Formation, Buldrebreen arm, Ny Frieslan, Spitsbergen, Norway
Apophysiactinia (77)							
<i>Apophysiactinia duplospinula</i>	n.r.	Calc-area	—	Won 1997a: 362	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Apophysiactinia iamsi</i>	n.r.	Calc-area	—	Park & Won 2012: 64	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Apophysiactinia testacea</i>	n.r.	Calc-area	—	Won 1997a: 364	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Apophysiactinia trispinula</i>	n.r.	Calc-area	Tnr	Won 1997a: 364	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
Apophysisphaera (78)							
<i>Apophysisphaera elegans</i>	E	—	—	Won 1997b: 374	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Apophysisphaera parva</i>	E	—	—	Won 1997b: 375	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Apophysisphaera</i> (78) continuation							
<i>Apophysisphaera?</i> <i>membranacea</i>	E	—	—	Won 1997b: 376	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Apophysisphaera?</i> <i>rosae</i>	E	—	—	Won 1997b: 376	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Arbustrum</i>							
<i>Arbustrum congregatum</i>	n.r.	Calc- area?	—	Wang 1989: 155	Lower Cambrian	—	Niutitang Formation, Sandu district, Guizhou Province, China
<i>Arbustrum inflata</i>	n.r.	Calc- area?	—	Wang 1989: 146	Lower Cambrian	—	Damiao Formation, Erlongping Group, Eastern Qinling ophiolite belt, Henan Province, China
<i>Arbustrum luxurians</i>	n.r.	Calc- area?	—	Wang 1989: 155	Lower Cambrian	—	Damiao Formation, Erlongping Group, Eastern Qinling ophiolite belt, Henan Province, China
<i>Arbustrum strigosum</i>	n.r.	Calc- area?	Tnr	Wang 1989: 146	Lower Cambrian	—	Damiao Formation, Erlongping Group, Eastern Qinling ophiolite belt, Henan Province, China
<i>Archaeocenospshaera</i> (50)							
<i>Archaeocenospshaera</i> <i>muricata</i>	Ar	—	Ts	Obut & Iwata 2000: 34	Lower Cambrian	Stage 4	Shashkunar Formation, Gorny Altai, SW Siberia, Russia
<i>Archaeopyramisa</i> (203)							
<i>Archaeopyramisa</i> <i>concava</i>	L	—	—	Cheng 1986: 185	Lower Carboniferous	Bashkirian	Jones Valley Shale, Le Flore County, eastern Oklahoma, USA
<i>Archaeopyramisa</i> <i>convexa</i>	L	—	—	Cheng 1986: 186	Lower Carboniferous	Serpukhovian	Sand Branch Member of Caney Formation, Pittsburg County, Oklahoma, USA
<i>Archaeopyramisa</i> <i>globosa</i>	L	—	—	Cheng 1986: 187	Lower Carboniferous	Serpukhovian	Sand Branch Member of Caney Formation, Pittsburg County, Oklahoma, USA
<i>Archaeopyramisa</i> <i>haeckeli</i>	L	—	Ts	Cheng 1986: 186	Lower Carboniferous	Serpukhovian	Sand Branch Member of Caney Formation, Pittsburg County, Oklahoma, USA
<i>Archaeopyramisa</i> <i>robusta</i>	L	—	—	Cheng 1986: 187	Lower Carboniferous	Serpukhovian	Sand Branch Member of Caney Formation, Pittsburg County, Oklahoma, USA
<i>Archaeopyramisa</i> <i>taliinhaensis</i>	L	—	—	Cheng 1986: 188	Lower Carboniferous	Bashkirian	Jones Valley Shale, Le Flore County, eastern Oklahoma, USA
<i>Archaeospongoprnum</i>							
<i>Archaeospongoprnum</i> <i>mengi</i>	S	—	—	Feng in Feng et al. 2006a: 35	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Archeoentactinia</i> (43)							
<i>Archeoentactinia</i> <i>angulata</i>	Ar	—	—	Won in Won & Below 1999: 332	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia
<i>Archeoentactinia</i> <i>delicata</i>	Ar	—	—	Won in Won & Below 1999: 332	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia
<i>Archeoentactinia</i> <i>hexactinia</i>	Ar	—	—	Won in Won & Below 1999: 333	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia
<i>Archeoentactinia</i> <i>incaensis</i>	Ar	—	T	Won in Won & Below 1999: 333	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia
<i>Archeoentactinia</i> <i>tetractinia</i>	Ar	—	—	Won in Won & Below 1999: 335	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia
<i>Archeoproventocitum</i> (280)							
<i>Archeoproventocitum</i> <i>nudiformum</i>	IS	—	T	Won, Iams & Reed 2007: 534	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Archeoproventocitum</i> <i>retiformum</i>	IS	—	—	Won, Iams & Reed 2007: 534	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Archidiscus</i>							
<i>Archidiscus lens</i>	—	n.d.	—	Rüst 1892: 166	Lower Carboniferous	—	Kieselschiefer, Harz, Germany

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Archocyrtium</i> (219)							
<i>Archocyrtium amoenus</i>	N?	—	—	Afanasieva & Amon 2011: 1513	Upper Devonian	lower Famennian	Polar Urals, Palnik Yu River, Russia
<i>Archocyrtium angulosum</i>	N?	—	—	Deflandre 1973d: 150	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Archocyrtium breviora</i>	N?	—	—	Park & Won 2012: 61	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Archocyrtium callimorphum</i>	N?	—	—	Braun 1989: 90	Lower Carboniferous	upper Tournaisian	Pebbles of siliceous shale from the lower Main-valley near Frankfurt a. M., Germany
<i>Archocyrtium castuligerum</i>	N?	—	—	Deflandre 1972a: 3539	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Archocyrtium castuligerum</i>	N?	n.n.	Ts	Deflandre 1972b: 15	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Archocyrtium clinoceros</i>	N?	—	—	Deflandre 1973d: 151	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Archocyrtium coronaesimile</i>	N?	—	—	Won 1983: 128	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Archocyrtium delicatum</i>	N?	—	—	Cheng 1986: 123	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Archocyrtium diductum</i>	N?	—	—	Deflandre 1973d: 150	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Archocyrtium dilatipes</i>	N?	—	—	Deflandre 1973d: 150	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Archocyrtium effingi</i>	N?	—	—	Kiessling & Tragelehn 1994: 231	Upper Devonian	Famennian	Frankenwald, north Bavaria, Germany
<i>Archocyrtium eupectum</i>	N?	—	—	Braun 1989: 90	Lower Carboniferous	upper Tournaisian	Pebbles of siliceous shale from the lower Main-valley near Frankfurt a. M., Germany
<i>Archocyrtium ferreum</i>	N?	—	—	Braun 1989: 90	Lower Carboniferous	upper Tournaisian	Pebbles of siliceous shale from the lower Main-valley near Frankfurt a. M., Germany
<i>Archocyrtium formosum</i>	N?	—	—	Cheng 1986: 124	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Archocyrtium lagabriellei</i>	N?	—	—	Gourmelon 1987: 115	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
<i>Archocyrtium ludicum</i>	N?	—	—	Deflandre 1973d: 150	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Archocyrtium medium</i>	N?	—	—	Liu & Hao 2006: 649	Upper Devonian	Famennian	Tielimaitidaban section, SW Tianshan, Xinjiang, China
<i>Archocyrtium menglianense</i>	N?	—	—	Wu in Wu & Li 1989: 341	Lower Carboniferous	Visean	Banshu section, Menglian County, Yunnan Province, China
<i>Archocyrtium obesum</i>	N?	—	—	Cheng 1986: 124	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Archocyrtium ormistoni</i>	N?	—	—	Cheng 1986: 125	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Archocyrtium parvispina</i>	N?	—	—	Park & Won 2012: 62	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Archocyrtium parvum</i>	N?	—	—	Deflandre 1972a: 3536	Lower Carboniferous	Visean	Brétignolles-sur-mer, Vendée, Pays de la Loire, France
<i>Archocyrtium parvum</i>	N?	n.n.	—	Deflandre 1972b: 15	Lower Carboniferous	Visean	Brétignolles-sur-mer, Vendée, Pays de la Loire, France
<i>Archocyrtium petrushevskaye</i>	N?	—	—	Deflandre 1973d: 151	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Archocyrtium procerum</i>	N?	—	—	Cheng 1986: 126	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Archocyrtium pulchrum</i>	N?	—	—	Braun 1990: 126	Lower Carboniferous	upper Tournaisian	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Archocyrtium riedeli</i>	N?	n.n.	T	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Archocyrtium riedeli</i>	N?	n.n.	—	Deflandre 1972a: 3539	Lower Carboniferous	Visean	Cabrières, Hérault, France

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Archocyrtium</i> (219) continuation							
<i>Archocyrtium riedeli</i>	N?	—	—	Deflandre 1972b: 15	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Archocyrtium sashidai</i>	N?	—	—	Feng in Feng et al. 2004b: 383	Lower Carboniferous	Visean	Shan-Thai terrane, Chiang Mai, NW Thailand
<i>Archocyrtium shijiaensis</i>	N?	—	—	Wang in Wang et al. 2012: 112	Lower Carboniferous	Tournaisian	Shijia Formation, Bancheng, Qinzhou area, Guangxi Zhuang Region, SW China
<i>Archocyrtium strictum</i>	N?	—	—	Deflandre 1973d: 151	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Archocyrtium tersae</i>	N?	—	—	Deflandre 1972a: 3536	Lower Carboniferous	Visean	Brétignolles-sur-mer, Vendée, Pays de la Loire, France
<i>Archocyrtium tersae</i>	N?	n.n.	—	Deflandre 1972b: 15	Lower Carboniferous	Visean	Brétignolles-sur-mer, Vendée, Pays de la Loire, France
<i>Archocyrtium typicum</i>	N?	—	—	Cheng 1986: 126	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Archocyrtium validum</i>	N?	—	—	Cheng 1986: 127	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Archocyrtium venustum</i>	N?	—	—	Cheng 1986: 128	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Archocyrtium wonae</i>	N?	—	—	Cheng 1986: 128	Lower Carboniferous	Bashkirian	Jones Valley Shale, Le Flore County, eastern Oklahoma, USA
<i>Archocyrtium? babini</i>	N?	—	—	Gourmelon 1986: 189	Lower Carboniferous	Tournaisian	Hauts-Pyrénées, France
<i>Arcocladhrata</i> (131)							
<i>Arcocladhrata alekseevi</i>	E	—	—	Afanasieva & Amon 2016: 219	Lower Permian	Sakmarian	Kondurovka section, Sakmar River, Southern Urals, Russia
<i>Areolicaudatus</i> (181)							
<i>Areolicaudatus elongatus</i>	L	n.n.	—	Feng 1992: 55	Upper Permian	Changhsingian	Papai Formation of Changning-Menglian Belt, Papai Village, Cangyuan County, Yunnan, China
<i>Areolicaudatus semiglobosus</i>	L	n.n.	—	Feng 1992: 55	Upper Permian	Changhsingian	Papai Formation of Changning-Menglian Belt, Papai Village, Cangyuan County, Yunnan, China
<i>Areolicaudatus semiglobosus</i>	L	—	T	Feng & Liu 1993: 545	Upper Permian	Changhsingian	Muiyinhe Formation, Nanpan, Lancang County, Yunnan, China
<i>Arrectoalatus</i> (276)							
<i>Arrectoalatus bicorniger</i>	IS	—	—	Nazarov in Isakova & Nazarov 1986: 124	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Arrectoalatus cernuus</i>	IS	—	T	Nazarov & Ormiston 1985: 49	Upper Carboniferous	Gzhelian	E of Saraktash, Nikol Village, Ural River, Bashkirsk Region, Urals, Russia
<i>Arrectoalatus eximus</i>	IS	—	—	Nazarov in Isakova & Nazarov 1986: 123	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Arrectoalatus? uncinatus</i>	IS	—	—	Rudenko & Panasenko 1990a: 122	Upper Permian	Changhsingian	Yastrebov Formation, Taukha Terrane, Primoriya, Russia
<i>Arrhiniella</i> (132)							
<i>Arrhiniella surrecta</i>	—	n.n.	—	Li 1995: 332 -n.c.	Middle Ordovician	Dapingian	Qingshuigou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Aspiculum</i> (284)							
<i>Aspiculum angulatum</i>	IS	—	—	Won, Iams & Reed 2005: 441	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Aspiculum densem</i>	IS	—	—	Won, Iams & Reed 2007: 507	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Aspiculum eccentricum</i>	IS	—	T	Won, Iams & Reed 2005: 441	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Aspiculum gigantium</i>	IS	—	—	Won, Iams & Reed 2007: 511	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Aspiculum jamesi</i>	IS	—	—	Won, Iams & Reed 2007: 513	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Aspiculum (284) continuation							
<i>Aspiculum jamesi parajamesi</i>	IS	—	—	Won & Iams 2011: 163	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Aspiculum multistratum</i>	IS	—	—	Won, Iams & Reed 2007: 515	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
Astroentactinia (79)							
<i>Astroentactinia biaciculata</i>	E	—	—	Nazarov 1975: 84	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Astroentactinia capitanensis</i>	E	—	—	Nestell & Nestell 2010: 20	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Astroentactinia crassata</i>	E	—	—	Nazarov 1975: 85	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Astroentactinia deorsiacus</i>	E	—	—	Nazarov & Ormiston 1993: 33	Upper Devonian	Famennian	Aitpaika River, Aktyubinsk region, Southern Urals, Russia
<i>Astroentactinia deorsiacus</i>	E	n.n.	—	Nazarov 1988: 129	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Astroentactinia digitosa</i>	E	—	—	Braun 1990: 101	Lower Carboniferous	upper Tournaisian	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Astroentactinia erinacea</i>	E	—	—	Nazarov in Nazarov & Popov 1980: 45	Middle Ordovician	Darriwilian	Bestomaks Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Astroentactinia formosa</i>	E	—	—	Wang in Wang et al. 2012: 110	Lower Carboniferous	Tournaisian	Shijia Formation, Bancheng, Qinzhou area, Guangxi Zhuang Region, SW China
<i>Astroentactinia inscita</i>	E	—	—	Nazarov in Isakova & Nazarov 1986: 67	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Astroentactinia luxuria</i>	E	—	—	Nazarov & Ormiston 1985: 23	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Astroentactinia mendosa</i>	E	—	—	Nazarov in Isakova & Nazarov 1986: 68	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Astroentactinia pauxilla</i>	E	—	—	Nazarov 1975: 86	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Astroentactinia porosa</i>	E	—	—	Maldonado & Noble 2010: 84	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Astroentactinia praeacudura</i>	E	n.n.	—	Nazarov 1988: 130	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Astroentactinia radiata</i>	E	—	—	Braun 1990: 102	Lower Carboniferous	upper Tournaisian	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Astroentactinia ramificans</i>	E	—	T	Nazarov 1975: 87	Middle Ordovician	Darriwilian	Bestomaks Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Astroentactinia rusaevi</i>	E	n.n.	—	Afanasieva 1997a: 221	Upper Devonian	lower Frasnian	Domanik Formation, outcrop 1904, Lyail River, Timan-Pechora Basin, Russia
<i>Astroentactinia rusaevi</i>	E	—	—	Afanasieva 2000b: 140	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Astroentactinia spatiosa</i>	E	—	—	Braun 1990: 103	Lower Carboniferous	upper Tournaisian	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Astroentactinia speciosa</i>	E	—	—	Amon & Braun 1994: 2	Lower Permian	Artinskian	Burtsevsky horizon, Dalny Tulkas Rill, Bashkortostan Region, S Urals, Russia
<i>Astroentactinia stellata</i>	E	—	T	Nazarov 1975: 82	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Astroentactinia tantilla</i>	E	—	—	Nazarov 1975: 85	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Astroentactinia tikhomirovi</i>	E	—	—	Afanasieva 2000b: 142	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Astroentactinia valentiniae</i>	E	—	—	Nazarov in Nazarov et al. 1981: 87	Upper Devonian	Famennian	Duksundinsk Formation, along Dukunda River, Magadan, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Astroentactinia (79) continuation							
<i>Astroentactinia vishnevskayae</i>	E	—	—	Afanasieva 2000b: 142	Upper Devonian	middle Frasnian	Domanik Formation, borehole Ukhinskaya-3B, SW of Ukhta, Timan-Pechora Basin, Russia
<i>Astroentactinia? crubellata</i>	E	—	—	Nazarov 1975: 86	Lower Silurian	—	Sakmarsk Formation, Bazyam, Sakmar, Orenburgskaya Region, S Urals, Russia
<i>Astroentactinia? echinosimilis</i>	E	—	—	Won 1991b: 95	Lower Carboniferous	Tournaisian	Boulders in Quaternary Rhine Terrace, near Oberkassel, Bonn
<i>Astroentactinia? mirouisi</i>	E	—	—	Gourmelon 1986: 184	Lower Carboniferous	Tournaisian	Hautes-Pyrénées, France
<i>Astroentactinia? miscella</i>	E	—	—	Nazarov <i>in</i> Nazarov & Popov 1980: 47	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Astroentactinia? radiata</i>	E	—	—	Aitchison 1993b: 118	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Astroentactinia? stellaesimilis</i>	E	—	—	Won 1991b: 96	Lower Carboniferous	Tournaisian	Boulders in Quaternary Rhine Terrace, near Oberkassel, Bonn
Astrophacus							
<i>Astrophacus cingulatus</i>	—	n.d.	—	Aberdeen 1940: 139	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
Auliela (336)							
<i>Auliela annula</i>	n.r.	s.s	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuigou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Auliela aspersa</i>	n.r.	s.s	Ts	Nazarov 1977: 170	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Auliela taplowensis</i>	n.r.	s.s	—	Webby & Blom 1986: 151	Upper Ordovician	Katian	Malongulli Formation, Belubula River, E of Canowindra, central NSW, Australia
Axellipsis							
<i>Axellipsis longitudinalis</i>	—	n.d.	—	Rüst 1892: 152	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Azyrtalia (337)							
<i>Azyrtalia dilata</i>	n.r.	Calc-area	Tnr	Nazarov 1973b: 12	Lower Cambrian	Stage 2	Bograd Mountains, Betenevskiy area, Khakasiya Region, Russia
Batoballa (338)							
<i>Batoballa communis</i>	n.r.	Calc-area	Tnr	Wang <i>in</i> Wang <i>et al.</i> 2008: 400	Middle Ordovician	Dapingian	Heituo Formation, Tarim Basin, Kuruktag region, Xinjiang, China
<i>Batoballa longiovata</i>	n.r.	Calc-area	—	Wang <i>in</i> Wang <i>et al.</i> 2008: 401	Middle Ordovician	Dapingian	Heituo Formation, Tarim Basin, Kuruktag region, Xinjiang, China
Belowea (80)							
<i>Belowea crassitesta</i>	E	—	—	Won 1983: 131	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Belowea hexaculeata</i>	E	—	—	Won 1990: 121	Lower Carboniferous	Visean	Riescheid Section, Wuppertal-Barmen, Germany
<i>Belowea tenuistesta</i>	E	—	—	Won 1983: 133	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
Beothuka (235)							
<i>Beothuka aitchisoni</i>	S	—	—	Won & Iams 2011: 161	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Beothuka echinata</i>	S	—	—	Won & Iams 2013: 16	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Beothuka grosmornensis</i>	S	—	—	Won & Iams 2011: 162	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Beothuka longispiniforma</i>	S	—	—	Wang <i>in</i> Wang <i>et al.</i> 2008: 397	Middle Ordovician	Dapingian	Heituo Formation, Tarim Basin, Kuruktag region, Xinjiang, China
<i>Beothuka maletziana</i>	S	—	—	Won & Iams 2015b: 12	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Beothuka multiaculeata</i>	S	—	—	Won & Iams 2015a: 26	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Beothuka robusta bispinosa</i>	S	—	—	Won & Iams 2013: 17	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Beothuka</i> (235) continuation							
<i>Beothuka robusta intermediata</i>	S	—	—	Won & Iams 2013: 17	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Beothuka spissa</i>	S	—	—	Won & Iams 2015a: 26	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Beothuka spongiosa</i>	S	—	—	Won & Iams 2013: 17	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Beothuka spongiosa spongiosa</i>	S	—	—	Won & Iams 2013: 19	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Beothuka spongiosa variabilis</i>	S	—	—	Won & Iams 2013: 19	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Beothuka stougei</i>	S	—	—	Won & Iams 2011: 162	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Beothuka terranova</i>	S	—	T	Aitchison, Flood & Malpas 1998: 417	Lower Ordovician	Tremadocian	Little Port Complex at Winter House Brook Lookout, Newfoundland, Canada
<i>Beothuka terranova dimunata</i>	S	—	—	Won & Iams 2015a: 25	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Beothuka terranova intermediata</i>	S	—	—	Won & Iams 2015a: 25	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Beothuka terranova mutispinosa</i>	S	—	—	Won & Iams 2011: 163	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Beothuka? concreta</i>	S	—	—	Won & Iams 2013: 21	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Beothuka? stellata</i>	S	—	—	Won & Iams 2011: 163	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Bientactinosphaera</i> (81)							
<i>Bientactinosphaera maslakovae</i>	E	—	—	Afanasieva 2000a: 51	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Bientactinosphaera miletenkoi</i>	E	—	—	Afanasieva 2000c: 372	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Bientactinosphaera morozovi</i>	E	—	—	Afanasieva 2000a: 53	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Bientactinosphaera pinica</i>	E	—	—	Afanasieva 2000a: 50	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Bientactinosphaera spinofoliacea</i>	E	—	—	Nazarov & Afanasieva in Afanasieva 2000c: 54	Upper Devonian	Famennian	Zadonsk Formation, W Lekkeyaginsk-65, Sarembi-Lekkeyaga, Timan-Pechora Basin, Russia
<i>Bientactinosphaera zuraevi</i>	E	—	—	Afanasieva & Amon 2011: 1501	Upper Devonian	Frasnian	Polar Urals, Palnik Yu River, Russia
<i>Bipylospongia</i> (238)							
<i>Bipylospongia rudosa</i>	S	—	T	Noble 1994: 37	Upper Silurian	Gorstian	Caballos Novaculite Formation, East Bourland Mts., Marathon Basin, W Texas, USA
<i>Bisphaera</i> (82)							
<i>Bisphaera beniguna</i>	E	—	—	Won 1997a: 344	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Bisphaera cribrisimilis</i>	E	—	—	Won 1997a: 345	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Bisphaera cribrisimilis crassa</i>	E	—	—	Won 1997a: 345	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Bisphaera cribrisimilis cribrisimilis</i>	E	—	—	Won 1997a: 345	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Bisphaera dissimilicortex</i>	E	—	—	Won 1997a: 346	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Bisphaera solidispinosa</i>	E	—	Th, Ts	Won 1997a: 346	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Bisphaera uniprocerata</i>	E	—	—	Won 1997a: 346	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Bissulentaectinia</i>							
<i>Bissulentaectinia diaphoraxis</i>	—	n.n.	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuigou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Bissylentactinia</i> (133)							
<i>Bissylentactinia bifida</i>	E	—	—	Nazarov in Nazarov & Popov 1980: 64	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Bissylentactinia penita</i>	E	—	—	Nazarov 1975: 95	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Bissylentactinia pilifera</i>	E	—	—	Nazarov in Nazarov & Popov 1980: 64	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Bissylentactinia rudicula</i>	E	—	Ts	Nazarov 1975: 94	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Bistarkum</i>							
<i>Bistarkum martiali</i>	S	—	—	Feng in Feng et al. 2006a: 37	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Blastulospongia</i>							
<i>Blastulospongia mindyallica</i>	n.r. Calc-area	—	—	Bengtson 1986: 205	Upper Cambrian	Paibian	Mungerebar Limestone, Georgina Basin, Queensland, Australia
<i>Blastulospongia monothalamos</i>	n.r. Calc-Tnr area	Pickett & Jell 1983: 87	—	Middle Cambrian	—	—	Mootwingee, New South Wales
<i>Blastulospongia polytreta</i>	n.r. Calc-area	—	—	Conway Morris & Chen 1990: 26	Lower Cambrian	Stage 2-Stage 3	Quarry in Taishanmiao section, N of Yichang City, Hubei Province, China
<i>Borisella</i> (83)							
<i>Borisella bykovae</i>	E	n.n.	—	Afanasieva 1997a: 221	Upper Devonian	middle Frasnian	Domanik Formation, outcrop 1904, Lyaiol River, Timan-Pechora Basin, Russia
<i>Borisella bykovae</i>	E	—	—	Afanasieva 2000b: 144	Upper Devonian	middle Frasnian	Domanik Formation, outcrop 1904, Lyaiol River, Timan-Pechora Basin, Russia
<i>Borisella dunhilli</i>	E	—	—	Noble & Webby 2009: 555	Upper Ordovician	Katian	Malongulli Formation, Cliefden Caves area, NSW, Australia
<i>Borisella invisitata</i>	E	—	—	Afanasieva 2000a: 45	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Ukhtha, Timan-Pechora Basin, Russia
<i>Borisella maksimovae</i>	E	n.n.	—	Afanasieva 1997a: 221	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Ukhtha, Timan-Pechora Basin, Russia
<i>Borisella maksimovae</i>	E	—	T	Afanasieva 2000b: 144	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Ukhtha, Timan-Pechora Basin, Russia
<i>Borisella mariae</i>	E	n.n.	—	Afanasieva 1997a: 221	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Ukhtha, Timan-Pechora Basin, Russia
<i>Borisella mariae</i>	E	—	—	Afanasieva 2000b: 145	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Ukhtha, Timan-Pechora Basin, Russia
<i>Borisella primitiva</i>	E	—	—	Afanasieva 2000a: 47	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Ukhtha, Timan-Pechora Basin, Russia
<i>Brianellium</i> (182)							
<i>Brianellium buckense</i>	L	—	—	Cheng 1986: 181	Upper Carboniferous	Bashkirian	Wesley Formation, Turnpike section, Pittsburg County, Oklahoma, USA
<i>Brianellium gordoni</i>	L	—	—	Cheng 1986: 181	Upper Carboniferous	Bashkirian	Wesley Formation, Turnpike section, Pittsburg County, Oklahoma, USA
<i>Brianellium holdsworthi</i>	L	—	Ts	Cheng 1986: 182	Upper Carboniferous	Bashkirian	Wesley Formation, Turnpike section, Pittsburg County, Oklahoma, USA
<i>Brianellium ishigai</i>	L	—	—	Cheng 1986: 182	Upper Carboniferous	Bashkirian	Wesley Formation, Turnpike section, Pittsburg County, Oklahoma, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Brianellium</i> (182) continuation							
<i>Brianellium laxum</i>		L	—	—	Cheng 1986: 183	Upper Carboniferous	Bashkirian
<i>Brianellium medium</i>		L	—	—	Cheng 1986: 183	Upper Carboniferous	Bashkirian
<i>Brianellium obesum</i>		L	—	—	Cheng 1986: 184	Upper Carboniferous	Bashkirian
<i>Brianellium ruestae</i>		L	—	—	Cheng 1986: 184	Upper Carboniferous	Bashkirian
<i>Callela</i> (84)							
<i>Callela conispinosa</i>		E	—	—	Won 1983: 134	Lower Carboniferous	Visean
<i>Callela hexactina</i>		E	—	—	Won 1983: 134	Lower Carboniferous	Visean
<i>Callela parvispinosa</i>		E	—	—	Won 1983: 134	Lower Carboniferous	Visean
<i>Callela stellaesimilis</i>		E	—	T	Won 1983: 135	Lower Carboniferous	Visean
<i>Callela tetravalidaculeata</i>		E	—	—	Won 1990: 132	Lower Carboniferous	Visean
<i>Callela variaculeata</i>		E	—	—	Park & Won 2012: 66	Lower Carboniferous	Tournaisian
<i>Campanulithus</i> (9)							
<i>Campanulithus falcatus</i>		Al	—	T	Nazarov & Rudenko 1981: 137	Lower Permian	Artinskian
<i>Campanulithus insuetus</i>		Al	—	—	Nestell & Nestell 2010: 14	Middle Permian	Capitanian
<i>Campoalatus</i> (277)							
<i>Campoalatus benignus</i>		IS	—	—	Nazarov & Ormiston 1985: 49	Upper Carboniferous	Gzhelian
<i>Campoalatus monopterygius</i>		IS	—	T	Nazarov & Rudenko 1981: 138	Lower Permian	Sakmarian
<i>Campoalatus volaticus</i>		IS	—	—	Maldonado & Noble 2010: 80	Middle Permian	Capitanian
<i>Campoalatus?</i> <i>aretinus</i>		IS	—	—	Nazarov in Isakova & Nazarov 1986: 121	Upper Carboniferous	Gzhelian
<i>Cancellientactinia</i> (291)							
<i>Cancellientactinia acifera</i>	IS	—	T	(O&F)	Obut & Shcherbanenko 2008: 374	Upper Devonian	Frasnian
<i>Cancellisphaera</i> (51)							
<i>Cancellisphaera kozuri</i>	Ar	—	—	—	Won & Iams 2015a: 20	Lower Ordovician	Floian
<i>Cangyuanella</i> (10)							
<i>Cangyuanella deflandrei</i>	Al	n.n.	—	—	Feng 1992: 55	Upper Permian	Changhsingian
<i>Cangyuanella deflandrei</i>	Al	—	T	—	Feng & Liu 1993: 550	Upper Permian	Changhsingian
<i>Cariver</i> (29)							
<i>Cariver dorsiococonvexus</i>	Al	—	—	—	Kozur 1993: 109	Upper Permian	upper Changhsingian

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Carposphaera</i>							
<i>Carposphaera aberdeenae</i>	—	n.d.	—	Riedel in Nitecki 1963: 164	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Carposphaera equalis</i>	—	n.d.	—	Aberdeen 1940: 133	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Carposphaera infracrinita</i>	—	n.d.	—	Rüst 1892: 136	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Carposphaera jejuna</i>	—	n.d.	—	Rüst 1892: 136	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Carposphaera macractinia</i>	—	n.d.	—	Rüst 1892: 136	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Carposphaera magna</i>	—	n.d.	—	Aberdeen 1940: 133	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Carposphaera magna</i>	—	n.d.	—	Rüst 1892: 136	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Carposphaera nana</i>	—	n.d.	—	Hinde 1899b: 215	Middle Devonian	Givetian	Chypons Farm, Mullion Parrish, Cornwall, England, UK
<i>Carposphaera pygmaea</i>	—	n.d.	—	Rüst 1892: 135	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Carposphaeridium</i> (307)							
<i>Carposphaeridium cambrense</i>	—	n.d.	Td	Chapman 1923: 37	Upper Cambrian	—	Lachlan Fold Belt, Victoria, Australia
<i>Caryosphaera</i>							
<i>Caryosphaera groddeekii</i>	—	n.d.	—	Rüst 1892: 139	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
<i>Caspiaza</i> (292)							
<i>Caspiaza aculeata</i>	IS (O&F)	—	—	Afanasieva 1986: 32	Lower Carboniferous	Serpukhovian	Tyan-Shan, Karachaganak area, Pre-Caspinsk, Batys Qazaqstan, Kazakhstan
<i>Caspiaza calva</i>	IS (O&F)	—	T	Afanasieva 1986: 31	Lower Carboniferous	Serpukhovian	Tyan-Shan, Karachaganak area, Pre-Caspinsk, Batys Qazaqstan, Kazakhstan
<i>Caspiaza collaricostulata</i>	IS (O&F)	—	—	Afanasieva 1993: 117	Upper Devonian	Famennian	Polar Urals, Yamalo-Nenetskiy Region, Russia
<i>Caspiaza spinifera</i>	IS (O&F)	—	—	Afanasieva 1993: 117	Upper Devonian	Famennian	Polar Urals, Yamalo-Nenetskiy Region, Russia
<i>Caspiaza urceus</i>	IS (O&F)	—	—	Afanasieva 1986: 32	Lower Carboniferous	Serpukhovian	Tyan-Shan, Karachaganak area, Pre-Caspinsk, Batys Qazaqstan, Kazakhstan
<i>Cauletella</i> (170)							
<i>Cauletella constricta</i>	L	—	—	Feng in Feng et al. 2006b: 833	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Cauletella paradoxa</i>	L	—	—	Shang, Caridroit & Wang 2001: 233	Upper Permian	Changhsingian	Changshing Formation, Liucqiao section, Fusui County, southern Nanning, Guangxi, China
<i>Cauletella porosa</i>	L	—	—	Feng in Feng et al. 2006b: 833	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Cavasphaera</i> (285)							
<i>Cavasphaera diversa</i>	IS	—	T	Won & Iams 2015a: 30	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Cavasphaera inaequalis</i>	IS	—	—	Won & Iams 2015a: 30	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Cecryphalium</i>							
<i>Cecryphalium infundibulum</i>	—	n.d.	—	Rüst 1892: 184	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Cecryphalium oligoporum</i>	—	n.d.	—	Rüst 1892: 183	Upper Permian	—	Novgorod, Russia
<i>Cenellipsis</i>							
<i>Cenellipsis areolata</i>	—	n.d.	—	Rüst 1892: 151	Lower Devonian	—	Southern Urals, Russia
<i>Cenellipsis cepaeformis</i>	—	n.d.	—	Rüst 1892: 152	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
<i>Cenellipsis citrus</i>	—	n.d.	—	Rüst 1892: 151	Lower Devonian	—	Southern Urals, Russia
<i>Cenellipsis curvatoporata</i>	—	n.d.	—	Rüst 1892: 151	Lower Devonian	—	Southern Urals, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Cenellipsis (continuation)							
<i>Cenellipsis cypridina</i>	—	n.d.	—	Rüst 1892: 152	Lower Devonian	—	Southern Urals, Russia
<i>Cenellipsis diversipora</i>	—	n.d.	—	Rüst 1892: 151	Lower Silurian	—	Cabrières, Hérault, France
<i>Cenellipsis favosa</i>	—	n.d.	—	Hinde 1899b: 216	Middle Devonian	Givetian	Chypons Farm, Mullion Parrish, Cornwall, England, UK
<i>Cenellipsis multiplex</i>	—	n.d.	—	Rüst 1892: 152	Carboniferous	—	Bükk-Gebirge, Inner Western Carpathians, Hungary
<i>Cenellipsis perovalis</i>	—	n.d.	—	Rüst 1892: 151	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Cenellipsis rectipora</i>	—	n.d.	—	Rüst 1892: 151	Lower Devonian	—	Southern Urals, Russia
<i>Cenellipsis reticulosa</i>	—	n.d.	—	Rüst 1892: 152	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Cenellipsis scitula</i>	—	n.d.	—	Hinde 1899b: 216	Middle Devonian	Givetian	Chypons Farm, Mullion Parrish, Cornwall, England, UK
<i>Cenellipsis setosa</i>	—	n.d.	—	Hinde 1899b: 216	Middle Devonian	Givetian	Chypons Farm, Mullion Parrish, Cornwall, England, UK
Cenodiscus							
<i>Cenodiscus intermedius</i>	—	n.d.	—	Rüst 1892: 162	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Cenodiscus nummularis</i>	—	n.d.	—	Rüst 1892: 162	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Cenodiscus primordialis</i>	—	n.d.	—	Rüst 1892: 161	Lower Silurian	—	Cabrières, Hérault, France
Cenosphaera							
<i>Cenosphaera aberdeenae</i>	?Ar	—	—	Furutani 1990: 51	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Cenosphaera affinis</i>	—	n.d.	—	Hinde 1899a: 44	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Cenosphaera antiqua</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1567	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Cenosphaera apiaria</i>	—	n.d.	—	Rüst 1892: 135	Lower Devonian	—	Southern Urals, Russia
<i>Cenosphaera cabrierensis</i>	—	n.d.	—	Deflandre 1973c: 1150	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Cenosphaera carbonica</i>	—	n.d.	—	Rüst 1892: 134	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Cenosphaera castanea</i>	—	n.d.	—	Rüst 1892: 134	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
<i>Cenosphaera hexagonalis</i>	—	n.d.	—	Aberdeen 1940: 133	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Cenosphaera hexata</i>	—	n.d.	—	Pulfrey 1932: 194	Lower Carboniferous	Serpukhovian	Calver Sough, Derbyshire, England, UK
<i>Cenosphaera ingens</i>	—	n.d.	—	Rüst 1892: 134	Lower Silurian	—	Cabrières, Hérault, France
<i>Cenosphaera macropora</i>	—	n.d.	—	Rüst 1892: 134	Lower Silurian	—	Cabrières, Hérault, France
<i>Cenosphaera marathonensis</i>	—	n.d.	—	Riedel in Nitecki 1963: 165	Upper Devonian	Famennian	Marathon Basin, Texas, USA
<i>Cenosphaera rossica</i>	—	n.d.	—	Rüst 1892: 134	Lower Devonian	—	Southern Urals, Russia
<i>Cenosphaera scitula</i>	—	n.d.	—	Hinde 1899a: 43	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Cenosphaera semiequalis</i>	—	n.d.	—	Aberdeen 1940: 133	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Cenosphaera uralensis</i>	—	n.d.	—	Rüst 1892: 134	Lower Devonian	—	Southern Urals, Russia
<i>Cenosphaera variabilis</i>	—	n.d.	—	Aberdeen 1940: 133	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
Centrocubus?							
<i>Centrocubus? giganteus</i>	E	—	—	Won 1983: 135	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
Centrolonche							
<i>Centrolonche obscura</i>	—	n.n.	—	Deflandre 1953: 404	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
Cerarchocyrtium (220)							
<i>Cerarchocyrtium ambiguum</i>	N?	—	T	Deflandre 1973d: 151	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Cerarchocyrtium dirum</i>	N?	—	—	Cheng 1986: 129	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Cerarchocyrtium (220) continuation							
<i>Cerarchocyrtium singularium</i>		N?	—	Cheng 1986: 130	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Cerarchocyrtium tinnulum</i>		N?	—	Deflandre 1973d: 152	Lower Carboniferous	Visean	Cabrières, Hérault, France
Ceratoclathrulum (221)							
<i>Ceratoclathrulum ambiguum</i>		—	n.n. Tn	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
Ceratoikiscum (11)							
<i>Ceratoikiscum acatangulatum</i>	Al	—	—	Nazarov in Nazarov et al. 1975: 103	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Ceratoikiscum acatangulatum</i>	Al	—	—	Nazarov in Nazarov et al. 1977: 919	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Ceratoikiscum araneosum</i>	Al	—	—	Afanasieva 2000c: 367	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Utkha, Timan-Pechora Basin, Russia
<i>Ceratoikiscum ardmorensis</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 116	Upper Devonian	upper Famennian	Woodford Formation, Criner Hills 2A section, Carter County, Oklahoma, USA
<i>Ceratoikiscum armiger</i>	Al	—	—	Furutani 1990: 51	Upper Silurian	Ludfordian	Hitoegane Formation, Hida-gaien Belt, E of Hitoegane, Fukui area, Takayama City, Japan
<i>Ceratoikiscum astrum</i>	Al	—	—	Cheng 1986: 76	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Ceratoikiscum asymmetricum</i>	Al	—	—	Won 1998: 231	Lower Carboniferous	Tournaisian	Oese, Rheinische Schiefergebirge, Germany
<i>Ceratoikiscum avimexpectans</i>	Al	—	T	Deflandre 1953: 409	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
<i>Ceratoikiscum avimexpectans nonspongiosum</i>	Al	—	—	Won 1991b: 97	Lower Carboniferous	Tournaisian	Boulders in Quaternary Rhine Terrace, near Oberkassel, Bonn
<i>Ceratoikiscum berggreni</i>	Al	—	—	Gourmelon 1987: 96	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
<i>Ceratoikiscum bicancellatum</i>	Al	—	—	Holdsworth 1969: 228	Upper Carboniferous	Bashkirian	Waterhouses, Staffordshire, England, UK
<i>Ceratoikiscum bujugum</i>	Al	—	—	Foreman 1963: 288	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Ceratoikiscum calvum</i>	Al	—	—	Stratford & Aitchison 1997: 245	Lower Devonian	Emsian	Gamarloï terrane, Glenrock Station, New England orogen, NSW, Australia
<i>Ceratoikiscum canningense</i>	Al	—	—	Aitchison 1993b: 108	Upper Devonian	lower Famennian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Ceratoikiscum carinatum</i>	Al	—	—	Won 1998: 234	Lower Carboniferous	Tournaisian	Oese, Rheinische Schiefergebirge, Germany
<i>Ceratoikiscum chengi</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 113	Upper Devonian	upper Famennian	Woodford Formation, Criner Hills 2A section, Carter County, Oklahoma, USA
<i>Ceratoikiscum chengi</i>	Al	—	—	Won 1998: 235	Lower Carboniferous	Tournaisian	Oese, Rheinische Schiefergebirge, Germany
<i>Ceratoikiscum coroniferum</i>	Al	—	—	Luo, Aitchison & Wang 2002: 115	Middle Devonian	Givetian	Tanhe Formation, Wuxiangling section, S of Nanning, Guangxi Zhuang Region, SW China
<i>Ceratoikiscum costaciculare</i>	Al	—	—	Nazarov 1974a: 44	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Ceratoikiscum crinerensis</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 106	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA
<i>Ceratoikiscum delawarensis</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 119	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Sand Branch Section, Johnston County, Oklahoma, USA
<i>Ceratoikiscum delicatum</i>	Al	—	—	Cheng 1986: 78	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Ceratoikiscum (11) continuation							
<i>Ceratoikiscum echinatum</i>	Al	—	—	Aitchison 1993b: 109	Upper Devonian	lower Famennian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Ceratoikiscum echinocostatum</i>	Al	—	—	Nazarov 1975: 102	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Ceratoikiscum elmensis</i>	Al	—	—	Cheng 1986: 80	Upper Carboniferous	Bashkirian	Sand Branch Member of Caney Formation, Pittsburg County, Oklahoma, USA
<i>Ceratoikiscum extraordinarium</i>	Al	—	—	Cheng 1986: 80	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Ceratoikiscum famenium</i>	Al	—	—	Nazarov & Ormiston 1990: 23	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Ceratoikiscum famenium</i>	Al	n.n.	—	Nazarov 1988: 130	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Ceratoikiscum famenium</i>	E	n.n.	—	Nazarov 1988: 132	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Ceratoikiscum famenium</i>	Al	inv.	—	Nazarov & Ormiston 1993: 50	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Ceratoikiscum fenestratum</i>	Al	—	—	Won & Seo 2010: 245	Lower Carboniferous	Visean	Bergisches Land, N Westfalia, Germany
<i>Ceratoikiscum formosum</i>	Al	—	—	Braun 1990: 96	Lower Carboniferous	upper Tournaisian	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Ceratoikiscum fragile</i>	Al	—	—	Aitchison 1993b: 109	Upper Devonian	lower Famennian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Ceratoikiscum goodbodyi</i>	Al	—	—	Cheng 1986: 80	Lower Carboniferous	Bashkirian	Jones Valley Shale, Le Flore County, eastern Oklahoma, USA
<i>Ceratoikiscum herkommeli</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 117	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA
<i>Ceratoikiscum hexaspina</i>	Al	—	—	Won 1990: 133	Lower Carboniferous	Visean	Riescheid Section, Wuppertal-Barmen, Germany
<i>Ceratoikiscum hexastellatum</i>	Al	—	—	Cheng 1986: 81	Upper Devonian	Famenian	Johns Valley Shale, Ouachita Mountains, eastern Oklahoma, USA
<i>Ceratoikiscum ichinotaniense</i>	Al	—	—	Ishiga 1992: 395	Upper Silurian	Pridoli	Yoshiki Formation, Hida-gaien Belt, Ichinotani Valley, Fukuji area, Takayama City, Gifu, Japan
<i>Ceratoikiscum incomptum</i>	Al	—	—	Nazarov 1975: 103	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Ceratoikiscum izumiensis</i>	Al	—	—	Kurihara & Sashida 2000: 64	Lower Devonian	Emsian	Shibasudani Formation, Shibasudani Valley, Ohno City, Fukui Prefecture, Japan
<i>Ceratoikiscum jucundum</i>	Al	—	—	Noble, Tekin, Gedik & Pehlivan 2008: 46	Lower Carboniferous	Tournaisian	Baltalimanı Formation, Istanbul, Turkey
<i>Ceratoikiscum kochiense</i>	Al	—	—	Umeda 1997: 419	Upper Silurian	Pridoli	Jyoro Formation, Kurosegawa Belt, Mt. Konomori, Kochi City, Shikoku, Japan
<i>Ceratoikiscum konomoriense</i>	Al	—	—	Ishiga 1988: 75	Upper Devonian	middle Frasnian	Jyoro Formation, Kurosegawa Belt, Konomori section, Kochi City, Shikoku, Japan
<i>Ceratoikiscum kurosegum</i>	Al	—	—	Aitchison, Hada, Ireland & Yoshikura 1996: 59	Upper Silurian	Pridoli	Unit G4, Jingamori, Kurosegawa terrane, S Mt. Konomori, Kochi City, Shikoku, Japan
<i>Ceratoikiscum labyrinthum</i>	Al	—	—	Cheng 1986: 82	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Ceratoikiscum lorum</i>	Al	—	—	Holdsworth 1969: 224	Upper Carboniferous	Bashkirian	Upper Dove Valley, SW Derbyshire, England, UK
<i>Ceratoikiscum lyratum</i>	Al	—	—	Ishiga 1988: 74	Upper Devonian	middle Frasnian	Jyoro Formation, Kurosegawa Belt, Konomori section, Kochi City, Shikoku, Japan
<i>Ceratoikiscum marginatum</i>	Al	—	—	Aitchison 1993b: 109	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Ceratoikiscum mertsii</i>	Al	—	—	Vishnevskaya 1998: 65	Upper Devonian	Frasnian	Domanik Formation, Uktha section, Domanik creek, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Ceratoikiscum (11) continuation							
<i>Ceratoikiscum mirum</i>	Al	-	-	Cheng 1986: 83	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Ceratoikiscum neosurculum</i>	Al	-	-	Won & Seo 2010: 245	Lower Carboniferous	Visean	Bergisches Land, N Westfalia, Germany
<i>Ceratoikiscum omicron</i>	Al	-	-	Ormiston & Lane 1976: 172	Lower Carboniferous	Tournaisian	Sycamore Limestone, southern Arbuckle Mountains, Oklahoma, USA
<i>Ceratoikiscum orbistellerae</i>	Al	-	-	Nazarov 1975: 100	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Ceratoikiscum paragyium</i>	Al	-	-	Stratford & Aitchison 1997: 244	Middle Devonian	Eifelian	Gamilaroi terrane, Glenrock Station, New England orogen, NSW, Australia
<i>Ceratoikiscum patagiatum</i>	Al	-	-	Aitchison 1993b: 110	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Ceratoikiscum perittacanthinum</i>	Al	-	-	Foreman 1963: 292	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Ceratoikiscum pillaraense</i>	Al	-	-	Aitchison 1993b: 110	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Ceratoikiscum planistellare</i>	Al	-	-	Foreman 1963: 290	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Ceratoikiscum quinquestellatum</i>	Al	-	-	Cheng 1986: 82	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Ceratoikiscum rectum</i>	Al	-	-	Nazarov 1973a: 698	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Ceratoikiscum rectum</i>	Al	-	-	Nazarov 1975: 102	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Ceratoikiscum regalinodus</i>	Al	-	-	Stratford & Aitchison 1997: 244	Middle Devonian	Eifelian	Gamilaroi terrane, Glenrock Station, New England orogen, NSW, Australia
<i>Ceratoikiscum riedeli</i>	Al	-	-	Cheng 1986: 84	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Ceratoikiscum robustum</i>	Al	-	-	Aitchison 1993b: 110	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Ceratoikiscum rotundum</i>	Al	-	-	Braun 1990: 97	Lower Carboniferous	upper Tournaisian	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Ceratoikiscum sandbergi</i>	Al	-	-	Cheng 1986: 84	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Ceratoikiscum simplum</i>	Al	-	-	Cheng 1986: 85	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Ceratoikiscum spiculatum</i>	Al	-	-	Aitchison 1993b: 111	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Ceratoikiscum spinosiarcuatum</i>	Al	-	-	Foreman 1963: 294	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Ceratoikiscum spinosum</i>	Al	-	-	Cheng 1986: 85	Lower Carboniferous	Bashkirian	Jones Valley Shale, Le Flore County, eastern Oklahoma, USA
<i>Ceratoikiscum stellatum</i>	Al	-	-	Aitchison 1993b: 111	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Ceratoikiscum surculum</i>	Al	-	-	Schwartzapfel & Holdsworth 1996: 99	Upper Devonian	upper Famennian	Woodford Formation, Criner Hills 2A section, Carter County, Oklahoma, USA
<i>Ceratoikiscum torale</i>	Al	-	-	Aitchison 1993b: 111	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Ceratoikiscum triactina</i>	Al	-	-	Park & Won 2012: 47	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Ceratoikiscum triangulatum</i>	Al	-	-	Holdsworth 1969: 226	Upper Carboniferous	Bashkirian	Upper Dove Valley, SW Derbyshire, England, UK

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Ceratoikiscum (11) continuation							
<i>Ceratoikiscum tricancellatum</i>	Al	—	—	Holdsworth 1969: 225	Upper Carboniferous	Bashkirian	Upper Dove Valley, SW Derbyshire, England, UK
<i>Ceratoikiscum turgidum</i>	Al	—	—	Umeda 1998a: 98	Middle Devonian	Eifelian	Nakahata Formation, Section B, Ochi Town, Shikoku, Japan
<i>Ceratoikiscum ukhtensis</i>	Al	n.n.	—	Afanasieva 1997a: 221	Upper Devonian	middle Frasnian	Domanik Formation, outcrop 1904, Lyail River, Timan-Pechora Basin, Russia
<i>Ceratoikiscum ukhtensis</i>	Al	—	—	Afanasieva 2000c: 367	Upper Devonian	middle Frasnian	Domanik Formation, outcrop 1904, Lyail River, Timan-Pechora Basin, Russia
<i>Ceratoikiscum umbraculum</i>	Al	—	—	Won 1983: 139	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Ceratoikiscum umbraculum bisulcatum</i>	Al	—	—	Braun 1989: 86	Lower Carboniferous	upper Tournaisian	Pebbles of siliceous shale from the lower Main-valley near Frankfurt a. M., Germany
<i>Ceratoikiscum vimenum</i>	Al	—	—	Nazarov & Ormiston 1983a: 462	Upper Devonian	Frasnian	Sadler Range, SE Cap Creek Gap, Canning Basin, Western Australia
<i>Ceratoikiscum vimineum</i>	Al	—	—	Wakamatsu, Sugiyama & Furutani 1990: 179	Lower Devonian	Emsian	Nakahata Formation, SW of Mt. Yokokurayama, Ochi Town, Shikoku, Japan
<i>Ceratoikiscum wonae</i>	Al	—	—	Cheng 1986: 86	Upper Carboniferous	Bashkirian	Johns Valley Shale, Pittsburg County, eastern Oklahoma, USA
<i>Ceratoikiscum xinjangense</i>	Al	—	—	Liu 1992: 130	Upper Carboniferous	Bashkirian	Houxia Formation, Ewigrong-Houxia districts of Urumqi, Xinjiang, China
<i>Ceratoikiscum? acantangulatum</i>	Al	—	—	Nazarov in Nazarov et al. 1975: 103	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Ceratoikiscum? apertum</i>	Al	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Ceratoikiscum? evolutum</i>	Al	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Ceratoikiscum? reductum</i>	Al	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Ceratoikiscum? speciosum</i>	Al	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
Cessipyllum (256)							
<i>Cessipyllum admirandum</i>	E	n.n.	—	Nazarov 1988: 122	Upper Silurian	Pridoli	Maksyutov Complex, Tarangul River, 10 km N of Kosistik Village, S Urals, Russia
<i>Cessipyllum robuspinatum</i>	E	n.n.	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuiqou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
Choenicosphaera							
<i>Choenicosphaera brevispina</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1568	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Choenicosphaera multispoinosa</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1568	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
Circulaforma (12)							
<i>Circulaforma admissarius</i>	Al	—	—	Stratford & Aitchison 1997: 245	Lower Devonian	Emsian	Gamilaroi terrane, Glenrock Station, New England orogen, NSW, Australia
<i>Circulaforma annula</i>	Al	—	—	Won & Seo 2010: 246	Lower Carboniferous	Visean	Bergisches Land, N Westfalia, Germany
<i>Circulaforma davidi</i>	Al	—	—	Aitchison et al. 1999: 158	Lower Devonian	Emsian	Gamilaroi terrane, Glenrock Station, New England orogen, NSW, Australia
<i>Circulaforma delicata</i>	Al	—	T	Cheng 1986: 87	Lower Carboniferous	Serpukhovian	Sand Branch Member of Caney Formation, Pittsburg County, Oklahoma, USA
<i>Circulaforma oilensis</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 122	Lower Carboniferous	Serpukhovian	Goddard Formation, Oil Creek section, Johnston County, Oklahoma, USA
<i>Circulaforma robusta</i>	Al	—	—	Cheng 1986: 89	Upper Carboniferous	Bashkirian	Johns Valley Shale, Pittsburg County, eastern Oklahoma, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Clavata							
<i>Clavata lancangensis</i>	—	n.d.	—	Feng 1992: 57	Upper Permian	Changhsingian	Muyinhe Formation, Nanpan, Lancang County, Yunnan, China
<i>Clavata lancangensis</i>	—	n.n.	—	Feng & Liu 1993: 545	Upper Permian	Changhsingian	Muyinhe Formation, Nanpan, Lancang County, Yunnan, China
Copiconulus (293)							
<i>Copiconulus acanthicus</i>	IS (O&F)	—	—	Feng in Feng et al. 2006a: 31	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Copiconulus solidus</i>	IS (O&F)	—	T	Feng in Feng et al. 2006a: 31	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
Copicyntra (239)							
<i>Copicyntra acilaxa</i>	S	—	T	Nazarov in Isakova & Nazarov 1986: 70	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Copicyntra acilaxa trigona</i>	S	—	—	Nazarov in Isakova & Nazarov 1986: 71	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Copicyntra acilongata</i>	S	—	—	Nazarov in Isakova & Nazarov 1986: 71	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Copicyntra akikawaensis</i>	S	—	—	Sashida & Tonishi 1988: 530	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akitawa River, Akiruno City, Tokyo, Japan
<i>Copicyntra brevidentata</i>	S	—	—	Kozur & Mostler 1989: 217	Lower Permian	Kungurian	Koshelev Foramtion, Alogazovo Village, Moscovic Region, Russia
<i>Copicyntra cuspidata</i>	S	—	—	Nazarov & Ormiston 1985: 25	Lower Permian	Artinskian	Aktastyi River, Orenburgskaya region, Southern Urals, Russia
<i>Copicyntra erinacea</i>	S	—	—	Nestell & Nestell 2010: 24	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Copicyntra fragilispinosa</i>	S	—	—	Kozur & Mostler 1989: 217	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Copicyntra irregularata</i>	S	—	—	Maldonado & Noble 2010: 100	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Copicyntra leviuscula</i>	S	—	—	Amon & Braun 1994: 5	Lower Permian	Artinskian	Burtsevesky horizon, Dalny Tulkas Rill, Bashkortostan Region, S Urals, Russia
<i>Copicyntra multispinosa</i>	S	—	—	Kozur & Mostler 1989: 217	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Copicyntra phymatodonta</i>	S	—	—	Nazarov & Ormiston 1985: 25	Lower Permian	Artinskian	Aktastyi River, Orenburgskaya region, Southern Urals, Russia
<i>Copicyntra robustodentata</i>	S	—	—	Kozur & Mostler 1989: 217	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Copicyntra ruzhencevi</i>	S	—	—	Kozur & Mostler 1989: 218	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Copicyntra ruzhencevi gracilispinosa</i>	S	—	—	Kozur & Mostler 1989: 218	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Copicyntra ruzhencevi ruzhencevi</i>	S	—	—	Kozur & Mostler 1989: 218	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Copicyntra shaiwaensis</i>	S	—	Ts	Wang in Wang & Shang 2001: 118	Upper Permian	Wuchiapingian	Shaiwa Group, Shaiwa, Ziyun County, Guizhou, China
<i>Copicyntra spinosa</i>	S	—	—	Maldonado & Noble 2010: 100	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Copicyntra tongi</i>	S	—	—	Gui & Feng in Gui et al. 2009: 804	Upper Permian	Changhsingian	Dalong Formation, Pingdingshan section, N Chaou, Anhui Region, China
<i>Copicyntra ziyunensis</i>	S	—	T	Feng & Gu 2002: 803	Upper Permian	Changhsingian	Qiaoma Formation, Shaiwa section, Ziyun County, Guizhou, China
<i>Copicyntra? nuda</i>	S	—	—	Wakamatsu, Sugiyama & Furutani 1990: 169	Upper Silurian	Pridoli	Jyoro Formation, Kurosegawa Belt., S Mt. Yokokurayama, Ochi Town, Shikoku, Japan
<i>Copicyntra? simulens</i>	S	—	—	Nazarov & Ormiston 1985: 25	Middle Permian	Capitanian	Bell Canyon Formation, Guadalupe Mts, Culbertson County, W Texas, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Copicyntroides (240)							
<i>Copicyntroides asteriformis</i>	S	—	T	Nazarov & Ormiston 1985: 27	Middle Permian	Roadian	Bell Canyon Formation, Guadalupe Mts., Culberson County, W Texas, USA
<i>Copicyntroides nazarovi</i>	S	—	—	Maldonado & Noble 2010: 108	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Copicyntroides parvulus</i>	S	—	—	Feng in Feng et al. 2006a: 39	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Copicyntroides stellatus</i>	S	—	—	He & Feng in He et al. 2011: 486	Upper Permian	Changhsingian	Talung Formation, Hushan section, Nanjing, Jiangsu Region, China
Copiellintra (241)							
<i>Copiellintra bispina</i>	S	—	—	Nazarov & Afanasieva in Afanasieva 2000c: 91	Lower Permian	Sakmarian	station 13, Karachaganak area, Batys Qazaqstan, Kazakhstan
<i>Copiellintra diploacantha</i>	S	—	T	Nazarov & Ormiston 1985: 26	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Copiellintra elongata</i>	S	—	—	Feng in Feng et al. 2006a: 37	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Copiellintra fastuosa</i>	S	—	—	Nestell & Nestell 2010: 27	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Copiellintra ferula</i>	S	—	—	Noble & Jin 2010: 134	Middle Permian	Capitanian	Bell Canyon Formation, Guadalupe Mts., Culberson County, W Texas, USA
<i>Copiellintra laurelae</i>	S	—	—	Noble & Jin 2010: 134	Middle Permian	Capitanian	Bell Canyon Formation, Guadalupe Mts., Culberson County, W Texas, USA
<i>Copiellintra orbiculata</i>	S	—	—	Nestell & Nestell 2010: 26	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
Cornellus (189)							
<i>Cornellus sakmaraensis</i>	L	—	Ts	Kozur & Mostler 1989: 212	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
Cornum (278)							
<i>Cornum mittereri</i>	IS	—	T	Schwartzapfel & Holdsworth 1996: 246	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Phillips Creek Section, Carter County, Oklahoma, USA
<i>Cornum mullerae</i>	IS	—	—	Schwartzapfel & Holdsworth 1996: 238	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Phillips Creek Section, Carter County, Oklahoma, USA
<i>Cornum olssonae</i>	IS	—	—	Schwartzapfel & Holdsworth 1996: 242	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Phillips Creek Section, Carter County, Oklahoma, USA
<i>Cornum repetskii</i>	IS	—	—	Schwartzapfel & Holdsworth 1996: 232	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Phillips Creek Section, Carter County, Oklahoma, USA
Cornutanna							
<i>Cornutanna dilatata</i>	—	n.d.	—	Rüst 1892: 180	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Cornutanna macropora</i>	—	n.d.	—	Rüst 1892: 180	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Corythoecia (279)							
<i>Corythoecia dichoptera</i>	IS	—	T	Foreman 1963: 298	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Corythoecia loxosegmentata</i>	IS	—	—	Nazarov in Isakova & Nazarov 1986: 119	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
Costaentactinia (86)							
<i>Costaentactinia delicata</i>	E	—	—	Won & Seo 2010: 247	Lower Carboniferous	Visean	Bergisches Land, N Westfalia, Germany
<i>Costaentactinia foremanae</i>	E	—	T	Seo & Won 2009: 67	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Cowheadia (281)							
<i>Cowheadia duplex testa</i>	IS	—	T	Won, Iams & Reed 2007: 535	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
Cromyodruppa							
<i>Cromyodruppa prunulina</i>	—	n.d.	—	Rüst 1892: 157	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Cromyomma							
<i>Cromyomma grandaeum</i>	—	n.d.	—	Rüst 1892: 149	Lower Silurian	—	Cabrières, Hérault, France
Cromyosphaera							
<i>Cromyosphaera alternans</i>	—	n.d.	—	Rüst 1892: 139	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Cromyosphaera distans</i>	—	n.d.	—	Rüst 1892: 139	Lower Devonian	—	Southern Urals, Russia
<i>Cromyosphaera eminens</i>	—	n.d.	—	Rüst 1892: 139	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Cromyosphaera frequens</i>	—	n.d.	—	Rüst 1892: 138	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Cromyosphaera petschorae</i>	—	n.d.	—	Rüst 1892: 138	Lower Devonian	—	Southern Urals, Russia
<i>Cromyosphaera prisca</i>	—	n.d.	—	Rüst 1892: 138	Lower Silurian	—	Cabrières, Hérault, France
<i>Cromyosphaera radiata</i>	—	n.d.	—	Rüst 1892: 138	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Cromyosphaera rotiforme</i>	—	n.d.	—	Pulfrey 1932: 194	Lower Carboniferous	Serpukhovian	Calver Sough, Derbyshire, England, UK
Cromystylus?							
<i>Cromystylus? variabilis</i>	E	—	Ts	Ormiston & Lane 1976: 170	Lower Carboniferous	Tournaisian	Sycamore Limestone, southern Arbuckle Mountains, Oklahoma, USA
Crucidiscus							
<i>Crucidiscus praecursor</i>	—	n.d.	—	Rüst 1892: 163	Lower Silurian	—	Cabrières, Hérault, France
Cubaxonium							
<i>Cubaxonium antiquorum</i>	S?	—	—	Sheng & Wang 1982: 60	Middle Devonian	Givetian	Qizigiao Formation, Matangwo, Xintian district, Hunan, China
<i>Cubaxonium? octaedrospongiosum</i>	S?	—	—	Won 1983: 139	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
Cubosphaera							
<i>Cubosphaera significans</i>	—	n.d.	—	Deflandre & Deflandre-Rigaud 1958: 969	Lower Carboniferous	Visean	Cabrières, Hérault, France
Curvechidnina (52)							
<i>Curvechidnina fusa</i>	Ar	—	—	Won & Iams 2002: 23	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Curvechidnina kozuri</i>	Ar	—	—	Won & Iams 2002: 23	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Curvechidnina longispinosa</i>	Ar	—	—	Won & Iams 2002: 24	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Curvechidnina multiramosa</i>	Ar	—	—	Won, Iams & Reed 2005: 446	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Curvechidnina tetractina</i>	Ar	—	T	Won & Iams 2002: 24	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
Cyclocarpus (87)							
<i>Cyclocarpus tubiformis</i>	E	—	Tn	Li & Wang 1991: 398	Upper Devonian	Frasnian	Liukiang Formation, Etang section, Hexian County, Guangxi, China
Cyphanta							
<i>Cyphanta piscis</i>	—	n.d.	—	Rüst 1892: 160	Lower Devonian	—	Southern Urals, Russia
<i>Cyphanta quiniseriata</i>	—	n.d.	—	Rüst 1892: 161	Lower Devonian	—	Southern Urals, Russia
Cyrtentactinia (229)							
<i>Cyrtentactinia cibdelosphaera</i>	N?	—	T	Foreman 1963: 285	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Cyrtentactinia foremanae</i>	N?	—	—	Cheng 1986: 160	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Cyrtentactinia (229) continuation							
<i>Cyrtentactinia formosa</i>	N?	—	—	Cheng 1986: 161	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Cyrtentactinia macrocephala</i>	N?	—	—	Cheng 1986: 161	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Cyrtentactinia pessagnoi</i>	N?	—	—	Schwartzapfel & Holdsworth 1996: 141	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA
<i>Cyrtentactinia petrushevskayae</i>	N?	—	—	Cheng 1986: 162	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Cyrtentactinia primotica</i>	N?	—	T	Foreman 1963: 285	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Cyrtentactinia splendida</i>	N?	—	—	Cheng 1986: 162	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
Cyrtisphaeractenium (222)							
<i>Cyrtisphaeractenium crassum</i>	N?	—	—	Cheng 1986: 130	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Cyrtisphaeractenium delicatum</i>	N?	—	—	Cheng 1986: 131	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Cyrtisphaeractenium mendax</i>	N?	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Cyrtisphaeractenium mendax</i>	N?	—	—	Deflandre 1972a: 3538	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Cyrtisphaeractenium mendax</i>	N?	—	T	Deflandre 1972b: 15	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Cyrtisphaeractenium ruriae</i>	N?	—	—	Won 1983: 140	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Cyrtisphaeractenium sandbergi</i>	N?	—	—	Schwartzapfel & Holdsworth 1996: 170	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA
<i>Cyrtisphaeractenium shengi</i>	N?	—	—	Cheng 1986: 132	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Cyrtisphaeractenium spinosum</i>	N?	—	—	Cheng 1986: 133	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Cyrtisphaeractenium? fluegeli</i>	N?	—	—	Kiessling & Tragelehn 1994: 232	Upper Devonian	Famennian	Frankenwald, north Bavaria, Germany
Cyrtisphaeronemium (223)							
<i>Cyrtisphaeronemium prudentigerum</i>	N?	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Cyrtisphaeronemium prudentigerum</i>	N?	—	—	Deflandre 1972a: 3538	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Cyrtisphaeronemium prudentigerum</i>	N?	—	T	Deflandre 1972b: 14	Lower Carboniferous	Visean	Cabrières, Hérault, France
Cyrtocalpis							
<i>Cyrtocalpis obtusa</i>	—	n.d.	—	Rüst 1892: 180	Lower Devonian	—	Southern Urals, Russia
<i>Cyrtocalpis prima</i>	—	n.d.	—	Rüst 1892: 180	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Cyrtocalpis serieporata</i>	—	n.d.	—	Rüst 1892: 180	Lower Devonian	—	Southern Urals, Russia
Deflandrella (171)							
<i>Deflandrella manica</i>	L	—	T, Ts, Th	De Wever & Caridroit 1984: 99	Middle Permian	Capitanian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
Deflandrellium (224)							
<i>Deflandrellium georgesi</i>	N?	—	T	Cheng 1986: 134	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Deflandrellium minutum</i>	N?	—	—	Cheng 1986: 135	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Deflandrellium primum</i>	N?	—	—	Cheng 1986: 135	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Deflantrica (142)							
<i>Deflantrica furutani</i>	E	—	—	Kurihara & Sashida 2000: 60	Lower Devonian	Emsian	Shibasudani Formation, Shibasudani Valley, Ohno City, Fukui Prefecture, Japan
<i>Deflantrica solidum</i>	E	—	—	Wakamatsu, Sugiyama & Furutani 1990: 168	Lower Devonian	Pragian	Jyoro Formation, Kurosegawa Belt, Konomori area, Kochi City, Shikoku, Japan
Devoniglansus (242)							
<i>Devoniglansus brachiatus</i>	S	—	—	Umeda 1998b: 205	Upper Silurian	Pridoli	Mt. Yokokurayama area, Kochi Prefecture, Japan
<i>Devoniglansus unicus</i>	S	—	T	Wakamatsu, Sugiyama & Furutani 1990: 172	Upper Silurian	Pridoli	Jyoro Formation, Kurosegawa Belt., S Mt. Yokokurayama, Ochi Town, Shikoku, Japan
Dictyocephalus							
<i>Dictyocephalus ventricosus</i>	—	n.d.	—	Rüst 1892: 182	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Dictyomitra							
<i>Dictyomitra magnifica</i>	—	n.d.	—	Rüst 1892: 188	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Dictyomitra micropora</i>	—	n.d.	—	Rüst 1892: 188	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Dictyomitra pumilio</i>	—	n.d.	—	Rüst 1892: 187	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
Dictyophimus							
<i>Dictyophimus dubius</i>	—	n.d.	—	Rüst 1892: 181	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Diparvapila (69)							
<i>Diparvapila hicocki</i>	Ar	—	T	MacDonald 1998: 595	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Diparvapila larseni</i>	Ar	—	—	MacDonald 1998: 595	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Diparvapila pygmaea</i>	Ar	—	—	Won, Blodgett & Nestor 2002: 957	Lower Silurian	Telychian	Road River Formation, subsidiary channel of Tatonduck River, east-central Alaska, USA
<i>Diparvapila saintrochae</i>	Ar	—	—	MacDonald 1998: 595	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
Diploplegma (308)							
<i>Diploplegma cinctum</i>	—	n.d.	Td	Hinde 1890: 48	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK
<i>Diploplegma? schonensis</i>	—	n.d.	—	Hinz-Schallreuter & Schallreuter 2003: 82	Upper Ordovician	Katian	Gislövshammar, Scania, Sweden
Distospicula							
<i>Distospicula delicata</i>	n.r.	i.s.	Tnr	Wang 1989: 146	Lower Cambrian	—	Niutitang Formation, Sandu district, Guizhou Province, China
<i>Distospicula vigorum</i>	n.r.	i.s.	—	Wang 1989: 146	Lower Cambrian	—	Damiao Formation, Erlongping Group, Eastern Qinling ophiolite belt, Henan Province, China
Distriactis							
<i>Distriactis vetusta</i>	E	n.d.	—	Hinde 1899a: 53	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
Dizonium							
<i>Dizonium laeve</i>	—	n.d.	—	Rüst 1892: 174	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Dorydictyum (309)							
<i>Dorydictyum magnum</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1574	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Dorydictyum minutum</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1574	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Dorydictyum simplex</i>	—	n.d.	Td	Hinde 1890: 54	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Dorylonchidium							
<i>Dorylonchidium antiquum</i>	—	n.n.	—	Deflandre 1953: 391	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
Doryplegma (310)							
<i>Doryplegma armatum</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1575	Lower Ordovician	Floian	Normanskill chert, Fly Summit, Washington County, New York, USA
<i>Doryplegma gracile</i>	—	n.d.	—	Hinde 1890: 54	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK
<i>Doryplegma nasutum</i>	—	n.d.	Td	Hinde 1890: 53	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK
<i>Doryplegma nux</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1575	Lower Ordovician	Floian	Normanskill chert, Ghent, Columbia County, New York, USA
<i>Doryplegma priscum</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1574	Lower Ordovician	Floian	Normanskill chert, Glenmont, Albany County, New York, USA
Dorysphaera (311)							
<i>Dorysphaera domanicensis</i>	—	n.d.	—	Bykova 1955: 68	Upper Devonian	Frasnian	Domanik Formation, Tatarstan, Russia
<i>Dorysphaera echinata</i>	—	n.d.	—	Hinde 1899a: 45	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Dorysphaera laxa</i>	—	n.d.	—	Hinde 1890: 53	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK
<i>Dorysphaera nucula</i>	—	n.d.	—	Hinde 1890: 53	Middle Ordovician	Darriwilian	Southern Uplands, Peebleshire, Scotland, UK
<i>Dorysphaera reticulata</i>	—	n.d.	Td	Hinde 1890: 52	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK
Druppalonche (88)							
<i>Druppalonche clavigera</i>	E	—	Ts	Hinde 1899b: 217	Middle Devonian	Givetian	Chypons Farm, Mullion Parish, Cornwall, England, UK
<i>Druppalonche ovata</i>	E	—	—	Hinde 1899b: 218	Middle Devonian	Givetian	Chypons Farm, Mullion Parish, Cornwall, England, UK
Druppatractus							
<i>Druppatractus dictyococcus</i>	—	n.d.	—	Rüst 1892: 158	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
Druppula							
<i>Druppula amygdalina</i>	—	n.d.	—	Rüst 1892: 155	Lower Devonian	—	Southern Urals, Russia
<i>Druppula andreana</i>	—	n.d.	—	Rüst 1892: 155	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Druppula angustiporata</i>	—	n.d.	—	Rüst 1892: 156	Carboniferous	—	Bükk-Gebirge, Inner Western Carpathians, Hungary
<i>Druppula berberis</i>	—	n.d.	—	Rüst 1892: 156	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Druppula cembra</i>	—	n.d.	—	Rüst 1892: 155	Lower Devonian	—	Southern Urals, Russia
<i>Druppula cornus</i>	—	n.d.	—	Rüst 1892: 156	Carboniferous	—	Bükk-Gebirge, Inner Western Carpathians, Hungary
<i>Druppula crucifera</i>	—	n.d.	—	Rüst 1892: 156	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Druppula endechinata</i>	—	n.d.	—	Rüst 1892: 155	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Druppula fixata</i>	—	n.d.	—	Rüst 1892: 156	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Druppula silurica</i>	—	n.d.	—	Rüst 1892: 154	Lower Silurian	—	Cabrières, Hérault, France
<i>Druppula simplex</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1576	Lower Ordovician	Floian	Normanskill chert, Flint Mine Hill, Columbia County, New York, USA
Duodecimentactinia (89)							
<i>Duodecimentactinia ampla</i>	E	—	—	Won 1997b: 377	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Duodecimentactinia aranea</i>	E	—	T	Won 1997b: 378	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Duodecimentactinia media</i>	E	—	—	Won 1997b: 378	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Duosphaera (90)							
<i>Duosphaera hebes</i>	E	—	—	Park & Won 2012: 55	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
Duplexia (312)							
<i>Duplexia spinocurva</i>	E?	n.d.	—	Afanasieva 2000a: 62	Upper Devonian	Famennian	Zadonsk Formation, W Lekkeyaginsk-65, Saremboi-Lekkeyaga, Timan-Pechora Basin, Russia
<i>Duplexia? parviperforata</i>	E?	n.d.	—	Won 1990: 134	Lower Carboniferous	Visean	Riescheid Section, Wuppertal-Barmen, Germany
Durahelenifore (13)							
<i>Durahelenifore robustum</i>	Al	—	Ts	Boundy-Sanders & Murchey in Boundy-Sanders et al. 1999: 64	Upper Devonian	upper Famennian	Slaven Chert, Northern Shoshone Range, Roberts Mountains Allochthon, Nevada, USA
Dystympnium							
<i>Dystympnium carbonicum</i>	—	n.d.	—	Rüst 1892: 177	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
Echidnina (53)							
<i>Echidnina bengtsoni</i>	Ar	—	—	Kozur, Mostler & Repetski 1996: Lower Ordovician 249	Tremadocian	Windfall Formation, Antelope Range, Eureka County, Nevada, USA	
<i>Echidnina conexa</i>	Ar	—	—	Won, Iams & Reed 2005: 447	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Echidnina conjuncta</i>	Ar	—	—	Won & Iams 2002: 25	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Echidnina curvata</i>	Ar	—	—	Won & Iams 2002: 25	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Echidnina irregularis</i>	Ar	—	—	Won & Iams 2002: 25	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Echidnina laxa</i>	Ar	—	—	Won, Iams & Reed 2005: 447	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Echidnina runnegari</i>	Ar	—	T	Bengtson 1986: 202	Upper Cambrian	Paibian	Mungerebar Limestone, Georgina Basin, Queensland, Australia
<i>Echidnina semiconexa</i>	Ar	—	—	Won, Iams & Reed 2005: 447	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Echidnina severedeformis</i>	Ar	—	—	Won, Iams & Reed 2005: 449	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Echidnina? immanis</i>	Ar	—	—	Won, Iams & Reed 2005: 449	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Echidnina? monactina</i>	Ar	—	—	Won & Iams 2002: 26	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Echidnina? stevensi</i>	Ar	—	—	Won & Iams 2002: 26	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
Echinomma							
<i>Echinomma oligacanthum</i>	—	n.d.	—	Rüst 1892: 149	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Ectoactinia (313)							
<i>Ectoactinia tulufanensis</i>	—	n.d.	Td	Liu 1992: 130	Upper Carboniferous	Bashkirian	Houxia Formation, Ewirgol-Houxia districts of Ulumuqi, Xinjiang, China
Ehrenbergia (314)							
<i>Ehrenbergia baijingensis</i>	—	n.d.	Td	Li 1995: 335	Middle Ordovician	Dapingian	Qingshuiqou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
Ellipsidium							
<i>Ellipsidium aculeatum</i>	—	n.d.	—	Rüst 1892: 152	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Ellipsidium castanea</i>	—	n.d.	—	Hinde 1899a: 51	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Ellipsidium spinosum</i>	—	n.d.	—	Rüst 1892: 153	Lower Carboniferous	—	Kieselschiefer, Harz, Germany

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Ellipsocopicyntra</i> (243)							
<i>Ellipsocopicyntra acantha</i>	S	—	—	Feng in Feng et al. 2006a: 33	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Ellipsocopicyntra oviformis</i>	S	—	T	Kozur & Mostler 1989: 218	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Ellipsocopicyntra sakmaraensis</i>	S	—	—	Kozur & Mostler 1989: 219	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Ellipsocopicyntra wani</i>	S	—	—	Feng in Feng et al. 2006a: 33	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Ellipsostigma</i> (163)							
<i>Ellipsostigma australe</i>	E	n.d.	Td	Hinde 1899a: 51	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Ellipsostylus</i>							
<i>Ellipsostylus obliquus</i>	—	n.d.	—	Rüst 1892: 153	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Ellipsoxiphus</i>							
<i>Ellipsoxiphus hystrix</i>	—	n.d.	—	Rüst 1892: 153	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Ellipsoxiphus procerus</i>	—	n.d.	—	Rüst 1892: 153	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Entactinia</i> (91)							
<i>Entactinia akdymensis</i>	E	—	—	Nazarov 1975: 53	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Entactinia americana</i>	E	—	—	Park & Won 2012: 51	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Entactinia aperticuva</i>	E	—	—	Aitchison 1993b: 112	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Entactinia atypica</i>	E	—	—	Nazarov 1975: 53	Upper Cambrian	Furongian	Burudayal'sk Formation, SW Pribalkhash, Kazakhstan
<i>Entactinia austroauralica</i>	E	—	—	Nazarov in Isakova & Nazarov 1986: 64	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Entactinia bella</i>	E	—	—	Afanasieva & Amon 2011: 1498	Upper Devonian	Frasnian	Polar Urals, Palnik Yu River, Russia
<i>Entactinia bifida</i>	E	—	—	Afanasieva 2000c: 369	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Entactinia bogdanovi</i>	E	—	—	Afanasieva 2000c: 371	Upper Devonian	middle Frasnian	Domanik Formation, borehole Ukhinskaya-3B, SW of Uktha, Timan-Pechora Basin, Russia
<i>Entactinia carbonica</i>	E	—	—	Liu 1992: 128	Upper Carboniferous	Bashkirian	Houxia Formation, Ewigröl-Houxia districts of Ulumuqi, Xinjiang, China
<i>Entactinia cometes</i>	E	—	—	Foreman 1963: 271	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinia complanata</i>	E	—	—	Nazarov 1975: 56	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Entactinia complanata</i>	E	—	—	Nazarov in Nazarov et al. 1977: 917	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Entactinia consociata</i>	E	—	—	Nazarov 1975: 50	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Entactinia crustescens</i>	E	—	—	Foreman 1963: 272	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinia dasysa</i>	E	—	—	Nazarov in Nazarov & Popov 1976: 408	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Entactinia densa</i>	E	—	—	Won 1998: 236	Lower Carboniferous	Tournaisian	Oese, Rheinische Schiefergebirge, Germany
<i>Entactinia densissima</i>	E	—	—	Nazarov & Ormiston 1985: 18	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Entactinia (91) continuation							
<i>Entactinia dianae</i>	E	—	—	Nestell, Pope & Nestell 2012: 236	Upper Carboniferous	Moscovian	Mouse Creek Formation, Excello Shale Member, south-central Iowa, USA
<i>Entactinia dimidiata</i>	E	—	—	Nazarov 1975: 48	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Entactinia dissora</i>	E	—	—	Nazarov 1975: 48	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Entactinia diversita</i>	E	—	—	Nazarov 1973a: 697	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Entactinia dolichoacus</i>	E	—	—	Nazarov <i>in</i> Isakova & Nazarov 1986: 62	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Entactinia dolichoacus dolichoacus</i>	E	—	—	Nazarov <i>in</i> Isakova & Nazarov 1986: 63	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Entactinia dolichoacus praematura</i>	E	—	—	Nazarov <i>in</i> Isakova & Nazarov 1986: 63	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Entactinia duksundiensis</i>	E	—	—	Nazarov <i>in</i> Nazarov <i>et al.</i> 1981: 82	Upper Devonian	Famennian	Duksundinsk Formation, along Duksunda River, Magadan, Russia
<i>Entactinia eiklaensis</i>	E	—	—	Nazarov <i>in</i> Nazarov & Nolvak 1983: 4	Upper Ordovician	Hirnantian	Sau'yask Formation, Bore hole Eikla, Saaremaa, Estonia
<i>Entactinia elongata</i>	E	—	—	Nazarov 1975: 55	Middle Ordovician	Darriwilian	Bestomaks Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Entactinia exilispina</i>	E	—	—	Foreman 1963: 273	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinia faceta</i>	E	—	—	Amon, Braun & Chuvashov 1990: 121	Lower Permian	Artinskian	Shelyvaginsk Formation, around Sim Town, Chalyabinskaya region, Urals, Russia
<i>Entactinia foveolata</i>	E	—	—	Nazarov 1975: 51	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Entactinia gogoense</i>	E	—	—	Aitchison 1993b: 112	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Entactinia haeckeliana</i>	E	—	—	Won 1997a: 347	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Entactinia herculea</i>	E	—	T	Foreman 1963: 271	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinia hindeiana</i>	E	—	—	Won 1997a: 348	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Entactinia hirsuta</i>	E	—	—	Nazarov <i>in</i> Nazarov & Popov 1980: 33	Middle Ordovician	Darriwilian	Kizylzarsk Formation, area between Moynty and Zhamishinsk Rivers, Kazakhstan
<i>Entactinia hoxtolgayensis</i>	E	—	—	Wang 1997: 152	Upper Devonian	Famennian	Gennaren Formation, S Utubulak, NW Jungar Basin, Xinjiang, China
<i>Entactinia hystricuosa</i>	E	—		Aitchison 1993b: 113	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Entactinia iriensis</i>	E	—	—	Nazarov <i>in</i> Nazarov & Shkolnik 1974: 108	Middle Cambrian	—	Dzhagdish, between Nim and Dzharovdik River, Khabarovsk, Russia
<i>Entactinia itsukaichiensis</i>	E	—	—	Sashida & Tonishi 1985: 9	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Entactinia leptura</i>	E	—	—	Goto, Umeda & Ishiga 1992: 153	Upper Devonian	upper Frasnian	Malongulli Formation, Lachlan Fold Belt, eastern NSW, Australia
<i>Entactinia mediforma</i>	E	—	—	Won 1997a: 348	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Entactinia meishanensis</i>	E	—	—	He, Feng & Gu 2005: 210	Upper Permian	Changhsingian	Changxing Formation, Meishan D section, Changxing, Zhejiang, China
<i>Entactinia micropora</i>	E	—	—	Goto, Umeda & Ishiga 1992: 153	Upper Ordovician	Katian	Malongulli Formation, Lachlan Fold Belt, 30 km NW of Taralga, NSW, Australia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Entactinia</i> (91) continuation							
<i>Entactinia micula</i>	E	—	—	Foreman 1963: 272	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinia minuta</i>	E	—	—	Feng in Feng et al. 2007: 23	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Entactinia mixta</i>	E	—	—	Park & Won 2012: 51	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Entactinia modesta</i>	E	—	—	Goto, Umeda & Ishiga 1992: 151	Upper Devonian	upper Famennian	Malongulli Formation, Lachlan Fold Belt, eastern NSW, Australia
<i>Entactinia modesta</i>	E	—	—	Sashida & Tonishi 1985: 10	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Entactinia monalloea</i>	E	—	—	Foreman 1963: 273	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinia octaparvispina</i>	E	—	—	Won 1990: 137	Lower Carboniferous	Visean	Riescheid Section, Wuppertal-Barmen, Germany
<i>Entactinia octaradiata</i>	E	—	—	Won 1997a: 349	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Entactinia ormistoni</i>	E	—	—	Won 1983: 142	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Entactinia oumonhaoensis</i>	E	—	—	Wang 1997: 152	Upper Devonian	Famennian	Gennaren Formation, S Utubulak, NW Jungar Basin, Xinjiang, China
<i>Entactinia pantosompha</i>	E	—	—	Foreman 1963: 273	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinia parapycnoclada</i>	E	—	—	Nazarov & Ormiston 1985: 19	Middle Permian	Roadian	Bell Canyon Formation, Guadalupe Mts, Culbertson County, W Texas, USA
<i>Entactinia parva</i>	E	—	—	Won 1983: 143	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Entactinia parvaporosa</i>	E	—	—	Won 1990: 136	Lower Carboniferous	Visean	Riescheid Section, Wuppertal-Barmen, Germany
<i>Entactinia patorovaria</i>	E	—	—	Afanasieva 2000a: 43	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Utkha, Timan-Pechora Basin, Russia
<i>Entactinia paula</i>	E	—	—	Foreman 1963: 271	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinia perplexa</i>	E	—	—	Nazarov in Zhuravleva 1975: 55	Upper Cambrian	Furongian	Dzhagdy River area, Khabarovsk, Russia
<i>Entactinia pillaraense</i>	E	—	—	Aitchison 1993b: 113	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Entactinia pinrasensis</i>	E	—	—	Afanasieva & Amon 2016: 216	Lower Permian	Artinskian	Northern Mugodzhary, Aktasty River, Kazakhstan
<i>Entactinia postadditiva</i>	E	—	—	Nazarov & Ormiston 1993: 32	Upper Carboniferous	Moscovian	Nyatvinsk Formation, Popovka River, Prikolyma Region, Magadan Region, NE Russia
<i>Entactinia praenuntia</i>	E	—	—	Nazarov & Ormiston 1993: 30	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Entactinia praenuntia</i>	—	n.n.	—	Nazarov 1988: 190	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Entactinia praepycnoclada</i>	E	—	—	Nazarov & Ormiston 1993: 32	Upper Carboniferous	Moscovian	Nyatvinsk Formation, Popovka River, Prikolyma Region, Magadan Region, NE Russia
<i>Entactinia praepycnoclada</i>	—	n.n.	—	Nazarov 1988: 191	Upper Carboniferous	Moscovian	Popovka River in Prikolyma area, Magadan Region, Russia
<i>Entactinia proceraspina</i>	E	—	—	Aitchison 1993b: 113	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Entactinia prodigialis</i>	E	—	—	Nazarov 1975: 52	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Entactinia profundisulcus</i>	E	—	Ts	Aitchison 1993b: 114	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Entactinia pycnoclada</i>	E	—	—	Nazarov & Ormiston 1985: 19	Lower Permian	Sakmarian	Sarabil Formation, Kondurovska, Orenburgskaya Region, S Urals, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Entactinia (91) continuation							
<i>Entactinia quantilla</i>	E	—	—	Foreman 1963: 273	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinia reticulata</i>	E	—	—	Sashida & Tonishi 1985: 10	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Entactinia rostriformis</i>	E	—	—	Afanasieva & Amon 2008: 465	Lower Devonian	Emsian	Kamenneya Gora, Tanalyk River, Southern Ural, Russia
<i>Entactinia sashidai</i>	E	—	—	Feng in Feng et al. 2007: 23	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Entactinia sexradiata</i>	E	—	—	Won 1997a: 348	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Entactinia somphorhips</i>	E	—	—	Foreman 1963: 272	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinia spinosa</i>	E	—	—	Liu 1992: 129	Upper Carboniferous	Bashkirian	Houxia Formation, Ewirgol-Houxia districts of Ulumqi, Xinjiang, China
<i>Entactinia spongites</i>	E	—	—	Foreman 1963: 272	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinia suave</i>	E	—	—	Nazarov in Nazarov & Kruycheck 1977: 1447	Upper Devonian	Famennian	Eletsk horizon, Valavsk, Belarus
<i>Entactinia subulata</i>	E	—	—	Webby & Blom 1986: 149	Upper Ordovician	Katian	Malongulli Formation, Belubula River, E of Canowindra, central NSW, Australia
<i>Entactinia tenuiacerosa</i>	E	—	—	Nazarov 1975: 52	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Entactinia tyrelli</i>	E	—	—	Nazarov & Ormiston 1985: 19	Middle Permian	Capitanian	Bell Canyon Formation, Guadalupe Mts, Culbertson County, W Texas, USA
<i>Entactinia unica</i>	E	—	—	Nazarov 1975: 54	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Entactinia unica</i>	E	—	T	Nazarov in Nazarov et al. 1977: 917	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Entactinia vulgaris</i>	E	—	—	Won 1983: 144	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Entactinia vulgaris microporata</i>	E	—	—	Braun 1989: 88	Lower Carboniferous	upper Tournaisian	Pebbles of siliceous shale from the lower Main-valley near Frankfurt a. M., Germany
<i>Entactinia wangi</i>	E	—	—	Feng in Feng et al. 2007: 21	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Entactinia xinjiangensis</i>	E	—	—	Wang 1997: 153	Upper Devonian	Famennian	Gennaren Formation, S Utubulak, NW Jungar Basin, Xinjiang, China
<i>Entactinia? additiva</i>	E	—	—	Foreman 1963: 273	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinia? brilonensis</i>	E	—	—	Won 1983: 144	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Entactinia? delvolvei</i>	E	—	—	Gourmelon 1987: 45	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
<i>Entactinia? inaequoporosa</i>	E	—	—	Won 1983: 145	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Entactinia? multispinosa</i>	E	—	—	Won 1983: 145	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Entactinia? octaculeata</i>	E	—	—	Won 1983: 146	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Entactinia? pantotolma</i>	E	—	—	Braun 1989: 88	Lower Carboniferous	upper Tournaisian	Pebbles of siliceous shale from the lower Main-valley near Frankfurt a. M., Germany
<i>Entactinia? sheeprockensis</i>	E	—	—	Park & Won 2012: 54	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Entactinia? spinifera</i>	E	—	—	Amon, Braun & Chuvashov 1990: 121	Lower Permian	Artinskian	Shelyvaginsk Formation, around Sim Town, Chalybinskaya region, Urals, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Entactinia (91) continuation							
<i>Entactinia? spongia</i>	E	—	—	Renz 1990: 369	Upper Ordovician	Katian	Hanson Creek Formation, N Martin Ridge, Eureka County, Nevada, USA
<i>Entactinia? strena</i>	E	—	—	Feng & Ye 1996: 19	Middle Devonian	Givetian	Lalei Formation, Lila Village, Ximeng County, SW Yunnan, China
<i>Entactinia? synchonacanthina</i>	E	—	—	Foreman 1963: 274	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinia? unispina</i>	E	—	—	Won 1991b: 98	Lower Carboniferous	Tournaisian	Boulders in Quaternary Rhine Terrace, near Oberkassel, Bonn
<i>Entactinia? ximengensis</i>	E	—	—	Feng & Ye 1996: 19	Middle Devonian	Givetian	Lalei Formation, Lila Village, Ximeng County, SW Yunnan, China
Entactinosphaera (92)							
<i>Entactinosphaera aculeata</i>	E	—	—	Nazarov 1975: 70	Upper Ordovician	Hirnantian	Otyzbels area, Qostanay, Central Kazakhstan
<i>Entactinosphaera aculeatissima</i>	E	—	—	Aitchison 1993b: 114	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Entactinosphaera aerigma</i>	E	—	—	Nazarov <i>in</i> Isakova & Nazarov 1986: 66	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Entactinosphaera aitpaicensis</i>	E	—	—	Nazarov 1973a: 697	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Entactinosphaera aksakensis</i>	E	—	T	Nazarov 1975: 68	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Entactinosphaera assidera</i>	E	—	—	Nazarov 1975: 64	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Entactinosphaera aubouini</i>	E	—	—	Caridroit & De Wever 1986: 75	Upper Permian	Wuchiapingian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
<i>Entactinosphaera australis</i>	E	—	—	Aitchison 1993b: 115	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Entactinosphaera baragensis</i>	E	—	—	Nazarov <i>in</i> Nazarov <i>et al.</i> 1981: 83	Upper Devonian	Famennian	Duksundinsk Formation, along Duksunda River, Magadan, Russia
<i>Entactinosphaera bellula</i>	E	—	—	Wang 1997: 154	Upper Devonian	Famennian	Gennaren Formation, S Utubulak, NW Jungar Basin, Xinjiang, China
<i>Entactinosphaera brevispinosa</i>	E	—	—	Sashida & Tonishi 1988: 529	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Entactinosphaera calthra</i>	E	—	—	Nazarov <i>in</i> Isakova & Nazarov 1986: 65	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Entactinosphaera cancellicula</i>	E	—	—	Foreman 1963: 278	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinosphaera carassispira</i>	E	—	—	Liu 1992: 129	Upper Carboniferous	Bashkirian	Houxia Formation, Ewirgol-Houxia districts of Ulumuqi, Xinjiang, China
<i>Entactinosphaera cimelia</i>	E	—	—	Nazarov & Ormiston 1985: 22	Middle Permian	Capitanian	Bell Canyon Formation, Guadalupe Mts, Culbertson County, W Texas, USA
<i>Entactinosphaera conglobata</i>	E	—	—	Nazarov 1975: 67	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Entactinosphaera crassiclathrata</i>	E	—	—	Nazarov & Ormiston 1985: 20	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Entactinosphaera dystactotata</i>	E	—	—	Foreman 1963: 276	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinosphaera egindyensis</i>	E	—	—	Nazarov 1975: 61	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Entactinosphaera esostrongyla</i>	E	—	T	Foreman 1963: 274	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinosphaera euthlasta</i>	E	—	—	Foreman 1963: 276	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Entactinosphaera</i> (92) continuation							
<i>Entactinosphaera excurrens</i>	E	—	—	Nazarov <i>in</i> Nazarov & Popov 1980: 40	Upper Ordovician	Hirnantian	Ul'kuntassk Member, along Oy-Su River, Kazakhstan
<i>Entactinosphaera excurrens</i>	—	inv.	—	Nazarov 1980: 23	Upper Ordovician	Hirnantian	Ul'kuntassk Member, along Oy-Su River, Kazakhstan
<i>Entactinosphaera explicata</i>	E	—	—	Nazarov 1975: 68	Middle Ordovician	Darriwilian	Erzhansk Formation, Lake Sasykser, NE Central Kazakhstan
<i>Entactinosphaera foremanae</i>	E	—	Td	Ormiston & Lane 1976: 165	Lower Carboniferous	Tournaisian	Sycamore Limestone, southern Arbuckle Mountains, Oklahoma, USA
<i>Entactinosphaera fredericki</i>	E	—	—	Foreman 1963: 275	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinosphaera grandis</i>	E	—	—	Nazarov 1975: 65	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Entactinosphaera guangxiensis</i>	E	—	—	Li & Wang 1991: 400	Upper Devonian	Frasnian	Liukiang Formation, Etang section, Hexian County, Guangxi, China
<i>Entactinosphaera hystricosa</i>	E	—	—	Foreman 1963: 278	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinosphaera inconstans</i>	E	—	—	Nazarov 1975: 68	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Entactinosphaera impercepta</i>	E	—	—	Nazarov 1975: 70	Upper Ordovician	Hirnantian	Otyzbels area, Qostanay, Central Kazakhstan
<i>Entactinosphaera inusitata</i>	E	—	—	Foreman 1963: 275	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinosphaera liquidambarfructa</i>	E	—	—	Ormiston & Lane 1976: 166	Lower Carboniferous	Tournaisian	Sycamore Limestone, southern Arbuckle Mountains, Oklahoma, USA
<i>Entactinosphaera menneri</i>	—	n.n.	—	Afanasieva 1997a: 221	Upper Devonian	middle Frasnian	Domanik Formation, outcrop 1904, Lyail River, Timan-Pechora Basin, Russia
<i>Entactinosphaera neocimelia</i>	E	—	—	Feng, Fang, Zhang & Huang 1998: 240	Upper Permian	Changhsingian	Papai Formation of Changning-Menglian Belt, Papai Village, Cangyuan County, Yunnan, China
<i>Entactinosphaera palimbola</i>	E	—	—	Foreman 1963: 277	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinosphaera paracimelia</i>	E	—	—	Feng & Liu 1993: 558	Upper Permian	Changhsingian	Laba Group, SW Yunnan, China
<i>Entactinosphaera pseudocimelia</i>	E	—	—	Sashida & Tonishi 1988: 528	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Entactinosphaera pulcherima</i>	E	n.n.	—	Nazarov & Ormiston 1990: 16	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Entactinosphaera pulcherima</i>	E	—	—	Nazarov & Ormiston 1993: 32	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Entactinosphaera pulcherima</i>	—	n.n.	—	Nazarov 1988: 130	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Entactinosphaera riedeli</i>	E	—	Ts	Foreman 1963: 275	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinosphaera ruesti</i>	E	—	—	Won 1991b: 99	Lower Carboniferous	Tournaisian	Boulders in Quaternary Rhine Terrace, near Oberkassel, Bonn
<i>Entactinosphaera strangulata</i>	E	—	T	Nazarov & Ormiston 1985: 20	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Entactinosphaera symphypora</i>	E	—	—	Foreman 1963: 277	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinosphaera tretactinia</i>	E	—	—	Foreman 1963: 276	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinosphaera unimana</i>	E	—	—	Nazarov <i>in</i> Nazarov & Kryuchek 1977: 1448	Upper Devonian	Famennian	Eletsk horizon, Valavsk, Belarus
<i>Entactinosphaera variacanthina</i>	E	—	Ts	Foreman 1963: 278	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinosphaera verrucula</i>	E	—	—	Nazarov <i>in</i> Nazarov & Popov 1976: 408	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Entactinosphaera wuhanensis</i>	—	n.n.	—	Feng 1992: 59	Middle Permian	Capitanian	Gufeng Formation, Hubei, China

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Entactinosphaera (92) continuation							
<i>Entactinosphaera? almae</i>	E	—	—	Won 1983: 147	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Entactinosphaera? altasulcata</i>	E	—	—	Won 1983: 147	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Entactinosphaera? brevihebes</i>	E	—	—	Won 1983: 148	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Entactinosphaera? crassispinosa</i>	E	—	—	Sashida & Tonishi 1985: 12	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Entactinosphaera? diplostraca</i>	E	—	—	Foreman 1963: 279	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinosphaera? elegans</i>	E	—	—	Furutani 1990: 41	Upper Silurian	Gorstian	Hitoegane Formation, Hida-gaien Belt, E of Hitoegane, Fukui area, Takayama City, Japan
<i>Entactinosphaera? erebenna</i>	E	—	—	Foreman 1963: 279	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinosphaera? gengmaensis</i>	—	n.n.	—	Feng 1992: 55	Upper Permian	Changhsingian	Papai Formation of Changning-Menglian Belt, Papai Village, Cangyuan County, Yunnan, China
<i>Entactinosphaera? hapala</i>	E	—	—	Foreman 1963: 280	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinosphaera? hirta</i>	E	—	—	Nazarov in Nazarov & Popov 1980: 39	Middle Ordovician	Darriwilian	Kizylzarsk Formation, area between Moynty and Zhamishinsk Rivers, Kazakhstan
<i>Entactinosphaera? octospina</i>	E	—	—	Won 1991b: 98	Lower Carboniferous	Tournaisian	Boulders in Quaternary Rhine Terrace, near Oberkassel, Bonn
<i>Entactinosphaera? orientalis</i>	E	—	—	Sashida & Tonishi 1985: 11	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Entactinosphaera? polyacanthina</i>	E	—	T	Foreman 1963: 280	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Entactinosphaera? riedelii</i>	—	n.n.	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuiou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Entactinosphaera? robusta</i>	E	—	—	Aitchison 1993b: 116	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Entactinosphaera? trendalli</i>	E	—	—	Won 1983: 148	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
Eoalbaillella (14)							
<i>Eoalbaillella lilaensis</i>	Al	—	T	Feng & Liu 1992: 550	Middle Devonian	Givetian	Lalei Formation, Lila Village, Ximeng County, Yunnan, China
<i>Eoalbaillella turkensis</i>	Al	—	—	Kozur 1997: 49	Middle Devonian	Givetian	Gerence, Karaburun peninsula, Izmir Region, Turkey
Ecconcharium (339)							
<i>Ecconcharium chinense</i>	n.r.	i.s.	Th	Hao & Shu 1987: 309	Lower Cambrian	Terreneuvian	Shuijingtuo Formation, Shaanxi Province, Zhenba County, China
<i>Ecconcharium chinense</i>	n.r.	inv.	—	Shu & Chen 1989: 992	Lower Cambrian	Stage 3	Dengying Formation, Xiaoyang Village, Zhenba, Shaanxi Province, Zhenba County, China
<i>Ecconcharium ovalnm</i>	n.r.	i.s.	—	Hao & Shu 1987: 309	Lower Cambrian	Terreneuvian	Shuijingtuo Formation, Shaanxi Province, Zhenba County, China
<i>Ecconcharium rhomboidale</i>	n.r.	i.s.	—	Hao & Shu 1987: 309	Lower Cambrian	Terreneuvian	Shuijingtuo Formation, Shaanxi Province, Zhenba County, China
<i>Ecconcharium spiniferum</i>	n.r.	i.s.	—	Hao & Shu 1987: 309	Lower Cambrian	Terreneuvian	Shuijingtuo Formation, Shaanxi Province, Zhenba County, China
Eoscenidium							
<i>Eoscenidium hexaradiatum</i>	n.r.	i.s.	—	Wang 1989: 156	Lower Cambrian	—	Niutitang Formation, Sandu district, Guizhou Province, China
<i>Eoscenidium longicrurum</i>	n.r.	i.s.	—	Wang 1989: 156	Lower Cambrian	—	Damiao Formation, Erlongping Group, Eastern Qinling ophiolite belt, Henan Province, China
<i>Eoscenidium longiradiatum</i>	n.r.	i.s.	—	Wang 1989: 155	Lower Cambrian	—	Damiao Formation, Erlongping Group, Eastern Qinling ophiolite belt, Henan Province, China
<i>Eoscenidium solidescens</i>	n.r.	i.s.	Tnr	Wang 1989: 155	Lower Cambrian	—	Niutitang Formation, Sandu district, Guizhou Province, China

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Eostyloclictya</i> (136)							
<i>Eostyloclictya eccentrica</i>	E	—	Ts	Ormiston & Lane 1976: 171	Lower Carboniferous	Tournaisian	Sycamore Limestone, southern Arbuckle Mountains, Oklahoma, USA
<i>Eostyloclictya palaeoeccentrica</i>	E	—	—	Won & Seo 2010: 252	Lower Carboniferous	Visean	Bergisches Land, N Westfalia, Germany
<i>Eostyloclictya pericinctus spinosa</i>	E	—	—	Won & Seo 2010: 253	Lower Carboniferous	Visean	Bergisches Land, N Westfalia, Germany
<i>Eostyloclictya speculum</i>	E	—	Ts	Won 1983: 152	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Etymalbaillella</i> (294)							
<i>Etymalbaillella renzii</i>	IS (O&F)	—	—	Li 1995: 338	Middle Ordovician	Dapingian	Qingshuigou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Etymalbaillella toriterminolis</i>	IS (O&F)	—	—	Li 1995: 338	Middle Ordovician	Dapingian	Qingshuigou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Etymalbaillella yennienii</i>	IS (O&F)	—	T	Li 1995: 338	Middle Ordovician	Dapingian	Qingshuigou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Follicucullus</i> (31)							
<i>Follicucullus bipartitus</i>	Al	—	—	Caridroit & De Wever 1984: 640	Middle Permian	Capitanian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
<i>Follicucullus bispinosus</i>	Al	—	—	Kozur 1993: 105	Upper Permian	upper Changhsingian	Lamar Limestone, Guadalupe Mts. Culberson County, West Texas, USA
<i>Follicucullus crenulatus</i>	Al	—	—	Spiller 2002: 26	Middle Permian	—	Lower Chert Member, Semanggol Formation, Pokok Sena, NW Peninsular Malaysia
<i>Follicucullus dactylinus</i>	Al	—	—	Rudenko in Rudenko & Panasenko 1990b: 188	Upper Permian	Wuchiapingian	Pantov Member, Tauka Terrane, Tumanovk, Pantov area, Primorskiy Kray, Russia
<i>Follicucullus dilatatus</i>	Al	—	—	Rudenko in Belyansky et al. 1984: 54	Upper Permian	Capitanian	Sebuchar Formation of Taukha Belt, Dal'nyy-Kut, Bol'shoy Ussurka, Primorskiy Kray, Russia
<i>Follicucullus elongatus</i>	Al	—	—	Spiller 2002: 27	Middle Permian	—	Lower Chert Member, Semanggol Formation, Pokok Sena, NW Peninsular Malaysia
<i>Follicucullus falx</i>	Al	—	—	Caridroit & De Wever 1984: 641	Middle Permian	Capitanian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
<i>Follicucullus furca</i>	Al	—	—	Caridroit & De Wever 1986: 64	Upper Permian	Wuchiapingian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
<i>Follicucullus guangxiensis</i>	Al	—	—	Wang in Wang et al. 2012: 108	Upper Permian	upper Changhsingian	Bancheng Formation, SE Guangxi, China
<i>Follicucullus hamatus</i>	Al	—	—	Caridroit & De Wever 1984: 642	Middle Permian	Capitanian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
<i>Follicucullus hamatus uncinatus</i>	Al	—	—	Caridroit & De Wever 1984: 642	Middle Permian	Capitanian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
<i>Follicucullus japonicus</i>	Al	—	—	Ishiga 1991: 108	Upper Permian	Changhsingian	Imajo Unit, NW of the Nabejiryama area, Taga Town, Inukami-gun, Shiga, Japan
<i>Follicucullus lagenarius</i>	Al	—	—	Rudenko in Belyansky et al. 1984: 55	Upper Permian	Capitanian	Sebuchar Formation of Taukha Belt, Dal'nyy-Kut, Bol'shoy Ussurka, Primorskiy Kray, Russia
<i>Follicucullus latior</i>	Al	—	—	Feng & Liu 1993: 557	Upper Permian	Changhsingian	Laba Group, SW Yunnan, China
<i>Follicucullus monacanthus</i>	Al	—	—	Ishiga & Imoto in Ishiga et al. 1982b: 276	Lower Permian	Kungurian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Ashimi-dani section, Ukyo-ku, Kyoto, Japan
<i>Follicucullus orthogonus</i>	Al	—	Ts	Caridroit & De Wever 1984: 642	Middle Permian	Capitanian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
<i>Follicucullus porrectus</i>	Al	—	—	Rudenko in Belyansky et al. 1984: 55	Upper Permian	Capitanian	Sebuchar Formation of Taukha Belt, Dal'nyy-Kut, Bol'shoy Ussurka, Primorskiy Kray, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Follicucullus</i> (31) continuation							
<i>Follicucullus quadrataris</i>	Al	—	—	Wang in Wang et al. 1994: 187	Lower Permian	Kungurian	Dachongling section, Qinzhou City, Guangxi, S China
<i>Follicucullus scholasticus</i>	Al	—	Ts	Ormiston & Babcock 1979: 333	Middle Permian	Capitanian	Bell Canyon Formation, Delaware Basin, Culberson County, W Texas, USA
<i>Follicucullus sphaericus</i>	Al	—	—	Takemura in Takemura et al. 1999: 760	Middle Permian	Capitanian	Oruatemanu Formation, Waipapa Terrane, Arrow Rocks, North Island, New Zealand
<i>Follicucullus ventricosus</i>	Al	—	T	Ormiston & Babcock 1979: 332	Middle Permian	Capitanian	Bell Canyon Formation, Delaware Basin, Culberson County, W Texas, USA
<i>Follicucullus whangaroaensis</i>	Al	—	—	Takemura in Takemura et al. 1999: 763	Middle Permian	Capitanian	Oruatemanu Formation, Waipapa Terrane, Arrow Rocks, North Island, New Zealand
<i>Follicucullus? charveti</i>	Al	—	—	Caridroit & De Wever 1984: 641	Middle Permian	Capitanian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
<i>Foremanconus</i> (32)							
<i>Foremanconus postsakmaraensis</i>	Al	—	—	Kozur & Mostler 1989: 180	Lower Permian	Artinskian	Sasayama-cho, Takigun, Hyogo Prefecture, Japan
<i>Foremanhelena</i> (172)							
<i>Foremanhelena circula</i>	L	—	—	Shang, Caridroit & Wang 2001: 233	Upper Permian	Changhsingian	Changshing Formation, Liuqiao section, Fusui County, southern Nanning, Guangxi, China
<i>Foremanhelena intermixta</i>	L	—	—	Feng in Feng et al. 2006b: 839	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Foremanhelena robusta</i>	L	—	—	Feng in Feng et al. 2006b: 839	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Foremanhelena triangula</i>	L	—	T	De Wever & Caridroit 1984: 106	Upper Permian	Wuchiapingian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
<i>Foremaniella</i> (225)							
<i>Foremaniella helenae</i>	N?	—	—	Deflandre 1973c: 1150	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Franklinia</i> (268)							
<i>Franklinia dipulvisphaera</i>	S	—	—	Jones & Noble 2006: 312	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Franklinia tricae</i>	S	—	T,	Jones & Noble 2006: 310 Th	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Fukuijus</i> (143)							
<i>Fukuijus yamakoshii</i>	E	—	Td	Furutani 1990: 47	Upper Silurian	Pridoli	Yoshiki Formation, Hida-gaien Belt, Ichinotani Valley, Fukuji area, Takayama City, Gifu, Japan
<i>Fungomacula</i> (295)							
<i>Fungomacula barbatula</i>	S	—	T	Won in Won & Below 1999: 336	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia
<i>Fusalfanus</i> (257)							
<i>Fusalfanus bilateralis</i>	S	—	—	Tetard, Noble & Danelian in Tetard et al. 2015: 871	Upper Silurian	Gorstian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Fusalfanus osobudaniensis</i>	S	—	T	Furutani 1990: 38	Upper Silurian	Gorstian	Hitoegane Formation, Hida-gaien Belt, E of Hitoegane, Fukuji area, Takayama City, Japan
<i>Fusalfanus? konomoriensis</i>	S	—	—	Aitchison, Hada, Ireland & Yoshikura 1996: 66	Upper Silurian	Pridoli	Unit G4, Jingamori, Kurosegawa terrane, S Mt. Konomori, Kochi City, Shikoku, Japan
<i>Fusuconcharium</i> (340)							
<i>Fusuconcharium minimum</i>	n.r.	i.s.	—	Hao & Shu 1987: 309	Lower Cambrian	Terreneuvian	Shuijingtuo Formation, Shaanxi Province, Zhenba County, China
<i>Fusuconcharium typicum</i>	n.r.	i.s.	Tnr	Hao & Shu 1987: 309	Lower Cambrian	Terreneuvian	Shuijingtuo Formation, Shaanxi Province, Zhenba County, China

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Futobari (258)							
<i>Futobari morishitai</i>	S	—	—	Furutani 1990: 35	Upper Silurian	Pridoli	Yoshiki Formation, Hida-gaien Belt, Ichinotani Valley, Fukuji area, Takayama City, Gifu, Japan
<i>Futobari solidus</i>	S	—	T	Furutani 1990: 34	Upper Silurian	Pridoli	Yoshiki Formation, Hida-gaien Belt, Ichinotani Valley, Fukuji area, Takayama City, Gifu, Japan
<i>Futobari? jingamoriensis</i>	S	—	—	Aitchison, Hada, Ireland & Yoshikura 1996: 65	Upper Silurian	Pridoli	Unit G4, Jingamori, Kurosegawa terrane, S Mt. Konomori, Kochi City, Shikoku, Japan
<i>Futobari? tosaensis</i>	S	—	—	Aitchison, Hada, Ireland & Yoshikura 1996: 65	Upper Silurian	Pridoli	Unit G4, Jingamori, Kurosegawa terrane, S Mt. Konomori, Kochi City, Shikoku, Japan
Gansuceratoikiscum (15)							
<i>Gansuceratoikiscum guanzhuangensis</i>	Al	—	T	Wang in Wang et al. 2010: 472	Upper Ordovician Sandbian		Pinglian Formation, Guanzhuang section, Pinglang City, Gansu, China
Gedauia (137)							
<i>Gedauia bibrachialis</i>	E	—	Ts	Won 1983: 153	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenberg, Germany
Gigantoscopiculum (54)							
<i>Gigantoscopiculum dumitricai</i>	Ar	—	T	Won & Iams 2015a: 17	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
Glanta (16)							
<i>Glanta crinerensis</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 129	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA
<i>Glanta fragilis</i>	Al	—	T	Wakamatsu, Sugiyama & Furutani 1990: 180	Lower Devonian	Emsian	Nakahata Formation, SW of Mt. Yokokurayama, Ochi Town, Shikoku, Japan
<i>Glanta triangularis</i>	Al	—	—	Wakamatsu, Sugiyama & Furutani 1990: 182	Lower Devonian	Emsian	Nakahata Formation, SW of Mt. Yokokurayama, Ochi Town, Shikoku, Japan
<i>Glanta yokokurayamaensis</i>	Al	—	—	Umeda 1998a: 101	Middle Devonian	Eifelian	Nakahata Formation, Section C, Ochi Town, Shikoku, Japan
Goodbodium (144)							
<i>Goodbodium elegans</i>	E	—	—	Furutani 1990: 43	Upper Silurian	Gorstian	Hitoegane Formation, Hida-gaien Belt, E of Hitoegane, Fukuji area, Takayama City, Japan
<i>Goodbodium nishiyamai</i>	E	—	—	Furutani 1990: 44	Upper Silurian	Pridoli	Yoshiki Formation, Hida-gaien Belt, Ichinotani Valley, Fukuji area, Takayama City, Gifu, Japan
Gracilentactinia (93)							
<i>Gracilentactinia gracilis</i>	E	—	T	Kozur & Mostler 1989: 193	Lower Permian	Kungurian	Koshelev Foramtion, Alogazovo Village, Movsovic Region, Russia
<i>Gracilentactinia sphaerica</i>	E	—	—	Kozur & Mostler 1989: 193	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
Grandetortura (200)							
<i>Grandetortura nipponica</i>	L	—	T	Sashida & Tonishi 1991: 92	Upper Permian	Changhsingian	Ohyayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
Grosmorneus (55)							
<i>Grosmorneus globosus</i>	Ar	—	T	Won & Iams 2002: 31	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
Guangxitrisphaera (315)							
<i>Guangxitrisphaera wanyaoensis</i>	—	n.d.	Td	Wang & Kuang 1993: 281	Lower Carboniferous	Tournaisian	Shijia Formation, Shijia Reservoir, Qinzhou area, Guangxi Zhuang Region, SW China
Gustefana (316)							
<i>Gustefana obliqueannulata</i>	—	n.d.	Td	Kozur 1993: 111	Upper Permian	Wuchiapingian	Sosio Valley Area, Torrente San Calogero, Western Sicily, Italy

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Gyrosphaera (250)							
<i>Gyrosphaera cavea</i>	S	—	—	Jones & Noble 2006: 304	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Gyrosphaera primigena</i>	S	—	—	Umeda & Suzuki 2005: 87	Lower Silurian	Aeronian	Kallholn Formation, Solberga Quarry of Boda, Siljan area, Dalarna, Sweden
<i>Gyrosphaera raneatela</i>	S	—	T	Noble & Maletz 2000: 267	Lower Silurian	Telchyian	Kallholn Formation, Solberga Quarry of Boda, Siljan area, Dalarna, Sweden
<i>Gyrosphaera siljanensis</i>	S	—	—	Noble & Maletz 2000: 267	Lower Silurian	Telchyian	Kallholn Formation, Solberga Quarry of Boda, Siljan area, Dalarna, Sweden
Halicalyptra							
<i>Halicalyptra aculeata</i>	—	n.d.	—	Rüst 1892: 179	Lower Devonian	—	Southern Urals, Russia
<i>Halicalyptra ambulans</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1578	Lower Ordovician	Floian	Normanskill chert, Fly Summit, Washington County, New York, USA
<i>Halicalyptra similis</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1578	Lower Ordovician	Floian	Normanskill chert, Fly Summit, Washington County, New York, USA
Halicapsa							
<i>Halicapsa megapora</i>	—	n.d.	—	Rüst 1892: 181	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Haliomma							
<i>Haliomma antiquum</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1573	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Haliomma cornutum</i>	—	n.d.	—	Hinde 1890: 51	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK
<i>Haliomma paternum</i>	—	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Haliomma penrosei</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1573	Lower Ordovician	Floian	Normanskill chert, Glenmont, Albany County, New York, USA
<i>Haliomma perfecta</i>	—	n.d.	—	Aberdeen 1940: 138	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Haliomma speciosum</i>	—	n.d.	—	Rüst 1892: 148	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Haliomma stigmophorum</i>	—	n.d.	—	Rüst 1892: 148	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Haliomma vetustum</i>	—	n.d.	—	Hinde 1890: 51	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK
Haplentactinia (134)							
<i>Haplentactinia alekseevi</i>	E	—	—	Afanasieva 2000c: 374	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Haplentactinia armillata</i>	E	—	—	Nazarov in Nazarov & Popov 1980: 55	Middle Ordovician	Darriwilian	Kizylzarsk Formation, area between Moynty and Zhamishinsk Rivers, Kazakhstan
<i>Haplentactinia armista</i>	E	—	—	Siveter, Aitchison, Siveter & Sutton 2007: 91	Middle Silurian	Homerian	Wenlock Series, Herefordshire, England, UK
<i>Haplentactinia arrhinia</i>	E	—	Ts	Foreman 1963: 270	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Haplentactinia attenuata</i>	E	—	—	Goto, Umeda & Ishiga 1992: 156	Upper Ordovician	Katian	Malongulli Formation, Lachlan Fold Belt, 30 km NW of Taralga, NSW, Australia
<i>Haplentactinia baltica</i>	E	—	—	Nazarov in Nazarov & Nolvak 1983: 5	Upper Ordovician	Hirnantian	Sau'yask Formation, Bore hole Eikla, Saaremaa, Estonia
<i>Haplentactinia barskovi</i>	E	—	—	Afanasieva 2000c: 375	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Haplentactinia bicepsispina</i>	—	n.n.	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuigou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Haplentactinia bornazi</i>	E	—	—	Afanasieva 2000a: 31	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Haplentactinia</i> (134) continuation							
<i>Haplentactinia flagellifera</i>	E	—	—	Nazarov & Ormiston 1993: 40	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Haplentactinia flagellifera</i>	—	n.n.	—	Nazarov 1988: 129	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Haplentactinia inaudata</i>	—	n.n.	—	Nazarov 1988: 129	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Haplentactinia infida</i>	E	—	—	Nazarov in Nazarov et al. 1975: 102	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Haplentactinia infida</i>	E	—	—	Nazarov in Nazarov et al. 1977: 919	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Haplentactinia jinzhangii</i>	—	n.n.	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuigou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Haplentactinia juncta</i>	E	—	—	Nazarov 1975: 58	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Haplentactinia kuzminaee</i>	E	—	—	Afanasieva & Amon 2011: 1504	Upper Devonian	middle Frasnian	Pechora Basin, Ukhinskii District, Ukhta River, Russia
<i>Haplentactinia minia</i>	—	n.n.	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuigou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Haplentactinia rhinophyusa</i>	E	—	T	Foreman 1963: 270	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Haplentactinia silurica</i>	E	—	—	Nazarov & Ormiston 1990: 18	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Haplentactinia silurica</i>	E	—	—	Nazarov & Ormiston 1993: 39	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Haplentactinia silurica</i>	E	—	—	Nazarov 1988: 122	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Haplentactinia simplex</i>	E	—	—	Wang in Wang & Luo 2009: 136	Upper Devonian	Frasnian	Xiangshuidong Formation, Bazhai, Ziyun County, Guizhou, China
<i>Haplentactinia vilvaensis</i>	E	—	—	Afanasieva & Amon 2011: 1502	Upper Devonian	lower Famennian	Vilva River of the Perm Region, Middle Urals, Russia
<i>Haplentactinia? ichikawai</i>	E	—	—	Caridroit & De Wever 1984: 643	Middle Permian	Capitanian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
<i>Haplentactinia? ozawai</i>	E	—	—	Furutani 1990: 40	Upper Silurian	Gorstian	Hitoegane Formation, Hida-gaien Belt, E of Hitoegane, Fukui area, Takayama City, Japan
<i>Haplentactinia? pentochela</i>	E	—	—	Li 1994: 263	Upper Silurian	Gorstian	Keerhada, Mayila Mts., Xinjiang, China
<i>Haploaxon</i> (190)							
<i>Haploaxon melorax</i>	—	n.d.	—	Cordey 1998: 53-54	Lower Permian	Artinskian?	SW of Aspen Grove, British Columbia, Canada
<i>Haploaxon merrittensis</i>	—	n.d.	Ts	Cordey 1998: 53	Lower Permian	Artinskian?	SW of Aspen Grove, British Columbia, Canada
<i>Haplodiacanthus</i> (33)							
<i>Haplodiacanthus anfractus</i>	Al	—	Ts	Nazarov & Rudenko 1981: 133	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Haplodiacanthus circinatus</i>	Al	—	—	Nazarov & Ormiston 1985: 47	Upper Carboniferous	Gzhelian	E of Saraktash, Nikol Village, Ural River, Bashkirsk Region, Urals, Russia
<i>Haplodiacanthus levitoflexus</i>	Al	—	—	Nazarov in Isakova & Nazarov 1986: 116	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Haplodiacanthus levitoflexus fenistratus</i>	Al	—	—	Nazarov in Isakova & Nazarov 1986: 116	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Haploplus</i>							
<i>Haploplus qunii</i>	—	n.n.	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuigou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Haplopolaris</i>							
<i>Haplopolaris dipolaris</i>	—	n.n.	—	Li 1991: 75	Upper Silurian	Gorstian	Mayila Complex, Keerhada, S Mayila Mt., Xinjiang, China
<i>Haplopulus</i> (269)							
<i>Haplopulus dipolus</i>	S	—	Ts	Li 1994: 263	Upper Silurian	Gorstian	Keerhada, Mayila Mts., Xinjiang, China
<i>Haplostaeniatum</i> (251)							
<i>Haplostaeniatum catherinatum</i>	S	—	—	Nazarov & Ormiston 1993: 41	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Haplostaeniatum catherinatum</i>	—	n.n.	—	Nazarov 1988: 122	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Haplostaeniatum circulus</i>	S	—	—	Pouille & Danelian <i>in Pouille et al.</i> 2014: 157	Middle Ordovician	upper Darriwilian	Shundy Formation, Balkhash region, Kazakhstan
<i>Haplostaeniatum fenestratum</i>	S	—	—	Goto, Umeda & Ishiga 1992: 158	Upper Ordovician	Katian	Malongulli Formation, Lachlan Fold Belt, 30 km NW of Taralga, NSW, Australia
<i>Haplostaeniatum fissura</i>	S	—	—	MacDonald 2006: 20	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Haplostaeniatum labyrinthicum</i>	S	—	Th	Nazarov & Ormiston 1990: 20	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Haplostaeniatum labyrinthicum</i>	—	inv.	—	Nazarov & Ormiston 1993: 41	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Haplostaeniatum labyrinthicum</i>	—	n.n.	—	Nazarov 1988: 122	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Haplostaeniatum leptum</i>	—	n.n.	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuigou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Haplostaeniatum nunavutensis</i>	S	—	—	MacDonald 2006: 23	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Haplostaeniatum ovatum</i>	S	—	—	Noble & Webby 2009: 557	Upper Ordovician	Katian	Malongulli Formation, Cleftden Caves area, NSW, Australia
<i>Haplostaeniatum prolatum</i>	S	—	—	Noble & Webby 2009: 557	Upper Ordovician	Katian	Malongulli Formation, Cleftden Caves area, NSW, Australia
<i>Haplostaeniatum spinatum</i>	S	—	—	Goto, Umeda & Ishiga 1992: 157	Upper Ordovician	Katian	Malongulli Formation, Lachlan Fold Belt, 30 km NW of Taralga, NSW, Australia
<i>Haplostaeniatum tegimentum</i>	S	—	—	Nazarov & Ormiston 1990: 20	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Haplostaeniatum tegimentum</i>	—	inv.	—	Nazarov & Ormiston 1993: 42	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Haplostaeniatum tegimentum</i>	—	n.n.	—	Nazarov 1988: 66	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Haplostaeniatum vertigospongum</i>	S	—	—	Jones & Noble 2006: 302	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Haplostaeniatum?</i> <i>aperturatum</i>	S	—	—	Noble, Ketner & McClellan 1997: 721	Lower Silurian	Rhuddanian	Cherry Spring Chert, Garden Pass, Roberts Mts. Allochthon, Nevada, USA
<i>Haplostaeniatum?</i> <i>giganteum</i>	S	—	—	Pouille & Danelian <i>in Pouille et al.</i> 2014: 160	Middle Ordovician	upper Darriwilian	Shundy Formation, Balkhash region, Kazakhstan
<i>Hapolpolus</i>							
<i>Hapolpolus ruedemannii</i>	—	n.n.	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuigou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Hegleria (270)							
<i>Hegleria agnusiforma</i>	S	—	—	Noble & Jin 2010: 140	Middle Permian	Capitanian	Bell Canyon Formation, Guadalupe Mts., Culberson County, W Texas, USA
<i>Hegleria globosa</i>	S	—	—	Noble & Jin 2010: 141	Middle Permian	Capitanian	Bell Canyon Formation, Guadalupe Mts., Culberson County, W Texas, USA
<i>Hegleria mammifera</i>	S	—	T	Nazarov & Ormiston 1985: 22	Middle Permian	Capitanian	Bell Canyon Formation, Guadalupe Mts., Culbertson County, W Texas, USA
Helenifore (17)							
<i>Helenifore gogoense</i>	Al	—	—	Aitchison 1993b: 111	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Helenifore laticlavium</i>	Al	—	T	Nazarov & Ormiston 1983a: 464	Upper Devonian	Frasnian	Sadler Range, SE Cap Creek Gap, Canning Basin, Western Australia
<i>Helenifore pilosidiscus</i>	Al	—	—	Aitchison et al 1999: 158	Middle Devonian	Eifelian	Gamilaroi terrane, Silver Gully, Nundle, NSW, Australia
<i>Helenifore planus</i>	Al	—	—	Umeda 1997: 418	Upper Silurian	Gorstian	Jyoro Formation, Kurosegawa Belt, Konomori area, Kochi City, Shikoku, Japan
<i>Helenifore quadrispina</i>	Al	—	—	Noble & Lenz 2007: 1050	Middle Silurian	Homerian	Cape Phillips Formation, Rookery Creek, Cornwallis Island, Canadian Arctic Archipelago
<i>Helenifore? fasciola</i>	Al	—	—	Nazarov & Ormiston 1993: 52	Middle Silurian	Homerian	Maksyutov Complex, Tarangul River, 10 km N of Kosistek Village, S Urals, Russia
Helenofore							
<i>Helenofore fasciola</i>	—	n.n.	—	Nazarov 1988: 122	Upper Silurian	Pridoli	Maksyutov Complex, Tarangul River, 10 km N of Kosistek Village, S Urals, Russia
Heliodiscus							
<i>Heliodiscus acucinctus</i>	—	n.d.	—	Rüst 1892: 165	Lower Silurian	—	Cabrières, Hérault, France
<i>Heliodiscus saturnalis</i>	—	n.d.	Td	Rüst 1892: 165	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
Helioentactinia (94)							
<i>Helioentactinia aster</i>	E	—	—	Aitchison 1993b: 118	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Helioentactinia biexosphaera</i>	E	—	—	Nazarov in Isakova & Nazarov 1986: 69	Upper Carboniferous	Gzhelian	Saraktaš, Nikol Village, Southern Urals, Russia
<i>Helioentactinia circumtexta</i>	E	—	—	Nazarov 1975: 89	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Helioentactinia gudymovae</i>	E	—	—	Afanasieva 2000b: 143	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Helioentactinia ikka</i>	E	—	—	Nazarov & Ormiston 1990: 16	Lower Permian	Sakmarian	Dalny Tulkas Rill, Belskaya depression, Bashkortostan Region, S Urals, Russia
<i>Helioentactinia ikka</i>	E	—	—	Nazarov & Ormiston 1993: 34	Lower Permian	Sakmarian	Dalny Tulkas Rill, Belskaya depression, Bashkortostan Region, S Urals, Russia
<i>Helioentactinia ikka</i>	—	n.n.	—	Nazarov 1988: 156	Lower Permian	Artinskian	Dalny Tulkas Rill, Belskaya depression, Bashkortostan Region, S Urals, Russia
<i>Helioentactinia nazarovi</i>	E	—	—	Sashida & Tonishi 1985: 12	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Helioentactinia perjucunda</i>	E	—	—	Nazarov & Ormiston 1983a: 460	Upper Devonian	Frasnian	Sadler Range, SE Cap Creek Gap, Canning Basin, Western Australia
<i>Helioentactinia securitrix</i>	E	—	—	Nazarov 1975: 90	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Helioentactinia stellaepolus</i>	E	—	—	Aitchison 1993b: 119	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Helioentactinia</i> (94) continuation							
<i>Helioentactinia uralica</i>	E	—	—	Kozur & Mostler 1989: 193	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Helioentactinia valavica</i>	E	—	—	Nazarov & Ormiston 1993: 34	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Helioentactinia valavica</i>	—	n.n.	—	Nazarov 1988: 130	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Helioentactinia yunnensis</i>	E	—	—	Wang in Wang et al. 2000: 248	Middle Devonian	Givetian	Changyucun Formation, Shajingpo section, Xianyun County, Yunnan, China
<i>Helioentactinia?</i> <i>asymmetrica</i>	E	—	—	Nazarov 1975: 88	Middle Cambrian	—	Agyirkesk Formation, Mukhr River, Chingiz Mountain range, eastern Kazakhstan
<i>Helioentactinia?</i> <i>bakanasensis</i>	E	—	T	Nazarov 1975: 89	Upper Cambrian	Furongian	Ushkyzyl'sk Formation, Ushkyzyl Mts, Gora Ushkyzyl, Gora Akshata, Qyzylord, E Kazakhstan
<i>Helioentactinia?</i> <i>prismspinosa</i>	E	—	—	Wakamatsu, Sugiyama & Furutani 1990: 168	Upper Silurian	Pridoli	Jyoro Formation, Kurosegawa Belt., S Mt. Yokokurayama, Ochi Town, Shikoku, Japan
<i>Heliosestrum</i>							
<i>Heliosestrum nigrum</i>	E	—	—	Hinde 1899a: 54	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Heliosoma</i>							
<i>Heliosoma echinatum</i>	E	—	—	Hinde 1899a: 50	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Heliosoma mojsisovicsi</i>	E	—	—	Rüst 1892: 148	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Heliosoma paronae</i>	E	—	—	Hinde 1899a: 50	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Heliosoma roemeri</i>	—	n.d.	—	Rüst 1892: 148	Lower Silurian	—	Cabrières, Hérault, France
<i>Heliosphaera</i>							
<i>Heliosphaera alternata</i>	—	n.d.	—	Aberdeen 1940: 138	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Heliosphaera bardanum</i>	—	n.d.	—	Rüst 1892: 147	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Heliosphaera clavata</i>	—	n.d.	—	Hinde 1899a: 50	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Heliosphaera fenestrata</i>	—	n.d.	—	Hinde 1899a: 49	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Heliosphaera haackeli</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1572	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Heliosphaera kjrulfi</i>	—	n.d.	—	Rüst 1892: 147	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Heliosphaera macrospinosa</i>	—	n.d.	—	Aberdeen 1940: 138	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Heliosphaera micropora</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1572	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Heliosphaera robusta</i>	E	—	—	Hinde 1899a: 49	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Heliosphaera uesti</i>	—	n.d.	—	Ruedemann & Wilson 1936: n.c. 1572	Lower Ordovician	Floian	Normanskill chert, Ghent, Columbia County, New York, USA
<i>Heliosphaera tamworthi</i>	E	—	—	Hinde 1899a: 49	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Heliosphaera venusta</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1572	Lower Ordovician	Floian	Normanskill chert, Ghent, Columbia County, New York, USA
<i>Helminentactinia</i> (259)							
<i>Helminentactinia nazarovi</i>	—	n.n.	Td	Li 1991: 75	Upper Silurian	Gorstian	Mayila Complex, Keerhada, S Mayila Mt., Xinjiang, China
<i>Helminentactinia nazarovi</i>	—	n.d.	—	Li 1994: 268	Upper Silurian	Gorstian	Keerhada, Mayila Mts., Xinjiang, China
<i>Helminentactinia nazarovi</i>	—	n.n.	—	Li 1991: 75 longispina	Upper Silurian	Gorstian	Mayila Complex, Keerhada, S Mayila Mt., Xinjiang, China

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Hemisphaera</i>							
<i>Hemisphaera diflandrei</i>	—	n.n.	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuigou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Heptacladus</i>							
<i>Heptacladus permicus</i>	E?	—	—	Kozur & Mostler 1989: 184	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Hexacladus</i>							
<i>Hexacladus speciosus</i>	—	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Hexalastrum</i>							
<i>Hexalastrum infans</i>	—	n.d.	—	Rüst 1892: 172	Carboniferous	—	Bükk-Gebirge, Inner Western Carpathians, Hungary
<i>Hexalonche</i>							
<i>Hexalonche palaezoica</i>	E	—	—	Rüst 1892: 146	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
<i>Hexalonche valida</i>	E	—	—	Rüst 1892: 146	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Hexastylidium</i>							
<i>Hexastylidium variatum</i>	—	n.d.	—	Aberdeen 1940: 136	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Hexastylus</i>							
<i>Hexastylus basiporus</i>	—	n.d.	—	Aberdeen 1940: 136	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Hexastylus ferox</i>	—	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Hexastylus montismigrae</i>	—	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Holdisphaera</i> (95)							
<i>Holdisphaera furutani</i>	E	—	T	Kozur & Mostler 1989: 187	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Holdisphaera laevis</i>	E	—	—	Kozur & Mostler 1989: 187	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Holdsworthella</i> (34)							
<i>Holdsworthella perforata</i>	Al	—	—	Kozur 1981: 269	Lower Permian	Sakmarian	Sarabil Formation, Kondurovska, Orenburgskaya Region, S Urals, Russia
<i>Holdsworthella permica</i>	Al	—	Ts	Kozur 1981: 268	Lower Permian	Sakmarian	Sarabil Formation, Kondurovska, Orenburgskaya Region, S Urals, Russia
<i>Holdsworthum</i> (145)							
<i>Holdsworthum japonicus</i>	E	—	T	Furutani 1990: 45	Upper Silurian	Pridoli	Yoshiki Formation, Hida-gaien Belt, Ichinotani Valley, Fukuji area, Takayama City, Gifu, Japan
<i>Holoeciscus</i> (18)							
<i>Holoeciscus auceps</i>	Al	—	T	Foreman 1963: 294	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Holoeciscus brevis</i>	Al	—	—	Cheng 1986: 90	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Holoeciscus elongatus</i>	Al	—	—	Kiessling & Tragelehn 1994: 230	Upper Devonian	Famennian	Frankenwald, north Bavaria, Germany
<i>Holoeciscus foremanae</i>	Al	—	—	Cheng 1986: 91	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Holoeciscus longus</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 126	Upper Devonian	upper Famennian	Woodford Formation, Criner Hills 2A section, Carter County, Oklahoma, USA
<i>Holoeciscus quasiauceps</i>	Al	—	—	Wang 1997: 158	Upper Devonian	Famennian	Gennaren Formation, S Utubulak, NW Jungar Basin, Xinjiang, China
<i>Holoeciscus renzae</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 128	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Huasha</i> (2)							
<i>Huasha densa</i>	Al	—	—	Cheng 1986: 71	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Huasha holdsworthi</i>	Al	—	Ts	Cheng 1986: 73	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Huasha magnifica</i>	Al	—	—	Cheng 1986: 74	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Huasha quinquecostata</i>	Al	—	—	Cheng 1986: 74	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Inaequalientactinia</i> (96)							
<i>Inaequalientactinia deflandrei</i>	E	—	—	Won 1991b: 101	Lower Carboniferous	Tournaisian	Boulders in Quaternary Rhine Terrace, near Oberkassel, Bonn
<i>Inaequalientactinia gourmelonae</i>	E	—	—	Won 1991b: 102	Lower Carboniferous	Tournaisian	Boulders in Quaternary Rhine Terrace, near Oberkassel, Bonn
<i>Inaequalientactinia parva</i>	E	—	—	Won 1991b: 103	Lower Carboniferous	Tournaisian	Boulders in Quaternary Rhine Terrace, near Oberkassel, Bonn
<i>Inaequalientactinia typica</i>	E	—	Ts	Won 1991b: 103	Lower Carboniferous	Tournaisian	Boulders in Quaternary Rhine Terrace, near Oberkassel, Bonn
<i>Inaequalientactinia wuppertalensis</i>	E	—	—	Won 1992: 203	Lower Carboniferous	Tournaisian	Riescheid Section, Wuppertal-Barmen, Germany
<i>Inanibigutta</i> (260)							
<i>Inanibigutta goodbodyi</i>	S	n.n.	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuiogou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Inanibigutta ishigea</i>	S	n.n.	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuiogou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Inanibigutta keerhadaensis</i>	S	n.n.	—	Li 1991: 75	Upper Silurian	Gorstian	Mayila Complex, Keerhada, S Mayila Mt., Xinjiang, China
<i>Inanibigutta keerhadaensis</i>	S	—	—	Li 1994: 261	Lower Devonian	Emsian	Keerhada, Mayila Mts., Xinjiang, China
<i>Inanibigutta llanvirniana</i>	S	n.n.	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuiogou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Inanibigutta maletzi</i>	S	—	—	Pouille & Danelian in Pouille et al. 2013: 1154	Middle Ordovician	upper Darriwilian	Shundy Formation, Balkhash region, Kazakhstan
<i>Inanibigutta minuta</i>	S	—	—	Wang 1993c: 100	Upper Ordovician	Sandbian	Pinglian Formation, Horizon Pg 3, Yindongguan village, Pinglian County, Gansu, China
<i>Inanibigutta minutia</i>	S	n.n.	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuiogou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Inanibigutta pinglianensis</i>	S	—	—	Wang 1993c: 100	Upper Ordovician	Sandbian	Pinglian Formation, Horizon Pg 3, Yindongguan village, Pinglian County, Gansu, China
<i>Inanigigutta</i>							
<i>Inanigigutta yaoi</i>	S	n.n.	—	Li 1995: 332	Middle Ordovician	Dapingian	Qingshuiogou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Inanigutta</i> (261)							
<i>Inanigutta gansuensis</i>	S	—	—	Wang 1993c: 99	Upper Ordovician	Sandbian	Pinglian Formation, Horizon Pg 3, Yindongguan village, Pinglian County, Gansu, China
<i>Inanigutta hanquanii</i>	S	n.n.	—	Li 1995: 333	Middle Ordovician	Dapingian	Qingshuiogou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Inanigutta haoroui</i>	S	n.n.	—	Li 1995: 333	Middle Ordovician	Dapingian	Qingshuiogou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Inanigutta magnifica</i>	S	—	—	Maletz & Bruton 2008: 1193	Middle Ordovician	lower Darriwilian	Valhallonna Formation, Buldreibreen arm, Ny Frieslan, Spitsbergen, Norway

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Inanigutta</i> (261) continuation							
<i>Inanigutta yujingii</i>	S	n.n.	—	Li 1995: 333	Middle Ordovician	Dapingian	Qingshuigou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Inanigutta zhiyuanii</i>	S	n.n.	—	Li 1995: 333	Middle Ordovician	Dapingian	Qingshuigou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Inanigutta? kyrgyza</i>	S	—	—	Danelian, Popov & Ghobadi Pour 2011: 591	Lower Ordovician	Floian	Sarydzha, eastern Kyrgyzstan
<i>Inanihella</i> (262)							
<i>Inanihella duroacus</i>	S	n.n.	—	Nazarov & Ormiston 1993: 37	Middle Silurian	Homerian	Maksyutov Complex, Tarangul River, 10 km N Kosistek Village, S Urals, Russia
<i>Inanihella duroacus</i>	S	—	—	Nazarov 1988: 122	Upper Silurian	Pridoli	Maksyutov Complex, Tarangul River, 10 km N of Kosistek Village, S Urals, Russia
<i>Inanihella legincula</i>	S	n.n.	—	Nazarov 1988: 122	Middle Silurian	Homerian	Maksyutov Complex, Tarangul River, 10 km N of Kosistek Village, S Urals, Russia
<i>Inanihella legiuncula</i>	S	—	—	Nazarov & Ormiston 1993: 38	Middle Silurian	Homerian	Maksyutov Complex, Tarangul River, 10 km N Kosistek Village, S Urals, Russia
<i>Inanihella perarmata</i>	S	—	—	Nazarov & Ormiston 1993: 38	Middle Silurian	Homerian	Maksyutov Complex, Tarangul River, 10 km N Kosistek Village, S Urals, Russia
<i>Inanihella perarmata</i>	S	n.n.	—	Nazarov 1988: 122	Middle Silurian	Homerian	Maksyutov Complex, Tarangul River, 10 km N of Kosistek Village, S Urals, Russia
<i>Inanihella sagena</i>	S	—	—	Siveter, Aitchison, Siveter & Sutton 2007: 89	Middle Silurian	Homerian	Wenlock Series, Herefordshire, England, UK
<i>Inanihella tarangulica</i>	S	—	—	Nazarov & Ormiston 1984: 73	Middle Silurian	Homerian	Makyutov Complex, Tarangul River, Kosistek Village, Southern Ural, Kazakhstan
<i>Inanihella vulnerata</i>	S	n.n.	—	Nazarov 1988: 122	Middle Silurian	Homerian	Maksyutov Complex, Tarangul River, 10 km N of Kosistek Village, S Urals, Russia
<i>Inanihella? akzhala</i>	S	—	—	Danelian & Popov 2003: 333	Lower Ordovician	Floian	Akzhal Mts. S of Betpak-Dala desert, Kazakhstan
<i>Induropilarius</i> (317)							
<i>Induropilarius aenigmaticus</i>	E	n.n.	Tn	Ters & Deflandre 1966: 340	Ordovician	—	Phtanites d'Angers, Vendée, France
<i>Insolitignum</i> (146)							
<i>Insolitignum peranima</i>	E	—	—	MacDonald 1999: 2054	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Insolitignum vivanima</i>	E	—	—	MacDonald 1999: 2055	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Intracorpus</i> (271)							
<i>Intracorpus octaedron</i>	S	—	T	Won 1997a: 366	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Involutentactinia</i> (97)							
<i>Involutentactinia eccentrica</i>	E	—	T	Jones & Noble 2006: 297	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Involutentactinia eccentrica</i> var. <i>cupressa</i>	E	—	—	Jones & Noble 2006: 297	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Ishigaum</i> (173)							
<i>Ishigaum complanum</i>	L	—	—	Feng in Feng et al. 2006b: 837	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Ishigaum craticula</i>	L	—	—	Shang, Caridroit & Wang 2001: 233	Upper Permian	Changhsingian	Changshing Formation, Liuqiao section, Fusui County, southern Nanning, Guangxi, China

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described	
<i>Ishigaum</i> (173) continuation								
<i>Ishigaum fusinum</i>	L	—	—	Feng in Feng et al. 2006b: 837	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China	
<i>Ishigaum klaengensis</i>	L	—	—	Sashida in Sashida et al. 2000b: Upper Permian 254		Changhsingian	Ratuburi Group, Sukhothai Fold Belt, section I, Kao Wang Chik, Rayong, Thailand	
<i>Ishigaum labaensis</i>	L	—	—	Feng & Liu 1993: 545	Upper Permian	Changhsingian	Muyinhe Formation, Nanpan, Lancang County, Yunnan, China	
<i>Ishigaum longispina</i>	L	—	—	Feng in Feng et al. 2006b: 837	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China	
<i>Ishigaum obesum</i>	L	—	—	De Wever & Caridroit 1984: 100	Middle Permian	Capitanian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan	
<i>Ishigaum trifustis</i>	L	—	T	De Wever & Caridroit 1984: 99	Middle Permian	Capitanian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan	
<i>Ishigaum tristylum</i>	L	—	—	Feng in Feng et al. 2006b: 837	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China	
<i>Kalimnasphaera</i> (263)								
<i>Kalimnasphaera maculosa</i>	S	—	T	Webby & Blom 1986: 152		Upper Ordovician	Katian	Malongulli Formation, Belubula River, E of Canowindra, central NSW, Australia
<i>Kantollum</i> (230)								
<i>Kantollum bicornutum</i>	N?	—	—	Cheng 1986: 163	Upper Carboniferous	Bashkirian	Johns Valley Shale, Pittsburg County, eastern Oklahoma, USA	
<i>Kantollum blancoensis</i>	N?	—	—	Cheng 1986: 165	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA	
<i>Kantollum crinerensis</i>	N?	—	—	Schwartzapfel & Holdsworth 1996: 149	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA	
<i>Kantollum longicornutum</i>	N?	—	—	Wang in Wang et al. 2012: 112	Upper Devonian	Famennian	Shiti Reservoir Formation, Shiwu road section, Guangxi Zhuang Region, SW China	
<i>Kantollum pittsburgense</i>	N?	—	T	Cheng 1986: 164	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA	
<i>Kantollum undulatum</i>	N?	—	—	Cheng 1986: 164	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA	
<i>Kappaformia</i> (19)								
<i>Kappaformia insecta</i>	Al	—	T	Noble & Lenz 2007: 1052	Middle Silurian	Homerian	Cape Phillips Formation, Rookery Creek, Cornwallis Island, Canadian Arctic Archipelago	
<i>Kashiwara</i> (98)								
<i>Kashiwara magna</i>	E	—	T	Sashida & Tonishi 1985: 15	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan	
<i>Klaengsponges</i> (244)								
<i>Klaengsponges formosus</i>	S	—	—	Feng in Feng et al. 2009: 147	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China	
<i>Klaengsponges planus</i>	S	—	—	Nestell & Nestell 2010: 25	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA	
<i>Klaengsponges spinosus</i>	S	—	T	Sashida in Sashida et al. 2000b: Upper Permian 256		Changhsingian	Ratuburi Group, Sukhothai Fold Belt, section I, Kao Wang Chik, Rayong, Thailand	
<i>Klaengsponges umbilicatus</i>	S	—	—	Feng in Feng et al. 2009: 147	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China	
<i>Konyrium</i> (341)								
<i>Konyrium varium</i>	n.r. i.s. Tnr	Nazarov in Nazarov & Popov 1976: 415			Middle Ordovician	Darriwilian	Bestomaks Formation, Chagan River, Chingiz Range, Kazakhstan	

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Labyrinthia (236)							
<i>Labyrinthia inexpectata</i>	S	—	T	Maletz & Bruton 2007: 281	Lower Ordovician	Floian	Valhallfonna Formation, Buldrebreen arm, Ny Frieslan, Spitsbergen, Norway
<i>Labyrinthia robusta</i>	S	—	—	Maletz 2007: 76	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
Labyrinthosphaera (252)							
<i>Labyrinthosphaera lancia</i>	S	—	—	Jones & Noble 2006: 298	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Labyrinthosphaera macdonaldi</i>	S	—	T	Noble & Maletz 2000: 268	Lower Silurian	Telchyian	Kallholn Formation, Solberga Quarry of Boda, Siljan area, Dalarna, Sweden
<i>Labyrinthosphaera? lenzi</i>	S	—	—	Jones & Noble 2006: 298	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
Lacisus (342)							
<i>Lacisus siphunculus</i>	n.r.	i.s.	Tnr	Kozur 1993: 109	Upper Permian	Wuchiapingian	Sosio Valley Area, Torrente San Calogero, Western Sicily, Italy
Lapidopiscum (4)							
<i>Lapidopiscum piri</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 94	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA
<i>Lapidopiscum piveteaui</i>	Al	—	T	Deflandre 1958: 2278	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Lapidopiscum transversum</i>	Al	—	—	Schwartzapfel & Holdsworth 1996: 97	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA
Latentibifistula (183)							
<i>Latentibifistula asperspongiosa</i>	L	—	—	Sashida & Tonishi 1986: 7	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Latentibifistula triacanthophora</i>	L	—	T	Nazarov & Ormiston 1983b: 374	Lower Permian	Sakmarian	Maloik Formation, Don Village, Ural River, Orenburgskaya Region, S Urals, Russia
Latentidiota (210)							
<i>Latentidiota choripelata</i>	L	n.c.	—	Nazarov in Isakova & Nazarov 1986: 82	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Latentidiota clarisona</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 79	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Latentidiota fallacia</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 82	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Latentidiota medorensis</i>	L	—	—	Nestell, Pope & Nestell 2012: 240	Upper Carboniferous	Moscovian	Mouse Creek Formation, Excello Shale Member, south-central Iowa, USA
<i>Latentidiota semilamina</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 78	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Latentidiota trigimena</i>	L	—	—	Nazarov & Ormiston 1984: 81	Upper Carboniferous	Gzhelian	Makyutov Complex, Tarangul River, Kosistik Village, Southern Ural, Kazakhstan
<i>Latentidiota tripetalina</i>	L	n.c.	—	Nazarov in Isakova & Nazarov 1986: 80	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Latentidiota visenda</i>	L	—	T	Nazarov & Ormiston 1985: 29	Upper Carboniferous	Gzhelian	Maloik Formation, Don Village, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Latentidiota? ambigua</i>	L	n.c.	—	Nazarov in Isakova & Nazarov 1986: 81	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
Latentifistula (184)							
<i>Latentifistula actinoteres</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 87	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Latentifistula astricta</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 88	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Latentifistula astricta astricta</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 89	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Latentifistula astricta? solida</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 90	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Latentifistula</i> (184) continuation							
<i>Latentifistula banchengensis</i>	L	—	—	Wang in Wang et al. 2012: 109	Lower Permian	Artinskian	Bancheng Formation, SE Guangxi, China
<i>Latentifistula brauni</i>	L	—	—	Wang in Wang et al. 2012: 109	Upper Carboniferous	Gzhelian	Shijia Formation, Bancheng, Qinzhou area, Guangxi Zhuang Region, SW China
<i>Latentifistula crux</i>	L	—	T	Nazarov & Ormiston 1983b: 372	Upper Carboniferous	Gzhelian	E of Saraktash, Nikol Village, Ural River, Bashkirsk Region, Urals, Russia
<i>Latentifistula densa</i>	L	—	—	Nazarov & Ormiston 1985: 34	Middle Permian	Capitanian	Bell Canyon Formation, Guadalupe Mts, Culbertson County, W Texas, USA
<i>Latentifistula heteroextrema</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 90	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Latentifistula mushroomformis</i>	L	—	—	Wang in Wang et al. 2012: 109	Lower Permian	Artinskian	Bancheng Formation, SE Guangxi, China
<i>Latentifistula tuyinheensis</i>	—	n.n.	—	Feng 1992: 55	Upper Permian	Changhsingian	Papai Formation of Changning-Menglian Belt, Papai Village, Cangyuan County, Yunnan, China
<i>Latentifistula neotenica</i>	L	—	T	Nazarov & Ormiston 1985: 33	Middle Permian	Roadian	Bell Canyon Formation, Guadalupe Mts, Culbertson County, W Texas, USA
<i>Latentifistula patagilaterala</i>	L	—	—	Nazarov & Ormiston 1985: 33	Middle Permian	Capitanian	Bell Canyon Formation, Hegler Limestone, Culberson County, W Texas, USA
<i>Latentifistula similicutis</i>	L	—	—	Cardroit & De Wever 1986: 78	Upper Permian	Wuchiapingian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
<i>Latentifistula texana</i>	L	—	—	Nazarov & Ormiston 1985: 33	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Latentifistula torulosa</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 85	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Latentifistula torulosa ampliata</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 86	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Latentifistula triradiata</i>	L	—	—	Wang 1993a: 451	Lower Permian	Kungurian	Gufeng Formation, Qiaotou Village, Chaou City, Anhui, China
<i>Latentifistula valdeinepta</i>	L	—	Ts	Nazarov & Ormiston 1985: 33	Lower Permian	Sakmarian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Liosphaera</i>							
<i>Liosphaera devoniensis</i>	—	n.d.	—	Rüst 1892: 136	Lower Devonian	—	Southern Urals, Russia
<i>Liosphaera mera</i>	—	n.d.	—	Rüst 1892: 136	Lower Silurian	—	Cabrières, Hérault, France
<i>Lithapium</i>							
<i>Lithapium claviformis</i>	IS	—	—	Nazarov 1973b: 10	Lower Cambrian	Stage 2	Bograd Mountains, Betenevskiy area, Khakasiya Region, Russia
<i>Lithapium silicum</i>	—	n.d.	—	Rüst 1892: 154	Lower Silurian	—	Cabrières, Hérault, France
<i>Lithapium tesiensis</i>	IS	—	—	Nazarov 1973b: 10	Lower Cambrian	Stage 2	Bograd Mountains, Betenevskiy area, Khakasiya Region, Russia
<i>Lithatractus</i>							
<i>Lithatractus brevispinus</i>	—	n.d.	—	Rüst 1892: 158	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Lithatractus mejeri</i>	—	n.d.	—	Rüst 1892: 157	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Lithatractus perforatus</i>	—	n.d.	—	Rüst 1892: 158	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Lithelius</i>							
<i>Lithelius difficilis</i>	—	n.d.	—	Rüst 1892: 175	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Lithelius sinensis</i>	S	—	—	Feng in Feng et al. 2006a: 35	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Lithocampe</i>							
<i>Lithocampe lossenii</i>	—	n.d.	—	Rüst 1892: 189	Lower Devonian	—	Southern Urals, Russia
<i>Lithocampe orenburgensis</i>	—	n.d.	—	Rüst 1892: 188	Lower Devonian	—	Southern Urals, Russia
<i>Lithocampe pyramis</i>	—	n.d.	—	Rüst 1892: 189	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Lithocampe (continuation)							
<i>Lithocampe sphaerocephalica</i>		—	n.d.	—	Rüst 1892: 189	Upper Permian	—
<i>Lithocampe stenostoma</i>		—	n.d.	—	Rüst 1892: 189	Upper Permian	—
<i>Lithocampe tschernytschewii</i>		—	n.d.	—	Rüst 1892: 189	Lower Devonian	—
<i>Lithocampe tutata</i>		—	n.d.	—	Rüst 1892: 190	Carboniferous	—
<i>Lithocampe? spinosa</i>		—	n.d.	—	Ruedemann & Wilson 1936: 1579	Lower Ordovician	Floian
Lithocannospaeropsis (296)							
<i>Lithocannospaeropsis fallax</i>		—	n.n.	Tn	Deflandre 1960: 216	Lower Carboniferous	Visean
<i>Lithocannospaeropsis taylori</i>		—	n.d.	—	Ormiston & Lane 1976: 175	Lower Carboniferous	Tournaisian
Lithocyclus							
<i>Lithocyclus devoniensis</i>		—	n.d.	—	Hinde & Fox 1895: 639	Carboniferous	Serpukhovian-Bashkirian
<i>Lithocyclus macrococcus</i>	E	—	T	—	Rüst 1892: 166	Upper Devonian	—
<i>Lithocyclus ulrichi</i>	E	—	Ts	—	Rüst 1892: 166	Lower Carboniferous	—
Lithomespilus							
<i>Lithomespilus bipolaris</i>		—	n.d.	—	Rüst 1892: 154	Lower Carboniferous	—
<i>Lithomespilus hexacanthus</i>		—	n.d.	—	Rüst 1892: 153	Lower Silurian	—
<i>Lithomespilus steinvorthi</i>		—	n.d.	—	Rüst 1892: 154	Upper Devonian	—
Lithosphaera (44)							
<i>Lithosphaera oesensis</i>	Ar	—	Th	—	Won 1998: 257	Lower Carboniferous	Tournaisian
Lithostrobus							
<i>Lithostrobus wendlandi</i>	—	n.d.	—	—	Rüst 1892: 187	Upper Permian	—
Longtanella (36)							
<i>Longtanella mengshengensis</i>	Al	n.n.	—	Feng 1992: 54	Upper Permian	Changhsingian	Gufeng Formation, Hubei, China
<i>Longtanella turgida</i>	Al	—	—	Feng 1992: 59	Middle Permian	Capitanian	Gufeng Formation, Hubei, China
<i>Longtanella zhengpanshanensis</i>	Al	—	Ts	Sheng & Wang 1985: 175, 179	Lower Permian	Kungurian	Gufeng Formation, N Mt. Kongshan, Hushan, Nanjing, China
Magnentactinia (99)							
<i>Magnentactinia fragilis</i>	E	—	T	—	Won 1997a: 366	Upper Devonian	Frasnian
<i>Magnentactinia ostentata</i>	E	—	—	—	Jones & Noble 2006: 297	Middle Silurian	Sheinwoodian
<i>Magnentactinia? hexagonia</i>	E	—	—	—	Park & Won 2012: 67	Lower Carboniferous	Tournaisian
Magnisphaera (100)							
<i>Magnisphaera aitchisoniana</i>	E	—	—	—	Won 1997a: 367	Upper Devonian	Frasnian
<i>Magnisphaera gigantea</i>	E	—	T	—	Won 1997a: 368	Upper Devonian	Frasnian
<i>Magnisphaera imperfecta</i>	E	—	—	—	Won 1997a: 368	Upper Devonian	Frasnian

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Megaporus</i> (297)							
<i>Megaporus jini</i>	IS (O&F)	—	T	Feng in Feng et al. 2006c: S68	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Megaporus unicum</i>	IS (O&F)	—	—	Feng in Feng et al. 2006c: S70	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Megaporus yangi</i>	IS (O&F)	—	—	Feng in Feng et al. 2006c: S70	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Megaporus yini</i>	IS (O&F)	—	—	Feng in Feng et al. 2006c: S69	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Meschedea</i> (101)							
<i>Meschedea akcetensis</i>	E	—	—	Noble, Tekin, Gedik & Pehlivan 2008: 53	Lower Carboniferous	Tournaisian	Baltalimani Formation, Istanbul, Turkey
<i>Meschedea crassicortex</i>	E	—	—	Won 1997a: 360	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Meschedea hirsuta</i>	E	—	—	Won 1983: 154	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Meschedea permica</i>	E	—	—	Sashida & Tonishi 1985: 15	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Meschedea pyramispinosa</i>	E	—	Ts	Won 1983: 154	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Meschedea? endocarpa</i>	E	—	—	Nazarov & Ormiston 1993: 38	Middle Permian	Wordian	Bone Spring Formation, Guadalupe Mts., Culbertson County, W Texas, USA
<i>Microporosa</i> (102)							
<i>Microporosa aktastensis</i>	E	—	—	Afanasieva & Amon 2016: 214	Lower Permian	Artinskian	Northern Mugodzhary, Aktasty River, Kazakhstan
<i>Microporosa rozhnovi</i>	E	—	—	Afanasieva & Amon 2016: 213	Lower Permian	Artinskian	Northern Mugodzhary, Aktasty River, Kazakhstan
<i>Moskovistella</i> (103)							
<i>Moskovistella allbori</i>	E	n.n.	—	Afanasieva 1997a: 221	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella allbori</i>	E	n.n.	—	Afanasieva 1997b: 40	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella allbororum</i>	E	—	—	Afanasieva 2000b: 138	Upper Devonian	middle Frasnian	Domanik Formation, borehole Ukhinskaya-3B, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella baccata</i>	E	—	—	Afanasieva 2000a: 67	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella khaini</i>	E	n.n.	—	Afanasieva 1997a: 221	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella khaini</i>	E	n.n.	—	Afanasieva 1997b: 40	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella khaini</i>	E	—	—	Afanasieva 2000b: 135	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella lucet</i>	E	n.n.	—	Afanasieva 1997b: 40	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella lucet</i>	E	—	—	Afanasieva 2000a: 68	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella mira</i>	E	n.n.	—	Afanasieva 1997b: 40	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella mira</i>	E	—	—	Afanasieva 2000b: 140	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Moskovistella</i> (103) continuation							
<i>Moskovistella octoradiata</i>	E	—	T	Afanasieva 2000b: 136	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella rozanovi</i>	E	n.n.	—	Afanasieva 1997b: 40	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella rozanovi</i>	E	—	—	Afanasieva 2000b: 136	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella sincera</i>	E	n.n.	—	Afanasieva 1997b: 40	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella sincera</i>	E	—	—	Afanasieva 2000b: 135	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella viatoria</i>	E	n.n.	—	Afanasieva 1997b: 40	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella viatoria</i>	E	—	—	Afanasieva 2000b: 70	Upper Devonian	middle Frasnian	Domanik Formation, borehole Ukhinskaya-3B, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella victorialis</i>	E	n.n.	—	Afanasieva 1997a: 221	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella victorialis</i>	E	n.n.	—	Afanasieva 1997b: 40	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Moskovistella victorialis</i>	E	—	—	Afanasieva 2000b: 138	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Mostlerisponges</i> (204)							
<i>Mostlerisponges sosioensis</i>	L	—	T	Kozur 1993: 110	Upper Permian	Wuchiapingian	Sosio Valley Area, Torrente San Calogero, Western Sicily, Italy
<i>Mostlerium</i> (226)							
<i>Mostlerium unicum</i>	N?	—	Ts	Cheng 1986: 136	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Multientactinia</i> (104)							
<i>Multientactinia inconstans</i>	E	—	T	Won 1997b: 379	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Multientactinia iniqua</i>	E	—	—	Won 1997b: 379	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Multientactinia iniqua cancellibasis</i>	E	—	—	Won 1997b: 380	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Multientactinia iniqua iniqua</i>	E	—	—	Won 1997b: 379	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Multientactinia reedae</i>	E	—	—	Won 1997b: 380	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Multientactinia soluta</i>	E	—	—	Won 1997b: 380	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Multisphaera</i> (164)							
<i>Multisphaera impersepta</i>	E	—	T	Nazarov & Afanasieva <i>in</i> Afanasieva 2000c: 75	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Nabespecha</i> (191)							
<i>Nabespecha leonardia</i>	L	—	Ts	Cornell & Simpson 1986: 285	Middle Permian	Roadian	Bone Spring Formation, Guadalupe Mts., Culbertson County, W Texas, USA
<i>Nazaromistonella</i> (20)							
<i>Nazaromistonella speciosus</i>	Al	—	Ts	Furutani 1990: 53	Upper Silurian	Gorstian	Hitoegane Formation, Hida-gaien Belt, E of Hitoegane, Fukuji area, Takayama City, Japan

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Nazarovella (192)							
<i>Nazarovella gracilis</i>	L	—	Ts	De Wever & Cardroit 1984: 101	Middle Permian	Capitanian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
<i>Nazarovella inflata</i>	L	—	—	Sashida & Tonishi 1986: 10	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Nazarovella phlogides</i>	L	—	—	Wang in Wang & Li 1994: 206	Middle Permian	Capitanian	Dazong Range, Guangxi, Xiadong, Qinzhou area, China
<i>Nazarovella scalae</i>	L	—	—	Cardroit & De Wever 1986: 83	Middle Permian	Capitanian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
Nazarovispongus (211)							
<i>Nazarovispongus globosum</i>	L	—	—	Nestell & Nestell 2010: 58	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Nazarovispongus pavlovi</i>	L	—	Ts	Kozur 1980: 238	Lower Permian	Sakmarian	Sarabil Formation, Verchneozernaja Station, Orenburgskaya Region, Urals, Russia
<i>Nazarovispongus permicus</i>	L	—	—	Kozur 1980: 238	Lower Permian	Sakmarian	Sarabil Formation, Verchneozernaja Station, Orenburgskaya Region, Urals, Russia
Nazarovites (21)							
<i>Nazarovites aprelevkensis</i>	Al	—	—	Afanasieva 2000c: 360	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Utkha, Timan-Pechora Basin, Russia
<i>Nazarovites bioculus</i>	Al	—	Ts	Afanasieva 2000c: 364	Upper Devonian	middle Frasnian	Domanik Formation, outcrop 1904, Lyaiol River, Timan-Pechora Basin, Russia
<i>Nazarovites mikhailovae</i>	Al	n.n.	—	Afanasieva 1997a: 221	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Utkha, Timan-Pechora Basin, Russia
<i>Nazarovites mikhailovae</i>	Al	—	—	Afanasieva 2000c: 365	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Utkha, Timan-Pechora Basin, Russia
<i>Nazarovites pinnula</i>	Al	—	—	Afanasieva 2000c: 365	Upper Devonian	middle Frasnian	Domanik Formation, outcrop 1904, Lyaiol River, Timan-Pechora Basin, Russia
Neoalbaillella (5)							
<i>Neoalbaillella antaixiangi</i>	Al	—	—	Yao & Kuwahara 1999: 12	Upper Permian	Changhsingian	Dalong Formation, Changjianggou section, N of Shangsi, Sichuan, China
<i>Neoalbaillella camarata</i>	Al	—	—	Wu & Feng in Wu et al. 2010: 886	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Neoalbaillella cephalota</i>	Al	—	—	Wu & Feng in Wu et al. 2010: 886	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Neoalbaillella cribrosa</i>	Al	—	—	Rudenko & Panasenko 1990a: 121	Upper Permian	Changhsingian	Yastrebov Formation, Taukha Terrane, Primoriya, Russia
<i>Neoalbaillella gracilis</i>	Al	—	—	Takemura & Nakaseko 1981: 213	Upper Permian	Changhsingian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Mt. Kurogara-dake, Takatsuki City, Osaka, Japan
<i>Neoalbaillella grypus</i>	Al	—	—	Ishiga, Kito & Imoto 1982a: 16	Upper Permian	Changhsingian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Ubara section, Fukuchiyama City, Kyoto, Japan
<i>Neoalbaillella minuta</i>	Al	—	—	Jin & Feng in Jin et al. 2007: 16	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Neoalbaillella optima</i>	Al	—	—	Ishiga, Kito & Imoto 1982a: 16	Upper Permian	Changhsingian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Ubara section, Fukuchiyama City, Kyoto, Japan
<i>Neoalbaillella ornithoformis</i>	Al	—	T	Takemura & Nakaseko 1981: 211	Upper Permian	Changhsingian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Mt. Kurogara-dake, Takatsuki City, Osaka, Japan
<i>Neoalbaillella pseudogrypus</i>	Al	—	—	Sashida & Tonishi 1988: 527	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Neoaspiculum</i> (286)							
<i>Neoaspiculum cancellum</i>		IS	—	Won & Iams 2011: 165	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Neoaspiculum echinatum</i>		IS	—	Won & Iams 2015a: 29	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Neoaspiculum headense</i>		IS	—	T Won & Iams 2011: 165	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Neoaspiculum headense delicatum</i>		IS	—	Won & Iams 2011: 168	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Neoaspiculum headense headense</i>		IS	—	Won & Iams 2011: 165	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Neoaspiculum laxum</i>		IS	—	Won & Iams 2011: 168	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Neoaspiculum transformum</i>		IS	—	Won & Iams 2011: 168	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Neoaspiculum? amplum</i>		IS	—	Won & Iams 2011: 168	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Neoaspiculum? maletziana</i>		IS	—	Won & Iams 2015a: 29	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Neoechidnina</i> (56)							
<i>Neoechidnina compacta</i>		Ar	—	T Won & Iams 2015a: 15	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Neoholociscus</i> (22)							
<i>Neoholociscus cancerimimus</i>		Al	—	T Ormiston & Lane 1976: 174	Lower Carboniferous	Tournaisian	Sycamore Limestone, southern Arbuckle Mountains, Oklahoma, USA
<i>Neopalaeospiculum</i> (65)							
<i>Neopalaeospiculum densum</i>		Ar	—	Won, Iams & Reed 2007: 527	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Neopalaeospiculum laxum</i>		Ar	—	T Won, Iams & Reed 2007: 525	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Neopalaeospiculum transformum</i>		Ar	—	Won, Iams & Reed 2007: 527	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Noblella</i> (61)							
<i>Noblella tremadociensis</i>		Ar	—	Th, Kozur, Mostler & Repetski 1996: Lower Ordovician Ts 255		Tremadocian	Windfall Formation, Antelope Range, Eureka County, Nevada, USA
<i>Nodocapsa</i>							
<i>Nodocapsa multipartita</i>	n.r. l.s. Tnr	Wang 1989: 145			Lower Cambrian	—	Niutitang Formation, Sandu district, Guizhou Province, China
<i>Nyfrieslandia</i> (287)							
<i>Nyfrieslandia complicata</i>	IS	—	—	Maletz & Bruton 2007: 281	Lower Ordovician	Floian	Valhallonna Formation, Buldreibreen arm, Ny Frieslan, Spitsbergen, Norway
<i>Nyfrieslandia crassispinosa</i>	IS	—	—	Won & Iams 2013: 30	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Nyfrieslandia sphaeroidea</i>	IS	—	T	Maletz & Bruton 2007: 278	Lower Ordovician	Floian	Valhallonna Formation, Buldreibreen arm, Ny Frieslan, Spitsbergen, Norway
<i>Octatormentum</i> (201)							
<i>Octatormentum babcockae</i>	L	—	—	Nazarov & Ormiston 1985: 43	Middle Permian	Capitanian	Bell Canyon Formation, Guadalupe Mts, Culbertson County, W Texas, USA
<i>Octatormentum cornelli</i>	L	—	T	Nazarov & Ormiston 1985: 42	Middle Permian	Roadian	Bell Canyon Formation, Guadalupe Mts, Culbertson County, W Texas, USA
<i>Octatormentum floriferum</i>	L	—	—	Sashida & Tonishi 1988: 533	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Octatormentum yaoi</i>	L	—	—	Wu & Feng in Wu et al. 2010: 889	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Odontosphaera</i>							
<i>Odontosphaera echinocactus</i>	—	n.d.	—	Rüst 1892: 140	Lower Silurian	—	Cabrières, Hérault, France
<i>Orbiculopylorum</i> (253)							
<i>Orbiculopylorum adobensis</i>	S	—	—	Noble, Ketner & McClellan 1997: 721	Lower Silurian	Rhuddanian	Cherry Spring Chert, Garden Pass, Roberts Mts. Allochthon, Nevada, USA
<i>Orbiculopylorum granti</i>	S	—	—	MacDonald 2006: 29	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Orbiculopylorum marginatum</i>	S	—	T	Noble, Ketner & McClellan 1997: 719	Lower Silurian	Rhuddanian	Cherry Spring Chert, Garden Pass, Roberts Mts. Allochthon, Nevada, USA
<i>Orbiculopylorum splendens</i>	S	—	—	Noble, Ketner & McClellan 1997: 720	Lower Silurian	Rhuddanian	Cherry Spring Chert, Garden Pass, Roberts Mts. Allochthon, Nevada, USA
<i>Oriundogutta</i> (264)							
<i>Oriundogutta bella</i>	S	—	—	Wang 1993c: 101	Upper Ordovician	Sandbian	Pinglian Formation, Horizon Pg 3, Yindongguan village, Pinglian County, Gansu, China
<i>Oriundogutta litterula</i>	S	—	—	Nazarov & Ormiston 1990: 18	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Oriundogutta litterula</i>	S	—	—	Nazarov & Ormiston 1993: 36	Middle Silurian	Homerian	Maksyutov Complex, Tarangul River, 10 km N Kosistek Village, S Urals, Russia
<i>Oriundogutta litterula</i>	S	n.n.	—	Nazarov 1988: 122	Middle Silurian	Homerian	Maksyutov Complex, Tarangul River, 10 km N of Kosistek Village, S Urals, Russia
<i>Oriundogutta miscella minuta</i>	S	—	—	Wang 1993c: 101	Upper Ordovician	Sandbian	Pinglian Formation, Horizon Pg 3, Yindongguan village, Pinglian County, Gansu, China
<i>Oriundogutta nazarovi</i>	S	—	—	Wang 1993c: 102	Upper Ordovician	Sandbian	Pinglian Formation, Horizon Pg 3, Yindongguan village, Pinglian County, Gansu, China
<i>Oriundogutta qilianensis</i>	S	n.n.	—	Li 1995: 333	Middle Ordovician	Dapingian	Qingshuiqou-Baijingsi Complex, Baijingsi, Qilian County, Qinghai, China
<i>Oriundogutta? kingi</i>	S	—	—	Noble 1994: 31	Upper Silurian	Gorstian	Caballos Novaculite Formation, Payne Hills, Bourland Mts., Marathon Basin, W Texas, USA
<i>Oriundogutta? varispina</i>	S	—	—	Noble 1994: 31	Upper Silurian	Gorstian	Caballos Novaculite Formation, Monument Ck., Bourland Mts., Marathon Basin, W Texas, USA
<i>Ormistonella</i> (193)							
<i>Ormistonella adhaerens</i>	L	—	—	Feng in Feng et al. 2006b: 845	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Ormistonella hickoryensis</i>	L	—	—	Schwartzapfel & Holdsworth 1996: 216	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Hickory Creek section, Carter County, Oklahoma, USA
<i>Ormistonella robusta</i>	L	—	T	De Wever & Caridroit 1984: 100	Middle Permian	Capitanian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
<i>Ormistonella turgida</i>	—	n.n.	—	Feng 1992: 55	Upper Permian	Changhsingian	Papai Formation of Changning-Menglian Belt, Papai Village, Cangyuan County, Yunnan, China
<i>Ormistonella? cylindrata</i>	L	—	—	Feng in Feng et al. 2006b: 845	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Ormistonia</i> (299)							
<i>Ormistonia pteracaena</i>	—	n.n.	Td	Li 1991: 75	Upper Silurian	Gorstian	Mayila Complex, Keerhada, S Mayila Mt., Xinjiang, China
<i>Ormistonia pteracaena</i>	—	n.d.	Th, Td	Li 1994: 271	Upper Silurian	Gorstian	Keerhada, Mayila Mts., Xinjiang, China

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Ornatoentactinia (106)							
<i>Ornatoentactinia agarkovi</i>	E	—	—	Afanasieva 2000a: 56	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Ornatoentactinia beljaevorum</i>	E	—	—	Afanasieva 2000a: 56	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Ornatoentactinia klevtsovae</i>	E	—	—	Afanasieva 2000a: 57	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Ornatoentactinia solita</i>	E	—	Ts	Afanasieva 2000c: 373	Upper Devonian	middle Frasnian	Domanik Formation, Locality 4, Ukhta River, Timan-Pechora Basin, Komi Region, Russia
<i>Ornatoentactinia spartaci</i>	E	—	—	Afanasieva 2000c: 374	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Ornatoentactinia spartaki</i>	E	n.n.	—	Afanasieva 1997a: 221	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Ornatoentactinia spinisica</i>	E	—	—	Afanasieva 2000a: 57	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
Ouaka (185)							
<i>Ouaka asymmetrica</i>	L	—	Ts	Cheng 1986: 176	Upper Carboniferous	Bashkirian	Wesley Formation, Turnpike section, Pittsburg County, Oklahoma, USA
<i>Ouaka uesti</i>	L	—	—	Cheng 1986: 177	Upper Carboniferous	Bashkirian	Wesley Formation, Turnpike section, Pittsburg County, Oklahoma, USA
Pactarentinia (147)							
<i>Pactarentinia holdsworthi</i>	E	—	T	Furutani 1983: 109	Lower Devonian	Emsian	Nakahata Formation, S Mt. Yokokurayama, Ochi Town, Kochi, Shikoku, Japan
<i>Pactarentinia igoi</i>	E	—	—	Kurihara & Sashida 2000: 61	Lower Devonian	Emsian	Shibasudani Formation, Shibasudani Valley, Ohno City, Fukui Prefecture, Japan
<i>Pactarentinia intermedia</i>	E	—	—	Kurihara & Sashida 2000: 61	Lower Devonian	Emsian	Shibasudani Formation, Shibasudani Valley, Ohno City, Fukui Prefecture, Japan
Palacantholithus (40)							
<i>Palacantholithus crux</i>	Al	n.n.	—	Deflandre 1973a: 291	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Palacantholithus crux</i>	Al	—	—	Deflandre 1973b: 499	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Palacantholithus curvatus</i>	Al	—	—	Afanasieva 2000a: 120	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Palacantholithus stellatus</i>	Al	n.n.	—	Deflandre 1973a: 291	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Palacantholithus stellatus</i>	Al	—	T	Deflandre 1973b: 499	Lower Carboniferous	Visean	Cabrières, Hérault, France
Palaeoactinosphaera (300)							
<i>Palaeoactinosphaera antica</i>	IS (O&F)	—	T	Noble 1994: 34	Upper Silurian	Gorstian	Caballos Novaculite Formation, East Bourland Mts., Marathon Basin, W Texas, USA
<i>Palaeoactinosphaera asymmetrica</i>	IS (O&F)	—	—	Noble 1994: 34	Middle Silurian	Homerian	Caballos Novaculite Formation, Payne Hills, Bourland Mts., Marathon Basin, W Texas, USA
<i>Palaeoactinosphaera barricki</i>	IS (O&F)	—	—	Noble 1994: 34	Upper Silurian	Gorstian	Caballos Novaculite Formation, Payne Hills, Bourland Mts., Marathon Basin, W Texas, USA
<i>Palaeoactinosphaera elegantissima</i>	IS (O&F)	—	—	Noble 1994: 35	Middle Silurian	Homerian	Caballos Novaculite Formation, Payne Hills, Bourland Mts., Marathon Basin, W Texas, USA
<i>Palaeoactinosphaera? crucispina</i>	IS (O&F)	—	—	Noble 1994: 35	Middle Silurian	Homerian	Caballos Novaculite Formation, Payne Hills, Bourland Mts., Marathon Basin, W Texas, USA
<i>Palaeoactinosphaera? octaspina</i>	IS (O&F)	—	—	Noble 1994: 35	Middle Silurian	Homerian	Caballos Novaculite Formation, East Bourland Mts., Marathon Basin, W Texas, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Palaeocryptidium</i>							
<i>Palaeocryptidium cayeuxi</i>	—	n.n.	—	Deflandre 1955: 184	Cambrian	—	Ville-au-Roi-en-Maroué, Lamballe, Brittany, France
<i>Palaeodecaradium</i> (148)							
<i>Palaeodecaradium gordoni</i>	E	—	—	MacDonald 2004: 268	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeodecaradium umbelliforme</i>	E	—	T	Goodbody 1986: 136	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeodiscaleksus</i> (333)							
<i>Palaeodiscaleksus saturniformis</i>	n.r.	—	—	Afanasieva & Amon 2011: 1511	Middle Devonian	Givetian	Shipunikha Formation, Zmeinogorskii District, Shipunikha River, Rudy Altai, West Siberia, Russia
<i>Palaeodiscaleksus shuldakensis</i>	n.r.	—	—	Afanasieva & Amon 2012: 550	Middle Devonian	Givetian	Shulda Formation, Shulda River, western Mugodzhary, Kazakhstan
<i>Palaeodiscaleksus tumefactus</i>	n.r.	—	—	Afanasieva & Amon 2008: 462	Middle Devonian	Upper Eifelian	Kariyumas Mountain, NW Stary Sibai, Southern Ural, Russia
<i>Palaeoellipsoidea</i>							
<i>Palaeoellipsoides convexocylindratus</i>	L	n.d.	—	Afanasieva & Amon 2012: 550	Middle Devonian	Givetian	Shulda Formation, Shulda River, western Mugodzhary, Kazakhstan
<i>Palaeoellipsoides planoconvexus</i>	L	n.d.	—	Afanasieva & Amon 2012: 550	Middle Devonian	Givetian	Shulda Formation, Shulda River, western Mugodzhary, Kazakhstan
<i>Palaeoehippium</i> (149)							
<i>Palaeoehippium adraini</i>	E	—	—	MacDonald 1999: 2056	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoehippium aranea</i>	E	—	—	Goodbody 1986: 138	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoehippium bifurcum</i>	E	—	T	Goodbody 1986: 139	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoehippium dissimile</i>	E	—	T	Goodbody 1986: 140	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoehippium echinatum</i>	E	—	—	Goodbody 1986: 140	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoehippium fimbriatum</i>	E	—	—	Goodbody 1986: 142	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoehippium fukuiensis</i>	E	—	—	Furutani 1990: 46	Upper Silurian	Pridoli	Yoshiki Formation, Hida-gaien Belt, Osobudani Valley, Fukui area, Takayama City, Gifu, Japan
<i>Palaeoehippium irregulum</i>	—	n.n.	—	Li 1995: 333	Middle Ordovician	Dapingian	Qingshigou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Palaeoehippium multiramosum</i>	E	—	—	Goodbody 1986: 142	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoehippium octaramosum</i>	E	—	—	Renz 1990: 370	Upper Ordovician	Katian	Hanson Creek Formation, N Martin Ridge, Eureka County, Nevada, USA
<i>Palaeoehippium pariradiatum</i>	E	—	—	Goodbody 1986: 143	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoehippium pariramosum</i>	E	—	—	Goodbody 1986: 143	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoehippium plattum</i>	E	n.c.	—	Goto, Umeda & Ishiga 1992: 164	Upper Ordovician	Katian	Malongulli Formation, Lachlan Fold Belt, 30 km NW of Taralga, NSW, Australia
<i>Palaeoehippium radices</i>	E	—	—	Goodbody 1986: 144	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Palaeoephippium</i> (149) continuation							
<i>Palaeoephippium ramipendentes</i>	E	—	—	Goodbody 1986: 146	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoephippium reteforme</i>	E	—	—	Goodbody 1986: 146	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoephippium spinosum</i>	E	—	—	Goodbody 1986: 147	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoephippium tricornе</i>	E	—	—	Goodbody 1986: 147	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoephippium unipariradiatum</i>	—	n.n.	—	Li 1995: 333	Middle Ordovician	Dapingian	Qingshuiogou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Palaeolithochytris</i> (318)							
<i>Palaeolithochytris lethaea</i>	—	n.d.	—	Li 1995: 336	Middle Ordovician	Dapingian	Qingshuiogou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Palaeolithochytris olenus</i>	—	n.d.	Td	Li 1995: 336	Middle Ordovician	Dapingian	Qingshuiogou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Palaeolithocyclia</i> (139)							
<i>Palaeolithocyclia pilata</i>	E	—	—	Feng in Feng et al. 2009: 143	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Palaeolithocyclia platta</i>	E	—	—	Feng in Feng et al. 2009: 143	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Palaeopentactinorbis</i> (107)							
<i>Palaeopentactinorbis longispinosus</i>	E	—	Ts	Kozur & Mostler 1989: 195	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Palaeopyramidium</i> (150)							
<i>Palaeopyramidium arcuatum</i>	E	—	—	Amon, Braun & Ivanov 1995: 6	Upper Silurian	Gorstian	Maksyutov Complex, Tarangul River, 10 km N of Kosistik Village, S Urals, Russia
<i>Palaeopyramidium furutani</i>	—	n.n.	—	Li 1995: 333	Middle Ordovician	Dapingian	Qingshuiogou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Palaeopyramidium ramosum</i>	E	—	—	Kurihara & Sashida 2000: 62	Lower Devonian	Emsian	Shibasudani Formation, Shibasudani Valley, Ohno City, Fukui Prefecture, Japan
<i>Palaeopyramidium spinosum</i>	E	—	T	Goodbody 1986: 148	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeorubus</i> (343)							
<i>Palaeorubus hastingensis</i> n.r.	Calc-Tnr area	Ishiga in Ishiga et al. 1987: 300			Upper Devonian	Frasnian	Yarras, Hastings block, New England fold belt, NSW Australia
<i>Palaeoscenidium</i> (151)							
<i>Palaeoscenidium apertum</i>	E	—	—	Goodbody 1986: 150	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoscenidium appendum</i>	E	n.n.	—	Li 1995: 333	Middle Ordovician	Dapingian	Qingshuiogou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Palaeoscenidium bicorne</i>	E	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Palaeoscenidium bispina</i>	E	n.n.	—	Li 1995: 333	Middle Ordovician	Dapingian	Qingshuiogou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Palaeoscenidium cancellatum</i>	E	—	—	Goodbody 1986: 150	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoscenidium cladophorum</i>	E	—	T	Deflandre 1953: 408	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
<i>Palaeoscenidium daktylithra</i>	E	—	—	Aitchison 1993b: 122	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Palaeoscenidium</i> (151) continuation							
<i>Palaeoscenidium delicatum</i>	E	—	—	Aitchison 1993b: 122	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Palaeoscenidium deweveri</i>	E	—	—	Gourmelon 1987: 127	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
<i>Palaeoscenidium echinatum</i>	E	—	—	Aitchison 1993b: 122	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Palaeoscenidium flammatum</i>	E	—	Ts	Goodbody 1986: 152	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoscenidium fragilis</i>	E	—	—	Kurihara & Sashida 2000: 60	Lower Devonian	Emsian	Shibasudani Formation, Shibasudani Valley, Ohno City, Fukui Prefecture, Japan
<i>Palaeoscenidium hakogasensis</i>	E	—	—	Kurihara & Sashida 2000: 60	Lower Devonian	Emsian	Shibasudani Formation, Shibasudani Valley, Ohno City, Fukui Prefecture, Japan
<i>Palaeoscenidium ishigai</i>	E	—	—	Wakamatsu, Sugiyama & Furutani 1990: 166	Lower Devonian	Pragian	Jyoro Formation, Kurosegawa Belt, Konomori area, Kochi City, Shikoku, Japan
<i>Palaeoscenidium kuriharai</i>	E	—	—	Umeda & Suzuki 2005: 85	Lower Silurian	Aeronian	Kallholn Formation, Solberga Quarry of Boda, Siljan area, Dalarna, Sweden
<i>Palaeoscenidium nudum</i>	E	—	—	Aitchison 1993b: 122	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Palaeoscenidium phalangium</i>	E	—	—	Aitchison 1993b: 123	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Palaeoscenidium rarispinosum</i>	E	—	—	Goodbody 1986: 152	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Palaeoscenidium robustum</i>	E	—	—	Aitchison 1993b: 123	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Palaeoscenidium scaurum</i>	E	—	—	Afanasieva 2000c: 366	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Palaeoscenidium schaafi</i>	E	—	—	Gourmelon 1987: 128	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
<i>Palaeoscenidium simplum</i>	E	—	—	Kurihara & Sashida 2000: 59	Lower Devonian	Emsian	Shibasudani Formation, Shibasudani Valley, Ohno City, Fukui Prefecture, Japan
<i>Palaeoscenidium tabernaculum</i>	E	—	—	Aitchison 1993b: 123	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Palaeoscenidium venustum</i>	E	—	—	Aitchison 1993b: 123	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Palaeoscenidium? quadriramosum</i>	E	—	—	Foreman 1963: 304	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Palaeosphaera</i> (70)							
<i>Palaeosphaera micra</i>	Ar	—	Ts	Renz 1990: 372	Upper Ordovician Katian		Hanson Creek Formation, N Martin Ridge, Eureka County, Nevada, USA
<i>Palaeospiculum</i> (66)							
<i>Palaeospiculum arcussimile</i>	Ar	—	—	Won in Won & Below 1999: 340	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia
<i>Palaeospiculum burkensis</i>	Ar	—	T	Won in Won & Below 1999: 340	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia
<i>Palaeospiculum curvum</i>	Ar	—	—	Won, Iams & Reed 2005: 451	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Palaeospiculum dendroeides</i>	Ar	—	—	Won in Won & Below 1999: 341	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia
<i>Palaeospiculum devoncourtensis</i>	Ar	—	—	Won in Won & Below 1999: 341	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia
<i>Palaeospiculum georginaensis</i>	Ar	—	—	Won in Won & Below 1999: 341	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described	
<i>Palaeospiculum</i> (66) continuation								
<i>Palaeospiculum greenpointensis</i>		Ar	—	—	Won & Iams 2002: 27	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Palaeospiculum grosmornensis</i>		Ar	—	—	Won & Iams 2002: 27	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Palaeospiculum hexaradiatum</i>		Ar	—	—	Won & Iams 2002: 28	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Palaeospiculum martinpointensis</i>		Ar	—	—	Won & Iams 2002: 28	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Palaeospiculum multifurcatum</i>		Ar	—	—	Won, Iams & Reed 2005: 451	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Palaeospiculum neofurcatum</i>		Ar	—	—	Won, Iams & Reed 2005: 451	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Palaeospiculum parvum</i>		Ar	—	—	Won in Won & Below 1999: 346	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia
<i>Palaeospiculum radiatum</i>		Ar	—	—	Won in Won & Below 1999: 348	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia
<i>Palaeospiculum reedae</i>		Ar	—	—	Won in Won & Below 1999: 350	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia
<i>Palaeospiculum solutum</i>		Ar	—	—	Won & Iams 2015a: 13	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Palaeospiculum tetractinum</i>		Ar	—	—	Won, Iams & Reed 2005: 453	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Palaeospiculum tetraradiatum</i>		Ar	—	—	Won & Iams 2002: 28	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Palaeospiculum variabile</i>		Ar	—	—	Won & Iams 2015a: 13	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Palaeospiculum?</i> <i>discordiosum</i>		Ar	—	—	Won & Iams 2015a: 14	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Palaeothalomnus</i> (152)								
<i>Palaeothalomnus antiquus</i>		IS	n.n.	—	Deflandre 1973a: 290 (O&F)	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Palaeothalomnus antiquus</i>		IS	—	T	Deflandre 1973b: 498 (O&F)	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Palaeothalomnus piletocladus</i>		IS	—	—	Nazarov & Ormiston 1993: 50 (O&F)	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Palaeothalomnus piletocladus</i>		IS	n.n.	—	Nazarov 1988: 130 (O&F)	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Palaeothalomnus timokhini</i>		IS	n.n.	—	Afanasieva 1997a: 221 (O&F)	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Palaeothalomnus timokhini</i>		IS	—	—	Afanasieva 2000c: 366 (O&F)	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Palaeotrididus</i> (153)								
<i>Palaeotrididus ballator</i>	E	—	Ts	Renz 1990: 374	Upper Ordovician	Katian	Hanson Creek Formation, N Martin Ridge, Eureka County, Nevada, USA	
<i>Palaeotrididus imbfurcus</i>	E	—	—	Renz 1990: 374	Upper Ordovician	Katian	Hanson Creek Formation, N Martin Ridge, Eureka County, Nevada, USA	
<i>Palaeotriplus</i> (154)								
<i>Palaeotriplus cancellatus</i>	E	—	—	Goodbody 1986: 153	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago	
<i>Palaeotriplus gogoense</i>	E	—	—	Aitchison 1993b: 124	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia	
<i>Palaeotriplus impariramosus</i>	E	—	—	Goodbody 1986: 153	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago	
<i>Palaeotriplus monospinosus</i>	E	—	—	Goodbody 1986: 153	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago	
<i>Palaeotriplus nudus</i>	E	—	T	Goodbody 1986: 154	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago	

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Palaeotripos</i> (154) continuation							
<i>Palaeotripos ramalinus</i>	E	—	—	Goto, Umeda & Ishiga 1992: 163	Upper Ordovician Katian		Malongulli Formation, Lachlan Fold Belt, 30 km NW of Taralga, NSW, Australia
<i>Palaeotripos sexabracchiatus</i>	E	—	—	Renz 1990: 376	Upper Ordovician Katian		Hanson Creek Formation, N Martin Ridge, Eureka County, Nevada, USA
<i>Palaeotripos simplum</i>	E	n.c.	—	Goto, Umeda & Ishiga 1992: 165	Upper Ordovician Katian		Malongulli Formation, Lachlan Fold Belt, 30 km NW of Taralga, NSW, Australia
<i>Palaeotripos tetractinos</i>	—	n.n.	—	Li 1995: 333	Middle Ordovician	Dapingian	Qingshuiou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Palaeoumbraculum</i> (155)							
<i>Palaeoumbraculum expandum</i>	E	—	T	Amon, Braun & Ivanov 1995: 8	Upper Silurian	Gorstian	Maksyutov Complex, Tarangul River, 10 km N of Kositsev Village, S Urals, Russia
<i>Palaeoumbraculum hidense</i>	E	—	—	Kurihara & Sashida 2000: 63	Lower Devonian	Emsian	Shibasudani Formation, Shibasudani Valley, Ohno City, Fukui Prefecture, Japan
<i>Palaeoxyphostylus</i> (108)							
<i>Palaeoxyphostylus variospina</i>	E	—	T	Won 1983: 156	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Palamphimorphium</i> (319)							
<i>Palamphimorphium speciosum</i>	—	n.n.	Tn	Ters & Deflandre 1966: 340	Ordovician	—	Phtanites d'Angers, Vendée, France
<i>Paleocenosphaera</i> (320)							
<i>Paleocenosphaera magna</i>	—	n.d.	Td	Nazarov 1973b: 8	Lower Cambrian	Stage 2	Bograd Mountains, Betenevskiy area, Khakasiya Region, Russia
<i>Paleocenosphaera parva</i>	—	n.d.	—	Nazarov 1973b: 9	Lower Cambrian	Stage 2	Bograd Mountains, Betenevskiy area, Khakasiya Region, Russia
<i>Paleoxiphosphaera</i> (109)							
<i>Paleoxiphosphaera erbiensis</i>	IS	—	Ts	Nazarov 1973b: 9	Lower Cambrian	Stage 2	Bograd Mountains, Betenevskiy area, Khakasiya Region, Russia
<i>Palhindelolithus</i> (321)							
<i>Palhindelolithus ambiguus</i>	IS	n.n.	—	Deflandre 1973a: 291	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Palhindelolithus ambiguus</i>	IS	—	T	Deflandre 1973b: 498	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Palhindelolithus bibiceps</i>	IS	n.n.	—	Li 1995: 333	Middle Ordovician	Dapingian	Qingshuiou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Palhindelolithus bitrispinosus</i>	IS	n.n.	—	Deflandre 1973a: 290	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Palhindelolithus bitrispinosus</i>	IS	n.d.	—	Deflandre 1973b: 498	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Palhindelolithus cnidus</i>	IS	n.n.	—	Li 1995: 333	Middle Ordovician	Dapingian	Qingshuiou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Palhindelolithus diductus</i>	IS	n.n.	—	Deflandre 1973a: 291	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Palhindelolithus diductus</i>	IS	n.d.	—	Deflandre 1973b: 498	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Palhindelolithus ditetrablastus</i>	IS	n.n.	—	Li 1995: 333	Middle Ordovician	Dapingian	Qingshuiou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Palhindelolithus pulcher</i>	IS	n.n.	—	Deflandre 1973a: 291	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Palhindelolithus pulcher</i>	IS	n.d.	—	Deflandre 1973b: 498	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Papinochium</i> (322)							
<i>Papinochium dubium</i>	—	n.n.	Tn	Ters & Deflandre 1966: 340	Ordovician	—	Phtanites d'Angers, Vendée, France

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Parabeothuka (237)							
<i>Parabeothuka haekeliana</i>	S	—	—	Won & Iams 2015a: 28	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Parabeothuka transformis</i>	S	—	T	Won & Iams 2015a: 27	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
Paracopicyntra (245)							
<i>Paracopicyntra longispina</i>	S	—	—	Feng in Feng et al. 2006a: 25	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Paracopicyntra puncta</i>	S	—	—	Maldonado & Noble 2010: 104	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Paracopicyntra simplex</i>	S	—	—	Feng in Feng et al. 2006a: 25	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Paracopicyntra snyderi</i>	S	—	—	Nestell & Nestell 2010: 24	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
Parafollicuculus (37)							
<i>Parafollicuculus cornelli</i>	Al	—	—	Kozur & Mostler 1989: 175	Middle Permian	Roadian	Bone Spring Formation, Guadalupe Mts., Culbertson County, W Texas, USA
<i>Parafollicuculus fusiformis</i>	Al	—	Ts	Holdsworth & Jones 1980: 285	Middle Permian	Roadian	Mankomen Group, Clearwater Mountains, USGS MR loc. 0435, Alaska Range, USA
<i>Parafollicuculus sakmarenensis</i>	Al	—	Ts	Kozur 1981: 266	Lower Permian	Sakmarian	Sarabil Formation, Kondurovska, Orenburgskaya Region, S Urals, Russia
<i>Parafollicuculus? nazarovi</i>	Al	—	—	Kozur 1981: 266	Lower Permian	Sakmarian	Sarabil Formation, Kondurovska, Orenburgskaya Region, S Urals, Russia
Paraholoeiscus (23)							
<i>Paraholoeiscus bingaraensis</i>	Al	—	Ts	Aitchison 1993a: 363	Upper Devonian	Famennian	Djungati terrane, Bingara region, New England orogen, NSW, Australia
Paramphibrachium (140)							
<i>Paramphibrachium woni</i>	E	—	—	Feng in Feng et al. 2009: 143	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
Paracheoentactinia (45)							
<i>Paracheoentactinia parastilla</i>	Ar	—	—	Won & Iams 2015a: 11	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Paracheoentactinia reedae</i>	Ar	—	T	Won & Iams 2002: 13	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Paracheoentactinia stilla</i>	Ar	—	—	Won, Iams & Reed 2007: 505	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Paracheoentactinia? cowheadensis</i>	Ar	—	—	Won, Iams & Reed 2005: 438	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Paracheoentactinia? impedita</i>	Ar	—	—	Won & Iams 2002: 17	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
Pararchocyrtium (227)							
<i>Pararchocyrtium mirabile</i>	N?	n.n.	—	Deflandre 1972a: 3539	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Pararchocyrtium mirabile</i>	N?	—	T	Deflandre 1972b: 15	Lower Carboniferous	Visean	Cabrières, Hérault, France
Parasecuicollacta (71)							
<i>Parasecuicollacta bipola</i>	Ar	—	Ts	Won, Blodgett & Nestor 2002: 953	Lower Silurian	Telychian	Road River Formation, subsidiary channel of Tatonduck River, east-central Alaska, USA
<i>Parasecuicollacta hexactina</i>	Ar	—	—	Won, Blodgett & Nestor 2002: 953	Lower Silurian	Telychian	Road River Formation, subsidiary channel of Tatonduck River, east-central Alaska, USA
<i>Parasecuicollacta multispinosa</i>	Ar	—	—	Won, Blodgett & Nestor 2002: 953	Lower Silurian	Telychian	Road River Formation, subsidiary channel of Tatonduck River, east-central Alaska, USA
<i>Parasecuicollacta nannoglobosa</i>	Ar	—	—	Won, Blodgett & Nestor 2002: 953	Lower Silurian	Telychian	Road River Formation, subsidiary channel of Tatonduck River, east-central Alaska, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Parechidnina (57)							
<i>Parechidnina delicata</i>	Ar	—	—	Won, Iams & Reed 2005: 443	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Parechidnina densa</i>	Ar	—	—	Maletz & Bruton 2007: 276	Lower Ordovician	Floian	Valhallfonna Formation, Buldrebreen arm, Ny Frieslan, Spitsbergen, Norway
<i>Parechidnina imperfecta</i>	Ar	—	—	Won & Iams 2015a: 28	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Parechidnina jamesi</i>	Ar	—	—	Won & Iams 2002: 30	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Parechidnina nevadensis</i>	Ar	—	T	Kozur, Mostler & Repetski 1996: Lower Ordovician 250	Lower Ordovician	Tremadocian	Windfall Formation, Antelope Range, Eureka County, Nevada, USA
<i>Parechidnina variospina</i>	Ar	—	—	Won, Iams & Reed 2005: 445	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
Parentactinia							
<i>Parentactinia vetustum</i>	E	—	T	Furutani 1983: 108	Lower Devonian	Emsian	Nakahata Formation, S Mt. Yokokurayama, Ochi Town, Kochi, Shikoku, Japan
Paronaella							
<i>Paronaella impella</i>	L	—	Ts	Ormiston & Lane 1976: 169	Lower Carboniferous	Tournaisian	Sycamore Limestone, southern Arbuckle Mountains, Oklahoma, USA
<i>Paronaella turgida</i>	L	—	—	Ormiston & Lane 1976: 169	Lower Carboniferous	Tournaisian	Sycamore Limestone, southern Arbuckle Mountains, Oklahoma, USA
<i>Paronaella? triporosa</i>	L	—	—	Holdsworth & Murchey 1988: 788	Upper Carboniferous	Bashkirian	Kuna Formation, Nigu Bluff, Northern Brooks Range, Alaska, USA
Parvalanapila (72)							
<i>Parvalanapila fleischerorum</i>	Ar	—	Ts	MacDonald 1998: 599	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
Pentalastrum							
<i>Pentalastrum primitivum</i>	—	n.d.	—	Rüst 1892: 172	Carboniferous	—	Bükk-Gebirge, Inner Western Carpathians, Hungary
Peröffentactinia (111)							
<i>Peröffentactinia excepta</i>	E	—	T	Jones & Noble 2006: 298	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
Peripanartus							
<i>Peripanartus deficiens</i>	—	n.d.	—	Rüst 1892: 161	Lower Devonian	—	Southern Urals, Russia
Phaenicosphaera							
<i>Phaenicosphaera mammilla</i>	S	—	—	Sheng & Wang 1985: 176, 179- 180	Lower Permian	Kungurian	Gufeng Formation, N Mt. Kongshan, Hushan, Nanjing, China
Phaenoscenium							
<i>Phaenoscenium excentricum</i>	—	n.d.	—	Rüst 1892: 179	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
Phorticum							
<i>Phorticum macropylum</i>	—	n.d.	—	Rüst 1892: 175	Lower Silurian	—	Cabrières, Hérault, France
Plagiocantha							
<i>Plagiocantha australis</i>	—	n.d.	—	Hinde 1899a: 56	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Plagiocantha nana</i>	—	n.d.	—	Bykova 1955: 72	Upper Devonian	Frasnian	Domanik Formation, Tatarstan, Russia
Plagoniscus							
<i>Plagoniscus colligatus</i>	—	n.d.	—	Hinde 1899a: 56	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Plagoniscus cristatus</i>	—	n.d.	—	Hinde 1899a: 56	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Plagoniscus simplex</i>	—	n.d.	—	Hinde 1899a: 56	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Plagoniscus vetustus</i>	—	n.d.	—	Hinde 1899a: 57	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Plegmosphaera							
<i>Plegmosphaera spiculata</i>	—	n.d.	—	Aberdeen 1940: 134	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
Plenoentactinia (112)							
<i>Plenoentactinia concreta</i>	E	—	—	Won 1997b: 381	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Plenoentactinia gourmelonae</i>	E	—	—	Won 1998: 244	Lower Carboniferous	Tournaisian	Oese, Rheinische Schiefergebirge, Germany
<i>Plenoentactinia pinguis</i>	E	—	—	Won 1997b: 381	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Plenoentactinia sexangula</i>	E	—	T	Won 1997b: 382	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Plenoentactinia stella</i>	E	—	—	Won 1997b: 382	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
Plenosphaera (113)							
<i>Plenosphaera gigantea</i>	E	—	—	Park & Won 2012: 57	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Plenosphaera usitata</i>	E	—	—	Park & Won 2012: 57	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Plenosphaera? tenuitestata</i>	E	—	—	Park & Won 2012: 58	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
Pluristratoentactinia (114)							
<i>Pluristratoentactinia conspissata</i>	E	—	T	Nazarov <i>in</i> Nazarov <i>et al.</i> 1981: 87	Upper Devonian	Famennian	Duksundinsk Formation, along Duksunda River, Magadan, Russia
<i>Pluristratoentactinia trispheara</i>	E	—	—	Afanasieva & Amon 2011: 1509	Upper Devonian	lower Famennian	Polar Urals, Palnik Yu River, Russia
Plussatispila (265)							
<i>Plussatispila aethra</i>	S	—	—	Jones & Noble 2006: 308	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Plussatispila cornwallensis</i>	S	—	—	MacDonald 2006: 34	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Plussatispila delicata</i>	S	—	—	MacDonald 2006: 34	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Plussatispila magnilimax</i>	S	—	T	MacDonald 2006: 33	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Plussatispila pelicia</i>	S	—	—	MacDonald 2006: 35	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
Polyedroentactinia (115)							
<i>Polyedroentactinia cisuralica</i>	E	—	T	Kozur & Mostler 1989: 194	Lower Permian	Sakmarian	Sarabil Formation, Sakhmarsi, Orenburgskaya Region, S Urals, Russia
<i>Polyedroentactinia guadalupensis</i>	E	—	—	Nestell & Nestell 2010: 22	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Polyedroentactinia quadrata</i>	E	—	—	Maldonado & Noble 2010: 86	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
Polyentactinia (161)							
<i>Polyentactinia ampliclitibrosa</i>	E	—	—	Nazarov <i>in</i> Isakova & Nazarov 1986: 108	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Polyentactinia applanata</i>	E	—	—	Nazarov & Ormiston 1989: 18	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Polyentactinia aranaeosa</i>	E	—	—	Nazarov & Ormiston 1984: 70	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Polyentactinia aranea</i>	E	—	—	Gourmelon 1987: 77	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Polyentactinia (161) continuation							
<i>Polyentactinia centra</i>	E	—	—	Nazarov & Ormiston 1985: 43	Middle Permian	Roadian	Bell Canyon Formation, Guadalupe Mts, Culbertson County, W Texas, USA
<i>Polyentactinia circumretia</i>	E	—	—	Nazarov & Ormiston 1990: 22	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Polyentactinia circumretia</i>	E	inv.	—	Nazarov & Ormiston 1993: 46	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Polyentactinia circumretia</i>	E	n.n.	—	Nazarov 1988: pl 14 fig. 1	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Polyentactinia craticulata</i>	E	—	T	Foreman 1963: 281	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Polyentactinia djagdiensis</i>	E	—	—	Nazarov in Nazarov & Shkolnik 1974: 106	Middle Cambrian	—	Dzhagdish, between Nim and Dzharovdik River, Khabarovsk, Russia
<i>Polyentactinia fiscina</i>	E	—	—	Nazarov & Ormiston 1989: 17	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Polyentactinia fragilis</i>	E	—	—	Nazarov & Ormiston 1989: 17	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Polyentactinia hunanensis</i>	E	—	—	Dong, Knoll & Lipps 1997: 754	Upper Cambrian	Paibian	Bitiao Formation, Paibi Village, Huayuan County, Hunan, China
<i>Polyentactinia invenusta</i>	E	—	—	Aitchison 1993b: 117	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Polyentactinia ishigai</i>	E	—	—	Kozur & Mostler 1989: 195	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Polyentactinia kossistekensis</i>	E	—	—	Nazarov 1975: 78	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Polyentactinia lautitia</i>	E	—	—	Nazarov & Ormiston 1985: 43	Lower Permian	Artinskian	Aktasty River, Orenburgskaya region, Southern Urals, Russia
<i>Polyentactinia leptosphaera</i>	E	—	—	Foreman 1963: 281	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Polyentactinia miopora</i>	E	—	—	Wang in Wang et al. 2000: 248	Middle Devonian	Givetian	Changyucun Formation, Shajingpo section, Xianyun County, Yunnan, China
<i>Polyentactinia multifida</i>	E	—	—	Nazarov in Isakova & Nazarov 1986: 106	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Polyentactinia multifora</i>	E	—	—	Nazarov in Isakova & Nazarov 1986: 107	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Polyentactinia njativica</i>	E	—	—	Nazarov & Ormiston 1990: 23	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Polyentactinia nyatvica</i>	E	inv.	—	Nazarov & Ormiston 1993: 48	Upper Carboniferous	Moscovian	Popovka River in Prikolyma area, Magadan Region, Russia
<i>Polyentactinia nyatvica</i>	E	n.n.	—	Nazarov 1988: 139	Upper Carboniferous	Moscovian	Popovka River in Prikolyma area, Magadan Region, Russia
<i>Polyentactinia octupla</i>	E	—	—	Nazarov in Isakova & Nazarov 1986: 105	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Polyentactinia offerta</i>	E	—	—	Nazarov in Nazarov & Popov 1980: 42	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Polyentactinia offirmata</i>	E	—	—	Nazarov & Ormiston 1989: 18	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Polyentactinia polygonia</i>	E	—	—	Foreman 1963: 281	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Polyentactinia propinqua</i>	E	—	—	Nazarov 1975: 79	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Polyentactinia rudiispida</i>	E	—	—	Nazarov & Ormiston 1993: 48	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Polyentactinia rudiispida</i>	E	n.n.	—	Nazarov 1988: 132	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Polyentactinia sexangulata</i>	E	—	—	Feng, Mei & Zhang 1997: 89	Lower Carboniferous	Visean	Changning-Menglian Zone, SE of Gengma, Yunnan, China

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Polyentactinia (161) continuation							
<i>Polyentactinia spinulenta</i>	E	—	—	Pouille & Danelian in Pouille et al. 2014: 156	Middle Ordovician	upper Darriwilian	Shundy Formation, Balkhash region, Kazakhstan
<i>Polyentactinia tenera</i>	E	—	—	Aitchison 1993b: 117	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Polyentactinia tortispina</i>	E	—	—	Ormiston & Lane 1976: 166	Lower Carboniferous	Tournaisian	Sycamore Limestone, southern Arbuckle Mountains, Oklahoma, USA
<i>Polyentactinia zhamoidai</i>	E	n.n.	—	Afanasieva 1997a: 221	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Ukhtha, Timan-Pechora Basin, Russia
<i>Polyentactinia zhamoidai</i>	E	—	—	Afanasieva 2000a: 38	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Ukhtha, Timan-Pechora Basin, Russia
<i>Polyentactinia? coldinensis</i>	E	—	—	Nazarov 1975: 80	Middle Cambrian	—	Agyrksk Formation, Mukhr River, Chingiz Mountain range, eastern Kazakhstan
<i>Polyentactinia? estonica</i>	E	—	—	Nazarov in Nazarov & Nolvak 1983: 5	Upper Ordovician	Hirnantian	Sau'yask Formation, Bore hole Eikla, Saaremaa, Estonia
<i>Polyentactinia? helioformis</i>	E	—	—	Kozur & Mostler 1989: 194	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Polyentactinia? leeorum</i>	E	—	—	Goodbody 1986: 156	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Polyentactinia? nazarovi</i>	E	—	—	Kozur & Mostler 1989: 195	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Polyentactinia? perampla</i>	E	—	—	Braun, Maass & Schmidt-Effing 1992: 172	Upper Devonian	Famennian	Breuschthal, northern Vosges, Alsace, France
<i>Polyentactinia? plecta</i>	E	—	—	Foreman 1963: 282	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Polyentactinia? stelcki</i>	E	—	—	Goodbody 1986: 156	Middle Silurian	Sheinwoodian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Polyentactinia? udiensis</i>	E	—	—	Nazarov in Nazarov & Shkolnik 1974: 107	Middle Cambrian	—	Dzhagdish, between Nim and Dzharovdik River, Khabarovsk, Russia
Polyfistula (195)							
<i>Polyfistula hexalobata</i>	L	—	—	Nazarov & Ormiston 1989: 13	Lower Permian	Artinskian	Havallah Formation, Cedar Mts., Lander County, Nevada, USA
<i>Polyfistula longiquitas</i>	L	—	T	Nazarov & Ormiston 1984: 80	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Polyfistula novem</i>	L	—	—	Noble & Renne 1990: 388	Middle Permian	Roadian	Dekkas Formation, Eastern Klamath Mountains, California, USA
<i>Polyfistula regularis</i>	L	—	—	Feng in Feng et al. 2006b: 846	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Polyfistula? grantmackiei</i>	L	—	—	Sashida in Sashida et al. 2000a: 85	Upper Permian	Changhsingian	Fang Chert, Quarry of Ban Huai Tian Tang, Chiang Mai, Thailand
Popofskyllum (231)							
<i>Popofskyllum annulatum</i>	N?	—	—	Deflandre 1964: 3056	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Popofskyllum aspinosum</i>	N?	—	—	Won 1998: 247	Lower Carboniferous	Tournaisian	Oese, Rheinische Schiefergebirge, Germany
<i>Popofskyllum bispina</i>	N?	—	—	Park & Won 2012: 60	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Popofskyllum campanella</i>	N?	—	—	Won 1983: 157	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Popofskyllum conicum</i>	N?	—	—	Deflandre 1964: 3056	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Popofskyllum crinerensis</i>	N?	—	—	Schwartzapfel & Holdsworth 1996: 134	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA
<i>Popofskyllum daisiensis</i>	N?	—	—	Cheng 1986: 153	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Popofskyllum</i> (231) continuation							
<i>Popofskyllum deflandrei</i>	N?	—	—	Cheng 1986: 154	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Popofskyllum delicatum</i>	N?	—	—	Cheng 1986: 154	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Popofskyllum dumitricai</i>	N?	—	—	Cheng 1986: 155	Lower Carboniferous	Bashkirian	Jones Valley Shale, Le Flore County, eastern Oklahoma, USA
<i>Popofskyllum elmense</i>	N?	—	—	Cheng 1986: 156	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Popofskyllum hendricksi</i>	N?	—	—	Cheng 1986: 156	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Popofskyllum obesum</i>	N?	—	—	Cheng 1986: 157	Lower Carboniferous	Bashkirian	Jones Valley Shale, Le Flore County, eastern Oklahoma, USA
<i>Popofskyllum pulchrum</i>	N? n.n. T	Deflandre 1960: 216			Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Popofskyllum pulchrum</i>	N? n.n. —	Deflandre 1964: 3056			Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Popofskyllum robustum</i>	N?	—	—	Cheng 1986: 157	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Popofskyllum tardicarboniferum</i>	N?	—	—	Nazarov in Isakova & Nazarov 1986: 118	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Popofskyllum triportium</i>	N?	—	—	Won 1990: 138	Lower Carboniferous	Visean	Riescheid Section, Wuppertal-Barmen, Germany
<i>Popofskyllum turpiculum</i>	N?	—	—	Cheng 1986: 158	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Popofskyllum undulatum</i>	N?	—	—	Deflandre 1964: 3056	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Popofskyllum wonae</i>	N?	—	—	Cheng 1986: 159	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Popofskyllum? procerulum</i>	N? — T	Nazarov in Nazarov & Popov 1980: 68			Middle Ordovician	Darriwilian	Kizylzarsk Formation, area between Moynty and Zhamishinsk Rivers, Kazakhstan
<i>Porodiscus</i>							
<i>Porodiscus brevis</i>	—	n.d.	—	Hinde & Fox 1895: 640	Carboniferous	Serpukhovian-Bashkirian	Codden Hill bed, Devon, England, UK
<i>Porodiscus cabrierensis</i>	—	n.d.	—	Rüst 1892: 168	Lower Silurian	—	Cabrières, Hérault, France
<i>Porodiscus clathratus</i>	—	n.d.	—	Hinde & Fox 1895: 640	Carboniferous	Serpukhovian-Bashkirian	Codden Hill bed, Devon, England, UK
<i>Porodiscus intricatus</i>	—	n.d.	—	Rüst 1892: 168	Lower Devonian	—	Southern Urals, Russia
<i>Porodiscus lens</i>	—	n.d.	—	Hinde & Fox 1895: 640	Carboniferous	Serpukhovian-Bashkirian	Codden Hill bed, Devon, England, UK
<i>Porodiscus percinctus</i>	—	n.d.	—	Hinde & Fox 1895: 640	Carboniferous	Serpukhovian-Bashkirian	Codden Hill bed, Devon, England, UK
<i>Porodiscus rossicus</i>	—	n.d.	—	Rüst 1892: 168	Lower Devonian	—	Southern Urals, Russia
<i>Praedeflandrella</i> (175)							
<i>Praedeflandrella firmata</i>	L	—	—	Maldonado & Noble 2010: 88	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Praedeflandrella prolata</i>	L	—	—	Maldonado & Noble 2010: 88	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Praesaturnalis</i> (156)							
<i>Praesaturnalis octoacicula</i>	—	n.n.	—	Li 1991: 75	Upper Silurian	Gorstian	Mayila Complex, Keerhada, S Mayila Mt., Xinjiang, China
<i>Praesaturnalis octoaculeatus</i>	E	—	—	Li 1994: 262	Lower Devonian	Emsian	Keerhada, Mayila Mts., Xinjiang, China
<i>Praesaturnalis septemistella</i>	—	n.n.	—	Li 1991: 75	Upper Silurian	Gorstian	Mayila Complex, Keerhada, S Mayila Mt., Xinjiang, China
<i>Praesaturnalis septemstellatus</i>	E	—	Ts	Li 1994: 262	Upper Silurian	Ludfordian	Keerhada, Mayila Mts., Xinjiang, China

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Praespongocoelia (301)							
<i>Praespongocoelia fusiforma</i>		IS (O&F)	—	Noble 1994: 38	Upper Silurian	Gorstian	Caballos Novaculite Formation, East Bourland Mts., Marathon Basin, W Texas, USA
<i>Praespongocoelia robusta</i>		IS (O&F)	—	Umeda 1997: 423	Lower Devonian	Lochkovian	Jyoro Formation, Kurosegawa Belt, Mt. Konomori, Kochi City, Shikoku, Japan
Primaritripus (323)							
<i>Primaritripus buribayensis</i>		S?	n.d.	— Afanasieva & Amon 2008: 465	Lower Devonian	Emsian	Kamennaya Gora, Tanalyk River, Southern Ural, Russia
<i>Primaritripus chuvashovi</i>		S?	n.d.	— Afanasieva & Amon 2008: 465	Upper Devonian	lower Frasnian	Argagan Mountains, Sultantimirovo, southern Urals, Russia
<i>Primaritripus kariukmasensis</i>		S?	n.d.	— Afanasieva & Amon 2009a: 45	Upper Devonian	lower Frasnian	Argagan Mountains, Sultantimirovo, southern Urals, Russia
Priscilatentidiota							
<i>Priscilatentidiota kozurii</i>		—	n.n.	— Li 1995: 333	Middle Ordovician	Dapingian	Qingshuiqou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
Prismatium							
<i>Prismatium paradicatum</i>		—	n.d.	— Rüst 1892: 178	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Procyrtis (157)							
<i>Procyrtis qinglai</i>		E	—	— Li 1995: 337	Middle Ordovician	Dapingian	Qingshuiqou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Procyrtis rustii</i>		E	—	T Li 1995: 336	Middle Ordovician	Dapingian	Qingshuiqou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
Proholoeciscus (24)							
<i>Proholoeciscus deweveri</i>	AI	—	—	Li 1995: 339	Middle Ordovician	Dapingian	Qingshuiqou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Proholoeciscus foremanii</i>	AI	—	Ts	Li 1995: 339	Middle Ordovician	Dapingian	Qingshuiqou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Proholoeciscus holdsworthi</i>	AI	—	—	Li 1995: 339	Middle Ordovician	Dapingian	Qingshuiqou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
Protoalbaillella (6)							
<i>Protoalbaillella anaiwanensis</i>	AI	—	—	Aitchison 1993a: 361	Lower Carboniferous	Tournaisian	Gundahl Complex, Anaiwan terrane, Jackadgery, NSW, Australia
<i>Protoalbaillella deflandrei</i>	AI	—	T	Cheng 1986: 68	Lower Carboniferous	Bashkirian	Jones Valley Shale, Le Flore County, eastern Oklahoma, USA
<i>Protoalbaillella formosa</i>	AI	—	—	Cheng 1986: 68	Upper Devonian	Famennian	Woodford Formation and Johns Valley Shale, Ouachita Mtns, Oklahoma, USA
<i>Protoalbaillella oilensis</i>	AI	—	—	Schwartzapfel & Holdsworth 1996: 91	Lower Carboniferous	Serpukhovian	Goddard Formation, Oil Creek section, Johnston County, Oklahoma, USA
<i>Protoalbaillella pinetopensis</i>	AI	—	—	Cheng 1986: 69	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Protoalbaillella talihinaensis</i>	AI	—	—	Cheng 1986: 70	Lower Carboniferous	Bashkirian	Jones Valley Shale, Le Flore County, eastern Oklahoma, USA
<i>Protoalbaillella triangulata</i>	AI	—	—	Won 1990: 138	Lower Carboniferous	Visean	Riescheid Section, Wuppertal-Barmen, Germany
<i>Protoalbaillella unispinosa</i>	AI	—	—	Won 1998: 226	Lower Carboniferous	Tournaisian	Oese, Rheinische Schiefergebirge, Germany
<i>Protoalbaillella? aprathensis</i>	AI	—	—	Won & Seo 2010: 243	Lower Carboniferous	Visean	Bergisches Land, N Westfalia, Germany
Protobiramus (302)							
<i>Protobiramus biaxialis</i>	S	—	T	Won in Won & Below 1999: 360	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Protoceratoikiscum (25)							
<i>Protoceratoikiscum arachnoides</i>	Al	n.c.	—	Goto, Umeda & Ishiga 1992: 165	Upper Ordovician	Katian	Malongulli Formation, Lachlan Fold Belt, 30 km NW of Taralga, NSW, Australia
<i>Protoceratoikiscum chinocrystallum</i>	Al	—	T	Goto, Umeda & Ishiga 1992: 166	Upper Ordovician	Katian	Malongulli Formation, Lachlan Fold Belt, 30 km NW of Taralga, NSW, Australia
<i>Protoceratoikiscum clarksoni</i>	Al	—	—	Danelian & Floyd 2001: 495	Lower Ordovician	Floian	Lower Crawford track, Southern Uplands, Scotland, UK
<i>Protoceratoikiscum crossingi</i>	Al	—	—	Noble & Webby 2009: 553	Upper Ordovician	Katian	Malongulli Formation, Cieffden Caves area, NSW, Australia
<i>Protoceratoikiscum similistellatum</i>	Al	—	—	Li 1995: 337	Middle Ordovician	Dapingian	Qingshuiogou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
Protoentactinia (63)							
<i>Protoentactinia bifurcata</i>	Ar	—	—	Maletz & Bruton 2007: 262	Lower Ordovician	Floian	Valhallfonna Formation, Buldrebreen arm, Ny Friesland, Spitsbergen, Norway
<i>Protoentactinia deformis</i>	Ar	—	—	Won, Iams & Reed 2005: 455	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Protoentactinia gracilispinosa</i>	Ar	—	Ts	Kozur, Mostler & Repetski 1996: 253	Lower Ordovician	Tremadocian	Windfall Formation, Antelope Range, Eureka County, Nevada, USA
<i>Protoentactinia kozuriana</i>	Ar	—	—	Won, Iams & Reed 2005: 455	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Protoentactinia latospinosa</i>	Ar	—	—	Kozur, Mostler & Repetski 1996: 254	Lower Ordovician	Tremadocian	Windfall Formation, Antelope Range, Eureka County, Nevada, USA
<i>Protoentactinia minuta</i>	Ar	—	—	Kozur, Mostler & Repetski 1996: 254	Lower Ordovician	Tremadocian	Windfall Formation, Antelope Range, Eureka County, Nevada, USA
<i>Protoentactinia primigena</i>	Ar	—	—	Won, Iams & Reed 2005: 456	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Protoentactinia transformis</i>	Ar	—	—	Won, Iams & Reed 2005: 457	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
Protoholoeciscus (26)							
<i>Protoholoeciscus hindea</i>	Al	—	T	Aitchison 1993a: 362	Upper Devonian	Famennian	Djungati terrane, Upper Barnard Valley, New England orogen, NSW, Australia
<i>Protoholoeciscus ochiensis</i>	Al	—	—	Umeda 1998a: 104	Middle Devonian	Eifelian	Nakahata Formation, Section C, Ochi Town, Shikoku, Japan
<i>Protoholoeciscus spinosus</i>	Al	—	—	Umeda 1998a: 104	Middle Devonian	Eifelian	Nakahata Formation, Section C, Ochi Town, Shikoku, Japan
Protoproventocitum (282)							
<i>Protoproventocitum aitchisoni</i>	IS	—	T	Won, Iams & Reed 2007: 536	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Protoproventocitum nazarovii</i>	IS	—	—	Won, Iams & Reed 2007: 537	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Protoproventocitum? floianum</i>	IS	—	—	Won & Iams 2015a: 22	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
Protosegmentum (324)							
<i>Protosegmentum xinjiangensis</i>	—	n.d.	Td	Wang in Wang et al. 2008: 397	Middle Ordovician	Dapingian	Heituo Formation, Tarim Basin, Kuruktag region, Xinjiang, China
Protospongentactinia (64)							
<i>Protospongentactinia spongiosa</i>	Ar	—	T	Won, Iams & Reed 2007: 532	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
Proventocitum (283)							
<i>Proventocitum cylindricum</i>	IS	—	—	Won & Iams 2011: 173	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Proventocitum holdsworthi</i>	IS	—	—	Aitchison 1998: 79	Lower Ordovician	Arenig	Ballantrae Complex, Bennane Lea, SW Scotland, UK
<i>Proventocitum piriforme</i>	IS	—	—	Won & Iams 2011: 173	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Provisocyntra</i> (116)							
<i>Provisocyntra amplissima</i>	E	—	—	Nazarov & Ormiston 1987: 72	Upper Carboniferous	Moscovian	Nyatvinsk Formation, Popovka River, Prikolyma Region, Magadan Region, NE Russia
<i>Provisocyntra cassicula</i>	E	—	T	Nazarov & Ormiston 1987: 72	Lower Carboniferous	Tournaisian	Lodgepole Formation, Amoco Daniel Anderson No. 1 well, Rolette County, North Dakota, USA
<i>Provisocyntra conferta</i>	E	—	—	Won 1997b: 383	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Provisocyntra densa</i>	E	—	—	Feng in Feng et al. 2007: 34	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Provisocyntra ormistoni</i>	E	—	—	Feng in Feng et al. 2007: 34	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Provisocyntra pskemensis</i>	E	—	—	Nazarov & Ormiston 1987: 73	Lower Carboniferous	Serpukhovian	Pskemskiy Khrebet, Pskem Range, Tashkent, Uzbekistan
<i>Provisocyntra tenuitomenta</i>	E	—	—	Nazarov & Ormiston 1987: 72	Upper Carboniferous	Moscovian	Nyatvinsk Formation, Popovka River, Prikolyma Region, Magadan Region, NE Russia
<i>Prunulum</i>							
<i>Prunulum armeniacum</i>	—	n.d.	—	Rüst 1892: 157	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
<i>Prunulum murrayi</i>	—	n.d.	—	Rüst 1892: 157	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Pseudoalbaillella</i> (39)							
<i>Pseudoalbaillella (Pseudoalbaillella) eurasatica</i>	AI	—	—	Kozur & Mostler 1989: 177	Lower Permian	Kungurian	Ashimi-dani section, Ukyo-ku, Kyoto Prefecture, Japan
<i>Pseudoalbaillella aidensis</i>	AI	—	—	Nishimura & Ishiga 1987: 174	Middle Permian	Wordian	Maizuru Belt, Mimasaka, Chugoku District, Japan
<i>Pseudoalbaillella annulata</i>	AI	—	—	Ishiga in Ishiga et al. 1984: 48	Lower Permian	Asselian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Ohmori, near Shuzan, Kinki Prefecture, Japan
<i>Pseudoalbaillella apachensis</i>	AI	—	—	Nestell & Nestell 2010: 18	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Pseudoalbaillella banchengensis</i>	AI	—	—	Xian & Zhang 1998: 194	Lower Permian	Kungurian	Bancheng Formation, SE Guangxi, China
<i>Pseudoalbaillella bella</i>	AI	—	—	Sheng & Wang 1985: 174, 178- 179	Lower Permian	Kungurian	Gufeng Formation, N Mt. Kongshan, Hushan, Nanjing, China
<i>Pseudoalbaillella boonevillensis</i>	AI	—	—	Nestell, Pope & Nestell 2012: 232	Upper Carboniferous	Moscovian	Mouse Creek Formation, Excello Shale Member, south-central Iowa, USA
<i>Pseudoalbaillella bulbosa</i>	AI	—	—	Ishiga 1982: 335	Upper Carboniferous	Gzhelian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Loc. 1, Kurookagawa River, Sasayama City, Japan
<i>Pseudoalbaillella chilensis</i>	AI	—	—	Ling & Forsythe 1987: 257	Upper Carboniferous	Gzhelian	Denaro Complex, Magallanes y Antartica Chilena, Chile
<i>Pseudoalbaillella cona</i>	AI	—	—	Cornell & Simpson 1985: 276	Middle Permian	Roadian	Bone Spring Formation, Guadalupe Mts., Culbertson County, W Texas, USA
<i>Pseudoalbaillella convexa</i>	AI	—	—	Rudenko in Rudenko & Panasenko 1990b: 184	Upper Permian	Wuchiapingian	Pantov Member, Tauka Terrane, Tumanovk, Pantov area, Primorskiy Kray, Russia
<i>Pseudoalbaillella corniculata</i>	AI	—	—	Rudenko in Rudenko & Panasenko 1990b: 185	Upper Permian	Wuchiapingian	Pantov Member, Tauka Terrane, Tumanovk, Pantov area, Primorskiy Kray, Russia
<i>Pseudoalbaillella decurvata</i>	AI	—	—	Nestell, Pope & Nestell 2012: 234	Upper Carboniferous	Moscovian	Mouse Creek Formation, Excello Shale Member, south-central Iowa, USA
<i>Pseudoalbaillella delawarensis</i>	AI	—	—	Maldonado & Noble 2010: 82	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Pseudoalbaillella desmoinesiensis</i>	AI	—	—	Nestell, Pope & Nestell 2012: 234	Upper Carboniferous	Moscovian	Mouse Creek Formation, Excello Shale Member, south-central Iowa, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Pseudoalbaillella</i> (39) continuation							
<i>Pseudoalbaillella elegans</i>	Al	—	—	Ishiga & Imoto 1980: 337	Lower Permian	Kungurian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Sasayama area, Chugoku District, Japan
<i>Pseudoalbaillella elongata</i>	Al	—	Ts	Ishiga & Imoto 1980: 339	Lower Permian	Kungurian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Sasayama area, Chugoku District, Japan
<i>Pseudoalbaillella excella</i>	Al	—	—	Nestell, Pope & Nestell 2012: 233	Upper Carboniferous	Moscovian	Mouse Creek Formation, Excello Shale Member, south-central Iowa, USA
<i>Pseudoalbaillella globosa</i>	Al	—	—	Ishiga & Imoto in Ishiga et al. 1982b: 275	Lower Permian	Kungurian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Ashimi-dani section, Ukyo-ku, Kyoto, Japan
<i>Pseudoalbaillella internata</i>	Al	—	—	Wang in Wang et al. 2012: 108	Middle Permian	Roadian	Bancheng Formation, SE Guangxi, China
<i>Pseudoalbaillella ishigai</i>	Al	—	—	Wang in Wang et al. 1994: 181	Lower Permian	Kungurian	Dachongling section, Qinzhou City, Guangxi, S China
<i>Pseudoalbaillella lanceolata</i>	Al	—	Ts	Ishiga & Imoto in Ishiga et al. 1982b: 275	Lower Permian	Kungurian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Ashimi-dani section, Ukyo-ku, Kyoto, Japan
<i>Pseudoalbaillella lomentaria</i>	Al	—	—	Ishiga & Imoto 1980: 338	Lower Permian	Kungurian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Sasayama area, Chugoku District, Japan
<i>Pseudoalbaillella longtanensis</i>	Al	—	—	Sheng & Wang 1985: 174, 179	Lower Permian	Kungurian	Gufeng Formation, N Mt. Kongshan, Hushan, Nanjing, China
<i>Pseudoalbaillella longuscornis</i>	Al	—	—	Ishiga & Imoto 1980: 337	Lower Permian	Kungurian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Sasayama area, Chugoku District, Japan
<i>Pseudoalbaillella nanjingensis</i>	Al	—	—	Sheng & Wang 1985: 174-175, 179	Lower Permian	Kungurian	Gufeng Formation, N Mt. Kongshan, Hushan, Nanjing, China
<i>Pseudoalbaillella nodosa</i>	Al	—	—	Ishiga 1982: 334	Upper Carboniferous	Gzhelian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Loc. 1, Kurookagawa River, Sasayama City, Japan
<i>Pseudoalbaillella ornata</i>	Al	—	—	Ishiga & Imoto 1980: 339	Lower Permian	Kungurian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Sasayama area, Chugoku District, Japan
<i>Pseudoalbaillella papaiensis</i>	Al	n.n.	—	Feng 1992: 55	Upper Permian	Changhsingian	Papai Formation of Changning-Menglian Belt, Papai Village, Cangyuan County, Yunnan, China
<i>Pseudoalbaillella rhombothoracata</i>	Al	—	—	Ishiga & Imoto 1980: 339	Lower Permian	Kungurian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Sasayama area, Chugoku District, Japan
<i>Pseudoalbaillella scalprata</i>	Al	—	T	Holdsworth & Jones 1980: 285	Lower Permian	Artinskian	Havallah Formation, USGS MR 0203, Nevada, USA
<i>Pseudoalbaillella scalprata postscalprata</i>	Al	—	—	Ishiga 1983: 3	Lower Permian	Kungurian	Fujioka-oku, in the Fujiokagawa Valley, Sasayama City, Hyogo Prefecture, SW Japan
<i>Pseudoalbaillella scalprata praescalprata</i>	Al	—	—	Catalano, Di Stefano & Kozur 1989: 92	Lower Permian	Kungurian	Fujioka-oku, in the Fujiokagawa Valley, Sasayama City, Hyogo Prefecture, SW Japan
<i>Pseudoalbaillella scalprata scalprata</i>	Al	—	—	Ishiga 1983: 2	Lower Permian	Kungurian	Fujioka-oku, in the Fujiokagawa Valley, Sasayama City, Hyogo Prefecture, SW Japan
<i>Pseudoalbaillella simplex</i>	Al	—	—	Ishiga & Imoto 1980: 337	Lower Permian	Kungurian	Funafuseyama Unit, Tamba-Mino-Ashio Belt, Sasayama area, Chugoku District, Japan
<i>Pseudoalbaillella triangularis</i>	Al	—	—	Wang in Wang et al. 2012: 108	Lower Permian	Artinskian	Bancheng Formation, SE Guangxi, China
<i>Pseudoalbaillella u-forma</i>	Al	n.c.	Ts	Holdsworth & Jones 1980: 285	Lower Permian	Artinskian	Big Delta quadrangle, USGS MR loc. 0349, east-central Alaska, USA
<i>Pseudoalbaillella yanaharensis</i>	Al	—	—	Nishimura & Ishiga 1987: 173	Middle Permian	Wordian	Maizuru Belt, Mimasaka, Chugoku District, Japan
<i>Pseudolithelius</i> (202)							
<i>Pseudolithelius permicus</i>	L	—	T	Kozur & Mostler 1989: 186	Lower Permian	Artinskian	Koshelev Formation, Alogazovo Village, Movsovic Region, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Pseudorotasphaera (73)							
<i>Pseudorotasphaera communica</i>	Ar	—	—	Noble 1994: 26	Middle Silurian	Homerian	Caballos Novaculite Formation, East Bourland Mts., Marathon Basin, W Texas, USA
<i>Pseudorotasphaera hispida</i>	Ar	—	T	Noble 1994: 25	Upper Silurian	Gorstian	Caballos Novaculite Formation, Payne Hills, Bourland Mts., Marathon Basin, W Texas, USA
<i>Pseudorotasphaera lanceolata</i>	Ar	—	—	Noble 1994: 26	Upper Silurian	Gorstian	Caballos Novaculite Formation, Beckwith Hills, Marathon Basin, W Texas, USA
<i>Pseudorotasphaera? robustispina</i>	Ar	—	—	Noble 1994: 27	Upper Silurian	Gorstian	Caballos Novaculite Formation, Payne Hills, Bourland Mts., Marathon Basin, W Texas, USA
<i>Pseudorotasphaera? rotunda</i>	Ar	—	—	Noble 1994: 27	Upper Silurian	Gorstian	Caballos Novaculite Formation, Payne Hills, Bourland Mts., Marathon Basin, W Texas, USA
Pseudospongoprnum (273)							
<i>Pseudospongoprnum parvispina</i>	S	—	—	Tetard, Noble & Danelian <i>in</i> Tetard et al 2015: 873	Upper Silurian	Gorstian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Pseudospongoprnum prototypum</i>	S	—	—	Umeda 1998b: 207	Upper Silurian	Pridoli	Kurosegawa Belt, Shikoku, Japan
<i>Pseudospongoprnum sagittatum</i>	S	—	—	Wakamatsu, Sugiyama & Furutani 1990: 173	Lower Devonian	Lochkovian	G4 formation of Gion-yama Group, Mt. Gionyama area, Kyushu, Japan
<i>Pseudospongoprnum tazukawaensis</i>	S	—	T	Wakamatsu, Sugiyama & Furutani 1990: 173	Upper Silurian	Gorstian	SE Suberidani, along Tazukawa River, Katsuura Town, Shikoku, Japan
<i>Pseudospongoprnum? chiangdaoensis</i>	S	—	—	Sashida <i>in</i> Sashida et al. 2000c: Upper Permian 805	Changhsingian	Ratuburi Group, Sukhothai Fold Belt, section I, Khao Wang Chik, Rayong, Thailand	
<i>Pseudospongoprnum? fontainei</i>	S	—	—	Sashida <i>in</i> Sashida et al. 2000b: Upper Permian 255	Changhsingian	Ratuburi Group, Sukhothai Fold Belt, section I, Khao Wang Chik, Rayong, Thailand	
<i>Pseudospongoprnum? tauversi</i>	S	—	—	Noble 1994: 28	Upper Silurian	Gorstian	Caballos Novaculite Formation, Monument Ck., Bourland Mts., Marathon Basin, W Texas, USA
Pseudotormentus (176)							
<i>Pseudotormentus delawarensis</i>	L	—	—	Schwartzapfel & Holdsworth 1996: 222	Lower Carboniferous	Visean	Caney Shale, Arbuckle Mountains, Sand Branch Section, Johnston County, Oklahoma, USA
<i>Pseudotormentus kamigoriensis</i>	L	—	T	De Wever & Cardroit 1984: 101	Middle Permian	Capitanian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
<i>Pseudotormentus monoporus</i>	L	—	—	Wang <i>in</i> Wang et al. 2012: 110	Upper Permian	upper Changhsingian	Bancheng Formation, SE Guangxi, China
<i>Pterocanium tenuecostatum</i>	—	n.d.	—	Rüst 1892: 183	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Pygacapsa							
<i>Pygacapsa bilaminata</i>	n.r.	—	Tnr	Wang 1989: 145	Lower Cambrian	—	Niuitang Formation, Sandu district, Guizhou Province, China
Pylentonema (160)							
<i>Pylentonema antiqua</i>	E	—	—	Deflandre 1963: 3982	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Pylentonema aperta</i>	E	—	Ts	Nazarov <i>in</i> Nazarov et al. 1975: 102	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Pylentonema aperta</i>	—	inv.	—	Nazarov <i>in</i> Nazarov et al. 1977: 918	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Pylentonema banchengensis</i>	E	—	—	Wang & Kuang 1993: 279	Lower Carboniferous	Tournaisian	Shijia Formation, Shijia Reservoir, Qinzhou area, Guangxi Zhuang Region, SW China
<i>Pylentonema eucosmeta</i>	E	—	—	Braun 1989: 91	Lower Carboniferous	upper Tournaisian	Pebbles of siliceous shale from the lower Main-valley near Frankfurt a. M., Germany
<i>Pylentonema hindei</i>	E	—	—	Cheng 1986: 117	Lower Carboniferous	Bashkirian	Jones Valley Shale, Le Flore County, eastern Oklahoma, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Pylentonema</i> (160) continuation							
<i>Pylentonema insueta</i>	E	—	Ts	Nazarov 1975: 97	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Pylentonema insueta</i>	E	—	—	Nazarov in Nazarov et al. 1977: 918	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Pylentonema mira</i>	E	—	—	Cheng 1986: 118	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Pylentonema racheboeufi</i>	E	—	—	Gourmelon 1986: 189	Lower Carboniferous	Tournaisian	Hautes-Pyrénées, France
<i>Pylentonema rimata</i>	E	—	—	Nazarov in Nazarov & Popov 1980: 62	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Pylentonema robusta</i>	E	—	—	Schwartzapfel & Holdsworth 1996: 154	Upper Devonian	upper Famennian	Woodford Formation, Criner Hills 2A section, Carter County, Oklahoma, USA
<i>Pylentonema transitorum</i>	E	—	—	Liu & Hao 2006: 649	Upper Devonian	Famennian	Tielimaitidaban section, SW Tianshan, Xinjiang, China
<i>Pylentonema triangulata</i>	E	—	—	Cheng 1986: 119	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Pylentonema typica</i>	E	—	—	Cheng 1986: 119	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Pylentonema?</i> <i>parviaperta</i>	E	—	—	Park & Won 2012: 64	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Pylentonema?</i> <i>serrensis</i>	E	—	—	Gourmelon 1987: 107	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
<i>Quadratus</i> (162)							
<i>Quadratus araneae</i>	E	—	—	Schwartzapfel & Holdsworth 1996: 162	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA
<i>Quadratus bakeri</i>	E	—	—	Schwartzapfel & Holdsworth 1996: 156	Upper Devonian	upper Famennian	Woodford Formation, Criner Hills 2A section, Carter County, Oklahoma, USA
<i>Quadratus dumitricai</i>	E	—	T	Cheng 1986: 121	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Quadratus transitivus</i>	E	—	—	Liu & Hao 2006: 649	Upper Devonian	Famennian	Tielimaitidaban section, SW Tianshan, Xinjiang, China
<i>Quadratus unicus</i>	E	—	—	Cheng 1986: 122	Upper Devonian	Famennian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Quadratus?</i> <i>conili</i>	E	—	—	Schwartzapfel & Holdsworth 1996: 158	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA
<i>Quadratus?</i> <i>jimisonae</i>	E	—	—	Schwartzapfel & Holdsworth 1996: 159	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA
<i>Quadratus?</i> <i>sixi</i>	E	—	—	Schwartzapfel & Holdsworth 1996: 157	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA
<i>Quadratopora</i> (344)							
<i>Quadratopora zhenbaensis</i>	n.r. i.s. Tnr	Hao & Shu 1987: 309			Lower Cambrian	Terreneuvian	Shuijingtu Formation, Shaanxi Province, Zhenba County, China
<i>Quadricalvis</i> (196)							
<i>Quadricalvis femoris</i>	L	—	Ts	Cardroit & De Wever 1986: 79	Upper Permian	Wuchiapingian	Oi Formation, Ultra-Tamba Belt, Yanogawa River, Yamasakicho-Kusune, Shisou City, Japan
<i>Quadrilobata</i> (205)							
<i>Quadrilobata ephippiomorpha</i>	L	—	T	Wang 1995: 144	Middle Permian	Capitanian	Gufeng Formation, Jiangsu, China
<i>Quadrilobata?</i> <i>blomei</i>	L	—	—	Nestell & Nestell 2010: 50	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Quadriremis</i> (197)							
<i>Quadriremis flata</i>	L	—	—	Wang 1993a: 451	Lower Permian	Kungurian	Gufeng Formation, Qiaotou Village, Chaoyang City, Anhui, China
<i>Quadriremis gliptoacus</i>	L	—	T	Nazarov & Ormiston 1985: 36	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Quadriremis</i> (197) continuation							
<i>Quadriremis minima</i>	L	—	—	Nazarov & Ormiston 1985: 36	Middle Permian	Roadian	Bell Canyon Formation, Guadalupe Mts, Culbertson County, W Texas, USA
<i>Quadriremis nevadensis</i>	L	—	—	Nazarov & Ormiston 1989: 11	Middle Permian	Capitanian	Willow Canyon Formation, Toquima Range, Mill Canyon, Nevada, USA
<i>Quadriremis nevadensis</i>	L	—	—	Nazarov & Ormiston 1993: 45	Middle Permian	Capitanian	Willow Canyon Formation, Toquima Range, Mill Canyon, Nevada, USA
<i>Quasibeothuka</i> (274)							
<i>Quasibeothuka bifurcata</i>	S	—	—	Wang in Wang et al. 2008: 400	Middle Ordovician	Dapingian	Heituo Formation, Tarim Basin, Kuruktag region, Xinjiang, China
<i>Quasibeothuka ellipsoidala</i>	S	—	—	Wang in Wang et al. 2008: 400	Middle Ordovician	Dapingian	Heituo Formation, Tarim Basin, Kuruktag region, Xinjiang, China
<i>Quasibeothuka fusiforma</i>	S	—	Td	Wang in Wang et al. 2008: 399	Middle Ordovician	Dapingian	Heituo Formation, Tarim Basin, Kuruktag region, Xinjiang, China
<i>Quasibeothuka longifusiforma</i>	S	—	—	Wang in Wang et al. 2008: 400	Middle Ordovician	Dapingian	Heituo Formation, Tarim Basin, Kuruktag region, Xinjiang, China
<i>Quasibeothuka ovata</i>	S	—	—	Wang in Wang et al. 2008: 399	Middle Ordovician	Dapingian	Heituo Formation, Tarim Basin, Kuruktag region, Xinjiang, China
<i>Quinqueremis</i> (198)							
<i>Quinqueremis arundinea</i>	L	—	—	Nazarov & Ormiston 1983b: 375	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Quinqueremis arundinea</i>	L	—	T	Nazarov & Ormiston 1985: 37	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Quinqueremis clathrolobulatus</i>	L	—	—	Amon & Braun 1994: 6	Lower Permian	Artinskian	Bursevesky horizon, Dalny Tulkas Rill, Bashkortostan Region, S Urals, Russia
<i>Quinqueremis robusta</i>	L	—	—	Nazarov & Ormiston 1985: 37	Middle Permian	Capitanian	U.S. Highway 180, Culbertson County, Texas, USA
<i>Quinqueremis yunnanensis</i>	—	n.n.	—	Feng 1992: 55	Upper Permian	Changhsingian	Papai Formation of Changning-Menglian Belt, Papai Village, Cangyuan County, Yunnan, China
<i>Radiobisphaera</i> (117)							
<i>Radiobisphaera acuta</i>	E	—	—	Won 1997a: 351	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Radiobisphaera flamans</i>	E	—	—	Won 1997a: 351	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Radiobisphaera magnifenestra</i>	E	—	—	Won 1997a: 352	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Radiobisphaera menneri</i>	E	—	—	Afanasieva 2000a: 60	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Radiobisphaera multa</i>	E	—	—	Won 1997a: 353	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Radiobisphaera multiaculeata</i>	E	—	—	Won 1997a: 353	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Radiobisphaera multiaculeata multiaculeata</i>	E	—	—	Won 1997a: 353	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Radiobisphaera nazaroviana</i>	E	—	—	Won 1997a: 356	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Radiobisphaera rozanovi</i>	E	—	—	Afanasieva & Amon 2009b: 495	Upper Devonian	middle Frasnian	Kamenevskaya Formation, Goryunovo, Zolotukha River, Goryunovo, Rudnyi Altai, Russia
<i>Radiobisphaera variantia</i>	E	—	T	Won 1997a: 356	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Radiobisphaera variantia inaequalis</i>	E	—	—	Won 1997a: 358	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Radiobisphaera variantia variantia</i>	E	—	—	Won 1997a: 356	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Ramuspicum (67)							
<i>Ramuspicum curvatum</i>	Ar	—	—	Won & Iams 2002: 29	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Ramuspicum multiramosum</i>	Ar	—	T	Won & Iams 2002: 29	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Ramuspicum trifurcatum</i>	Ar	—	—	Won & Iams 2002: 29	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
Raphidociclicus (27)							
<i>Raphidociclicus gemellus</i>	Al	—	—	Nazarov & Rudenko 1981: 136	Lower Permian	Artinskian	Aktasty River, Orenburgskaya region, Southern Urals, Russia
<i>Raphidociclicus gemellus americanus</i>	Al	—	—	Nazarov & Ormiston 1985: 52	Middle Permian	Capitanian	Bell Canyon Formation, Guadalupe Mts., Culbertson County, W Texas, USA
<i>Raphidociclicus hiulcus</i>	Al	—	T	Nazarov & Rudenko 1981: 135	Lower Permian	Sakmarian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Raphidociclicus scutum</i>	Al	—	—	Maldonado & Noble 2010: 80	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culbertson County, W Texas, USA
Rectotomentum (213)							
<i>Rectotomentum fengi</i>	L	—	—	Noble & Jin 2010: 143	Middle Permian	Capitanian	Bell Canyon Formation, Guadalupe Mts., Culbertson County, W Texas, USA
<i>Rectotomentum fornicatum</i>	L	—	T	Nazarov & Ormiston 1985: 41	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Rectotomentum wardlawi</i>	L	—	—	Nestell & Nestell 2010: 42	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culbertson County, W Texas, USA
Retentactinia (118)							
<i>Retentactinia aspera</i>	E	—	—	Won 1997b: 384	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Retentactinia aspinosa</i>	E	—	—	Won 1997b: 384	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Retentactinia delicata</i>	E	—	—	Won 1997b: 384	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Retentactinia dellensus</i>	E	—	—	Park & Won 2012: 58	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Retentactinia impedita</i>	E	—	T, Th	Won 1997b: 385	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Retentactinia interreticulata</i>	E	—	—	Won 1997b: 385	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Retentactinia kelleri</i>	E	—	—	Afanasieva 2000a: 76	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Retentactinia levis</i>	E	—	—	Won 1997b: 386	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Retentactinia longa</i>	E	—	—	Won 1997b: 386	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Retentactinia longa densa</i>	E	—	—	Won 1997b: 388	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Retentactinia longa longa</i>	E	—	—	Won 1997b: 386	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Retentactinia longa pilosa</i>	E	—	—	Won 1997b: 388	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Retentactinia repleta</i>	E	—	T	Won 1997b: 390	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Retentactinia spongiosa</i>	E	—	—	Seo & Won 2009: 72	Lower Carboniferous	Visean	Bergisches Land, N Westfalia, Germany
Retentactinosphaera (303)							
<i>Retentactinosphaera clavata</i>	IS (O&F)	—	—	Afanasieva 2011: 128	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Retentactinosphaera magnifica</i>	IS (O&F)	—	T	Afanasieva 2011: 127	Upper Devonian	lower Famennian	Zadonsk Formation, W Lekkeyaginsk-65, Saremboi-Lekkeyaga, Timan-Pechora Basin, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Retisphaera (119)							
<i>Retisphaera distralis</i>	E	—	—	Won 1997b: 396	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Retisphaera ovata</i>	E	—	—	Won 1997b: 398	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Retisphaera rota</i>	E	—	—	Won 1997b: 398	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
Rhizoplegma							
<i>Rhizoplegma betulinum</i>	—	n.d.	—	Rüst 1892: 150	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Rhodospaera							
<i>Rhodospaera crucifera</i>	E	n.d.	—	Rüst 1892: 137	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Rhodospaera devoniensis</i>	E	n.d.	—	Rüst 1892: 137	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
<i>Rhodospaera idonea</i>	E	n.d.	—	Rüst 1892: 137	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Rhodospaera pulchra</i>	E	n.d.	—	Rüst 1892: 138	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Rhodospaera ruesti</i>	—	n.d.	—	Hinde 1899a: 44	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
Rhopalastrum							
<i>Rhopalastrum carbonicum</i>	L	—	—	Rüst 1892: 170	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Rhopalastrum clavatum</i>	—	n.d.	—	Hinde & Fox 1895: 641	Carboniferous	Serpukhovian-Bashkirian	Codden Hill bed, Devon, England, UK
<i>Rhopalastrum giganteum</i>	L	—	—	Rüst 1892: 171	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Rhopalastrum ingens</i>	—	n.d.	—	Hinde & Fox 1895: 641	Carboniferous	Serpukhovian-Bashkirian	Codden Hill bed, Devon, England, UK
<i>Rhopalastrum isselii</i>	L	—	—	Rüst 1892: 171	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Rhopalastrum siculum</i>	L	—	—	Rüst 1892: 171	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Rhopalodictyum							
<i>Rhopalodictyum astrictum</i>	—	n.d.	—	Rüst 1892: 174	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
Robotium (228)							
<i>Robotium biauriculatum</i>	N?	—	—	Cheng 1986: 137	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Robotium firmum</i>	N?	—	—	Cheng 1986: 137	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Robotium gordoni</i>	N?	—	—	Cheng 1986: 138	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Robotium ruesti</i>	N?	n.c.	—	Cheng 1986: 139	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Robotium validum</i>	N?	—	Ts	Cheng 1986: 139	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
<i>Robotium venustum</i>	N?	—	—	Cheng 1986: 140	Lower Carboniferous	Tournaisian	Woodford Formation, TI Valley section, Pittsburg County, Oklahoma, USA
Rotasphaera (74)							
<i>Rotasphaera beckwithensis</i>	Ar	—	—	Noble 1994: 20	Upper Silurian	Gorstian	Caballos Novaculite Formation, Beckwith Hills, Marathon Basin, W Texas, USA
<i>Rotasphaera delicata</i>	Ar	—	—	Noble 1994: 20	Upper Silurian	Gorstian	Caballos Novaculite Formation, Payne Hills, Bourland Mts., Marathon Basin, W Texas, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Rotasphaera</i> (74) continuation							
<i>Rotasphaera marathonensis</i>	Ar	—	Ts	Noble 1994: 21	Middle Silurian	Homerian	Caballos Novaculite Formation, Payne Hills, Bourland Mts., Marathon Basin, W Texas, USA
<i>Rotasphaera nuda</i>	Ar	—	—	Noble 1994: 21	Upper Silurian	Gorstian	Caballos Novaculite Formation, East Bourland Mts., Marathon Basin, W Texas, USA
<i>Rotasphaera quadrata</i>	Ar	—	—	Noble 1994: 21	Middle Silurian	Homerian	Caballos Novaculite Formation, East Bourland Mts., Marathon Basin, W Texas, USA
<i>Rotasphaera robertsorum</i>	Ar	—	—	Noble 1994: 22	Upper Silurian	Gorstian	Caballos Novaculite Formation, Beckwith Hills, Marathon Basin, W Texas, USA
<i>Rotasphaera severa</i>	Ar	—	—	MacDonald 1998: 599	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Russirad</i> (304)							
<i>Russirad kazintsovae</i>	IS (O&F)	—	T	Afanasieva 2000a: 35	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Utkha, Timan-Pechora Basin, Russia
<i>Ruzhencevispongus</i> (214)							
<i>Ruzhencevispongus aktastiensis</i>	L	—	—	Nazarov & Ormiston 1993: 44	Lower Permian	Artinskian	Aktasty River, Orenburgskaya region, Southern Urals, Russia
<i>Ruzhencevispongus aktastiensis</i>	L	n.n.	—	Nazarov 1988: 75	Lower Permian	Artinskian	Aktasty River, Orenburgskaya region, Southern Urals, Russia
<i>Ruzhencevispongus apertus</i>	L	—	—	Amon, Braun & Chuvashov 1990: 126	Lower Permian	Artinskian	Shelyvaginsk Formation, around Sim Town, Chalyabinskaya region, Urals, Russia
<i>Ruzhencevispongus cataphractus</i>	L	n.n.	Ts	Nazarov & Ormiston 1984: pl. 5, fig. 11	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Ruzhencevispongus cataphractus</i>	L	—	—	Nazarov & Ormiston 1985: 29	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Ruzhencevispongus girtyi</i>	L	—	—	Nazarov & Ormiston 1985: 32	Middle Permian	Capitanian	Bell Canyon Formation, Guadalupe Mts, Culbertson County, W Texas, USA
<i>Ruzhencevispongus laqueus</i>	L	—	—	Nazarov & Ormiston 1993: 45	Lower Permian	Artinskian	Maloiik Formation, Don Village, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Ruzhencevispongus partilaminatus</i>	L	—	—	Nazarov & Ormiston 1989: 14	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Ruzhencevispongus retiporusus</i>	L	—	—	Nazarov & Ormiston 1989: 13	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Ruzhencevispongus rotundus</i>	L	—	—	Feng in Feng et al. 2006b: 831	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Ruzhencevispongus uralicus</i>	L	—	T	Kozur 1980: 237	Lower Permian	Sakmarian	Sarabil Formation, Verchneozernaja Station, Orenburgskaya Region, Urals, Russia
<i>Ruzhencevispongus uralicus subtriangularis</i>	L	—	—	Wang 1993b: 9	Middle Permian	Capitanian	Gufeng Formation, Jiangsu, China
<i>Ruzhencevispongus uralicus triradiatus</i>	L	—	—	Wang 1993b: 9	Middle Permian	Capitanian	Gufeng Formation, Jiangsu, China
<i>Ruzhencevispongus uralicus uralicus</i>	L	—	—	Wang 1993b: 9	Middle Permian	Capitanian	Gufeng Formation, Jiangsu, China
<i>Ruzhencevispongus? cacumenireticulatus</i>	L	—	—	Nazarov & Ormiston 1989: 14	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Ruzhencevispongus? emarginatus</i>	L	—	—	Nazarov & Ormiston 1989: 15	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Ruzhencevispongus? plumatus</i>	L	—	—	Nazarov & Ormiston 1985: 30	Lower Permian	Sakmarian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Ruzhencevispongus? promiscuus</i>	L	—	—	Nazarov & Ormiston 1989: 15	Lower Permian	Artinskian	Kandurov Formation, Donskoye, Ural River, Orenburgskaya Region, S Urals, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Sanctipauleum</i> (288)							
<i>Sanctipauleum biglobosum</i>	IS	—	—	Won & Iams 2015a: 31	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Sanctipauleum pingue</i>	IS	—	—	Won & Iams 2015a: 31	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Sanctipauleum superpingue</i>	IS	—	—	Won & Iams 2015a: 32	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Sanctipauleum?</i> <i>contractrum</i>	IS	—	—	Won & Iams 2015a: 32	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Sanctipauleum?</i> <i>indivisum</i>	IS	—	—	Won & Iams 2015a: 33	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Sanctipauleum? inusitata</i>	IS	—	—	Won & Iams 2015a: 33	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Scharfenbergia</i> (215)							
<i>Scharfenbergia concava</i>	L	—	—	Park & Won 2012: 68	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Scharfenbergia plenospongiosa</i>	L	—	—	Won 1983: 160	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Scharfenbergia tailleurense</i>	L	—	—	Holdsworth & Murchey 1988: 787	Upper Carboniferous	Bashkirian	Kuna Formation, Nigu Bluff, Northern Brooks Range, Alaska, USA
<i>Secuicollacta</i> (75)							
<i>Secuicollacta alaskensis</i>	Ar	—	—	Won, Blodgett & Nestor 2002: 949	Lower Silurian	Telychian	Road River Formation, subsidiary channel of Tatonduck River, east-central Alaska, USA
<i>Secuicollacta amoenitas</i>	Ar	—	—	Nazarov & Ormiston 1993: 42	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Secuicollacta amoenitas</i>	Ar	n.n.	—	Nazarov 1988: 130	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Secuicollacta araneam</i>	Ar	—	—	Aitchison 1993b: 121	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Secuicollacta baijingensis</i>	Ar	n.n.	—	Li 1995: 333	Middle Ordovician	Dapingian	Qingshuigou-Baijingsi Complex, Baijingsi, Quilian County, Qinghai, China
<i>Secuicollacta cassa</i>	Ar	—	T	Nazarov & Ormiston 1984: 75	Middle Silurian	Homerian	Makyutov Complex, Tarangul River, Kosistek Village, Southern Ural, Kazakhstan
<i>Secuicollacta foliaspinella</i>	Ar	—	—	Noble 1994: 23	Middle Silurian	Homerian	Caballo Novaculite Formation, East Bourland Mts., Marathon Basin, W Texas, USA
<i>Secuicollacta glaebara</i>	Ar	—	—	MacDonald 1998: 592	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Secuicollacta gliris</i>	Ar	—	—	MacDonald 1998: 589	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Secuicollacta herrimani</i>	Ar	—	—	MacDonald 1998: 591	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Secuicollacta horrida</i>	Ar	—	—	Furutani 1990: 50	Upper Silurian	Gorstian	Hitoegane Formation, Hida-gaien Belt, E of Hitoegane, Fukuji area, Takayama City, Japan
<i>Secuicollacta itoigawai</i>	Ar	—	—	Furutani 1990: 50	Upper Silurian	Gorstian	Hitoegane Formation, Hida-gaien Belt, E of Hitoegane, Fukuji area, Takayama City, Japan
<i>Secuicollacta labyrinthica</i>	Ar	—	—	Aitchison 1993b: 121	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Secuicollacta magnitestra</i>	Ar	—	—	Won, Blodgett & Nestor 2002: 949	Lower Silurian	Telychian	Road River Formation, subsidiary channel of Tatonduck River, east-central Alaska, USA
<i>Secuicollacta malevola</i>	Ar	—	—	MacDonald 1998: 589	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Secuicollacta minuta</i>	Ar	—	—	Goto, Umeda & Ishiga 1992: 161	Upper Ordovician	Katian	Malongulli Formation, Lachlan Fold Belt, 30 km NW of Taralga, NSW, Australia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Secuicollacta</i> (75) continuation							
<i>Secuicollacta nesymmetra</i>	Ar	—	—	Li 1994: 264	Upper Silurian	Gorstian	Keerhada, Mayila Mts., Xinjiang, China
<i>Secuicollacta nesymmetris</i>	—	n.n.	—	Li 1991: 75	Upper Silurian	Gorstian	Mayila Complex, Keerhada, S Mayila Mt., Xinjiang, China
<i>Secuicollacta ornata</i>	Ar	—	—	Goto, Umeda & Ishiga 1992: 160	Upper Ordovician	Katian	Malongulli Formation, Lachlan Fold Belt, 30 km NW of Taralga, NSW, Australia
<i>Secuicollacta parvitesta</i>	Ar	—	—	Won, Blodgett & Nestor 2002: 949	Lower Silurian	Telychian	Road River Formation, subsidiary channel of Tatonduck River, east-central Alaska, USA
<i>Secuicollacta resodosae</i>	Ar	—	—	MacDonald 1998: 592	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Secuicollacta sceptri</i>	Ar	—	—	MacDonald 1998: 589	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Secuicollacta segari</i>	Ar	—	—	MacDonald 1998: 591	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Secuicollacta silex</i>	Ar	—	—	Goto, Umeda & Ishiga 1992: 161	Upper Ordovician	Katian	Malongulli Formation, Lachlan Fold Belt, 30 km NW of Taralga, NSW, Australia
<i>Secuicollacta solara</i>	Ar	—	—	Noble 1994: 24	Upper Silurian	Gorstian	Caballos Novaculite Formation, Beckwith Hills, Marathon Basin, W Texas, USA
<i>Secuicollacta spissa</i>	Ar	—	—	Nazarov & Ormiston 1993: 42	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Secuicollacta spissa</i>	Ar	n.n.	—	Nazarov 1988: 122	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Secuicollacta stelligera</i>	Ar	—	—	Renz 1990: 376	Upper Ordovician	Katian	Hanson Creek Formation, N Martin Ridge, Eureka County, Nevada, USA
<i>Secuicollacta tatondukensis</i>	Ar	—	—	Won, Blodgett & Nestor 2002: 951	Lower Silurian	Telychian	Road River Formation, subsidiary channel of Tatonduck River, east-central Alaska, USA
<i>Secuicollacta teli</i>	Ar	—	—	MacDonald 1998: 593	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Secuicollacta vallipuella</i>	Ar	—	—	MacDonald 1998: 592	Lower Silurian	Telychian	Cape Phillips Formation, Cornwallis Island, Canadian Arctic Archipelago
<i>Secuicollacta vulgaris</i>	Ar	—	—	Furutani 1990: 49	Upper Silurian	Gorstian	Hitoegane Formation, Hida-gaien Belt, E of Hitoegane, Fukui area, Takayama City, Japan
<i>Secuicollacta xinjiangensis</i>	—	n.n.	—	Li 1991: 75	Upper Silurian	Gorstian	Mayila Complex, Keerhada, S Mayila Mt., Xinjiang, China
<i>Secuicollacta? exquisita</i>	Ar	—	—	Wakamatsu, Sugiyama & Furutani 1990: 170	Upper Silurian	Ludfordian	G3 formation of Gion-yama Group, NE of Kyowa, Gokase Town, Kyushu, Japan
<i>Secuicollacta? platyspina</i>	Ar	—	—	Noble 1994: 24	Middle Silurian	Homerian	Caballos Novaculite Formation, East Bourland Mts., Marathon Basin, W Texas, USA
<i>Secuidcollacta</i>							
<i>Secuidcollacta hindei</i>	—	n.n.	—	Li 1995: 333	Middle Ordovician	Dapingian	Qingshugou-Bajingsi Complex, Bajingsi, Quilian County, Qinghai, China
<i>Sethocapsa</i>							
<i>Sethocapsa obstipa</i>	—	n.d.	—	Rüst 1892: 182	Lower Devonian	—	Southern Urals, Russia
<i>Sethocapsa pytine</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1579	Lower Ordovician	Floian	Normanskill chert, Fly Summit, Washington County, New York, USA
<i>Sethocyrta</i>							
<i>Sethocyrta excisa</i>	—	n.d.	—	Rüst 1892: 182	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Sethodiscus</i>							
<i>Sethodiscus chudleighensis</i>	—	n.d.	—	Hinde & Fox 1895: 639	Carboniferous	Serpukhovian-Bashkirian	Codden Hill bed, Devon, England, UK

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Sethostaurus</i>							
<i>Sethostaurus exsculptus</i>	—	n.d.	—	Rüst 1892: 165	Lower Silurian	—	Cabrières, Hérault, France
<i>Shangella</i> (177)							
<i>Shangella capitanensis</i>	L	—	—	Nestell & Nestell 2010: 38	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Shangella longa</i>	L	—	T	Feng in Feng et al. 2006b: 829	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Shangella regularis</i>	L	—	—	Feng in Feng et al. 2006b: 831	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Sinocyrtis</i>							
<i>Sinocyrtis bellulus</i>	n.r.	—	Tnr	Wang 1989: 145	Lower Cambrian	—	Niutitang Formation, Sandu district, Guizhou Province, China
<i>Sinocyrtis latobasalis</i>	n.r.	—	—	Wang 1989: 146	Lower Cambrian	—	Niutitang Formation, Sandu district, Guizhou Province, China
<i>Sinosphaera</i> (120)							
<i>Sinosphaera spinosa</i>	E	—	T	Feng in Feng et al. 2004a: 137	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Siphonosphaera streptosiphonia</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1568	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Somphoentactinia</i> (165)							
<i>Somphoentactinia cavata</i>	E	—	—	Aitchison 1993b: 119	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Somphoentactinia gavrilovi</i>	E	—	—	Afanasieva 2000a: 84	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Somphoentactinia multisphaerata</i>	E	—	—	Afanasieva & Amon 2011: 1510	Upper Devonian	lower Farnesian	Polar Urals, Palnik Yu River, Russia
<i>Somphoentactinia saecularis</i>	E	—	—	Afanasieva & Amon 2016: 216	Lower Permian	Artinskian	Kondurovka section, Sakmara River, Southern Urals, Russia
<i>Sphaerodiscus</i> (141)							
<i>Sphaerodiscus rota</i>	E	—	Ts	Won 1983: 163	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Sphaeroentactinia</i> (46)							
<i>Sphaeroentactinia bispinosa</i>	Ar	—	—	Maletz & Bruton 2007: 265	Lower Ordovician	Floian	Valhallfonna Formation, Buldrebreen arm, Ny Frieslan, Spitsbergen, Norway
<i>Sphaeroentactinia hexaspinosa</i>	Ar	—	T	Maletz & Bruton 2007: 264	Lower Ordovician	Floian	Valhallfonna Formation, Buldrebreen arm, Ny Frieslan, Spitsbergen, Norway
<i>Sphaeroentactinia integrata</i>	Ar	—	—	Maletz & Bruton 2007: 265	Lower Ordovician	Floian	Valhallfonna Formation, Buldrebreen arm, Ny Frieslan, Spitsbergen, Norway
<i>Sphaeroentactinia robusta</i>	Ar	—	—	Won & Iams 2015a: 21	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Sphaeroentactinia saintpaulensis</i>	Ar	—	—	Won & Iams 2015a: 21	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Sphaeroentactinia?</i> <i>multiradiata</i>	Ar	—	—	Won & Iams 2013: 27	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Sphaeropyle</i>							
<i>Sphaeropyle dreyeri</i>	—	n.d.	—	Rüst 1892: 141	Lower Devonian	—	Southern Urals, Russia
<i>Sphaeropyle entostoma</i>	—	n.d.	—	Rüst 1892: 141	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
<i>Sphaeropyle eurystoma</i>	—	n.d.	—	Rüst 1892: 141	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Sphaeropyle laevis</i>	—	n.d.	—	Rüst 1892: 140	Lower Devonian	—	Southern Urals, Russia
<i>Sphaeropyle multangularis</i>	—	n.d.	—	Rüst 1892: 141	Lower Devonian	—	Southern Urals, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Sphaerozoum</i>							
<i>Sphaerozoum minutum</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1566	Lower Ordovician	Floian	Normanskill chert, Fly Summit, Washington County, New York, USA
<i>Sphaerozoum patulum</i>	—	n.d.	—	Hinde 1890: 58	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK
<i>Sphaerozoum priscum</i>	—	n.d.	—	Hinde 1890: 57	Middle Ordovician	Darriwilian	Southern Uplands, Peebleshire, Scotland, UK
<i>Spinodeflandrella</i> (8)							
<i>Spinodeflandrella acuminata</i>	Al	—	—	Rudenko in Rudenko & Panasenko 1990b: 192	Upper Permian	Wuchiapingian	Pantov Member, Tauka Terrane, Tumanovk, Pantov area, Primorskiy Kray, Russia
<i>Spinodeflandrella acutata</i>	Al	—	—	Rudenko in Rudenko & Panasenko 1990b: 191	Upper Permian	Wuchiapingian	Pantov Member, Tauka Terrane, Tumanovk, Pantov area, Primorskiy Kray, Russia
<i>Spinodeflandrella bicornuta</i>	Al	—	—	Rudenko in Rudenko & Panasenko 1990b: 191	Upper Permian	Changhsingian	Samarkinsk Formation, Taukah Terrane, Breevka, Primorskiy Kray, Russia
<i>Spinodeflandrella obtusa</i>	Al	—	—	Rudenko in Rudenko & Panasenko 1990b: 192	Upper Permian	Wuchiapingian	Pantov Member, Tauka Terrane, Tumanovk, Pantov area, Primorskiy Kray, Russia
<i>Spinodeflandrella tetraspinosa</i>	Al	—	T	Kozur 1981: 267	Lower Permian	Sakmarian	Sarabil Formation, Kondurovskaya, Orenburgskaya Region, S Urals, Russia
<i>Spinodeflandrella? siciliensis</i>	Al	—	—	Catalano, Di Stefano & Kozur 1989: 89	Lower Permian	Kungurian	Sosio Valley Area, Torrente San Calogero, Western Sicily, Italy
<i>Spirocapsa</i>							
<i>Spirocapsa singularis</i>	—	n.d.	Td	Rüst 1892: 192	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Spironium</i>							
<i>Spironium haeckelii</i>	—	n.d.	—	Rüst 1892: 175	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Spongatractus</i>							
<i>Spongatractus pleurosigma</i>	—	n.d.	—	Rüst 1892: 160	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Spongactinella</i> (166)							
<i>Spongactinella abstrusa</i>	E?	—	—	Aitchison 1993b: 120	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Spongactinella corynacantha</i>	E?	—	—	Nazarov & Ormiston 1983a: 460	Upper Devonian	Frasnian	Sadler Range, SE Cap Creek Gap, Canning Basin, Western Australia
<i>Spongactinella faceta</i>	E?	—	—	Nazarov & Ormiston 1993: 34	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Spongactinella faceta</i>	E?	n.n.	—	Nazarov 1988: 130	Upper Devonian	Famenian	Zapadno Valavskaya borehole 1-R, Pripyat Depression, Belarus
<i>Spongactinella intracata</i>	E?	—	—	Aitchison 1993b: 120	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Spongactinella olafi</i>	E?	—	—	Afanasieva 2000a: 82	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
<i>Spongactinella windjanensis</i>	E?	—	—	Nazarov in Nazarov et al. 1982: 170	Upper Devonian	Frasnian	Emanuel Range, SW Longs Well, Canning Basin, Western Australia
<i>Spongactinia</i> (121)							
<i>Spongactinia concinna</i>	E	—	T	Aitchison 1993b: 116	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Spongactinia exquisita</i>	E	—	—	Aitchison 1993b: 117	Upper Devonian	lower Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Spongactinia flexa</i>	E	—	—	Won 1997b: 404	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Sponginctinia</i> (121) continuation							
<i>Sponginctinia fungosa</i>	E	—	T	Nazarov 1975: 75	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Sponginctinia indisserta</i>	E	—	—	Nazarov 1975: 76	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Sponginctinia inusitata</i>	E	—	—	Won 1997b: 406	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Sponginctinia marina</i>	E	—	—	Afanasieva & Amon 2011: 1507	Upper Devonian	Famennian	Zadonsk Formation, W Lekkeyaginsk-65, Sarembi-Lekkeyaga, Timan-Pechora Basin, Russia
<i>Sponginctinia nupera</i>	E	—	—	Nazarov in Nazarov et al. 1981: 84	Upper Devonian	Famennian	Duksundinsk Formation, along Duksunda River, Magadan, Russia
<i>Sponginctinia olafi</i>	E	n.n.	—	Afanasieva 1997a: 221	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Utkha, Timan-Pechora Basin, Russia
<i>Sponginctinia polaris</i>	E	—	—	Afanasieva & Amon 2011: 1505	Upper Devonian	lower Famennian	Zadonsk Formation, W Lekkeyaginsk-65, Sarembi-Lekkeyaga, Timan-Pechora Basin, Russia
<i>Sponginctinia rigida</i>	E	—	—	Amon, Braun & Chuvashov 1990: 123	Lower Permian	Artinskian	Shelyaginsk Formation, around Sim Town, Chalyabinskaya region, Urals, Russia
<i>Sponginctinia shaijingpoensis</i>	E	—	—	Wang in Wang et al. 2000: 247	Middle Devonian	Givetian	Changyucun Formation, Shaijingpo section, Xianyun County, Yunnan, China
<i>Sponginctinia subtiradiata</i>	E	—	—	Nazarov 1975: 76	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Sponginctinia? ambigua</i>	E	—	—	Won 1997b: 408	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Sponginctinia? incerta</i>	E	—	—	Nestell, Pope & Nestell 2012: 236	Upper Carboniferous	Moscovian	Mouse Creek Formation, Excello Shale Member, south-central Iowa, USA
<i>Sponginctinia? mira</i>	E	—	—	Won 1997b: 410	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Sponginctinia? simensis</i>	E	—	—	Amon, Braun & Chuvashov 1990: 123	Lower Permian	Artinskian	Shelyaginsk Formation, around Sim Town, Chalyabinskaya region, Urals, Russia
<i>Spongocoelia</i> (326)							
<i>Spongocoelia citreum</i>	—	n.d.	Td	Hinde 1899a: 52	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Spongocoelia kamitakarense</i>	IS	—	—	Furutani 1990: 48	Upper Silurian	Gorstian	Hitoegane Formation, Hida-gaien Belt, E of Hitoegane, Fukuji area, Takayama City, Japan
<i>Spongocoelia oliva</i>	—	n.d.	—	Hinde 1899a: 52	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Spongocoelia parvus</i>	IS	—	T	Furutani 1990: 47	Upper Silurian	Gorstian	Hitoegane Formation, Hida-gaien Belt, E of Hitoegane, Fukuji area, Takayama City, Japan
<i>Spongocyrtis</i>							
<i>Spongocyrtis eurydictyum</i>	—	n.d.	—	Rüst 1892: 181	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Spongodictyon</i>							
<i>Spongodictyon triquetrum</i>	—	n.d.	—	Rüst 1892: 140	Lower Devonian	—	Southern Urals, Russia
<i>Spongodiscus</i>							
<i>Spongodiscus acinus</i>	—	n.d.	—	Hinde 1899a: 54	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Spongodiscus cribrarius</i>	—	n.d.	—	Hinde 1899a: 54	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Spongodiscus herzynicus</i>	—	n.d.	—	Rüst 1892: 172	Upper Devonian	—	Schaabenholz, Harz Mountains, Elbingerode, Germany

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Spongodiscus (continuation)							
<i>Spongodiscus punctus</i>	—	n.d.	Tnr, Th	Hinde 1899a: 54	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Spongodiscus scutulatus</i>	IS	—	—	Hinde 1899a: 55	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Spongodiscus sphaereatus</i>	IS	—	—	Liu 1992: 129	Upper Carboniferous	Bashkirian	Houxia Formation, Ewigrong-Houxia districts of Ulumuqi, Xinjiang, China
<i>Spongodiscus? lenticulatus</i>	IS	—	—	Won 1983: 165	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
Spongodruppa							
<i>Spongodruppa ornithopus</i>	—	n.d.	—	Rüst 1892: 160	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Spongodruppa triradiata</i>	—	n.d.	—	Rüst 1892: 159	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
Spongoentactinella							
<i>Spongoentactinella bella</i>	E	—	—	Wang in Wang et al. 2012: 111	Upper Devonian	Famennian	Shiti Reservoir Formation, Shiwu road section, Guangxi Zhuang Region, SW China
<i>Spongoentactinella borealis</i>	E	—	—	Wang 1997: 156	Upper Devonian	Famennian	Gennaren Formation, S Utubulak, NW Jungar Basin, Xinjiang, China
<i>Spongoentactinella micrococcua</i>	E	—	—	Wang in Wang et al. 2012: 111	Upper Devonian	Frasnian	Shiti Reservoir Formation, Shiwu road section, Guangxi Zhuang Region, SW China
<i>Spongoentactinella paracorynacantha</i>	E	—	—	Wang in Wang et al. 2012: 111	Upper Devonian	Frasnian	Shiti Reservoir Formation, Shiwu road section, Guangxi Zhuang Region, SW China
Spongolonche							
<i>Spongolonche lens</i>	E	—	—	Hinde 1899a: 55	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
Spongomassa (47)							
<i>Spongomassa gigantea</i>	Ar	—	T	Won in Won & Below 1999: 337	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia
<i>Spongomassa nannosphaera</i>	Ar	—	—	Won in Won & Below 1999: 338	Middle Cambrian	—	Inca Formation, Georgina Basin, Queensland, Australia
Spongopila							
<i>Spongopila juniperina</i>	—	n.d.	—	Rüst 1892: 149	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Spongoplegma							
<i>Spongoplegma australe</i>	IS	—	—	Hinde 1899a: 44	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Spongoplegma brevisphaera</i>	—	n.d.	—	Aberdeen 1940: 134	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Spongoplegma longispinosa</i>	—	n.d.	—	Aberdeen 1940: 134	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Spongoplegma priscum</i>	—	n.d.	—	Hinde 1890: 48	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK
Spongoprunum							
<i>Spongoprunum holodictyosum</i>	—	n.d.	—	Rüst 1892: 159	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Spongoprunum oligoporum</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1577	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Spongoprunum trispinosum</i>	—	n.d.	—	Rüst 1892: 159	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Spongospaera (122)							
<i>Spongospaera crasseptata</i>	E	—	—	Wang in Wang et al. 2012: 112	Upper Devonian	Famennian	Shiti Reservoir Formation, Shiwu road section, Guangxi Zhuang Region, SW China
<i>Spongospaera grandispongiosa</i>	E	—	T, Th	Won 1997b: 410	Upper Devonian	Frasnian	Gogo Formation, Pillar Range, Canning Basin, Western Australia
<i>Spongospaera induta</i>	—	n.d.	—	Rüst 1892: 150	Lower Devonian	—	Southern Urals, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Spongospaera (122) continuation							
<i>Spongospaera trendalliana</i>	E	—	—	Won 1997b: 412	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
<i>Spongospaera tritestacea</i>	—	n.d.	—	Rothpletz 1880: 449	Lower Silurian	Telchyian	Langenstriegis, Frankenberg/Sa., Germany
<i>Spongospaera tritestacea</i>	—	n.d.	—	Rüst 1892: 150	Lower Silurian	—	Cabrières, Hérault, France
<i>Spongospaera varia</i>	E	—	Ts	Won 1997b: 412	Upper Devonian	Frasnian	Gogo Formation, Pillara Range, Canning Basin, Western Australia
Spongospaeradiscus (247)							
<i>Spongospaeradiscus shaiwaensis</i>	S	—	—	Wang in Wang & Shang 2001: 118	Upper Permian	Wuchiapingian	Shaiwa Group, Shaiwa, Ziyun County, Guizhou, China
Spongotripus							
<i>Spongotripus concentricus</i>	L	—	Th, Ts	Rüst 1892: 173	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Spongotripus fenestratus</i>	IS	—	—	Hinde 1899a: 55	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Spongotripus patella</i>	IS	—	Td	Hinde 1899a: 55	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Spongotripus ruestae</i>	L	—	—	Ormiston & Lane 1976: 168	Lower Carboniferous	Tournaisian	Sycamore Limestone, southern Arbuckle Mountains, Oklahoma, USA
<i>Spongotripus sinensis</i>	L	—	—	Liu 1992: 129	Upper Carboniferous	Bashkirian	Houxia Formation, Ewigrong-Houxia districts of Urumqi, Xinjiang, China
<i>Spongotripus xintianensis</i>	E?	—	—	Sheng & Wang 1982: 61	Middle Devonian	Givetian	Qizigao Formation, Matangwu, Xintian district, Hunan, China
Spongotrochus							
<i>Spongotrochus elongatus</i>	—	n.d.	—	Rüst 1892: 173	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Spongotrochus primaevus</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1577	Lower Ordovician	Floian	Normanskill chert, Fly Summit, Washington County, New York, USA
<i>Spongotrochus? discoidalis</i>	S	n.c.	—	Won 1983: 164	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
Spongurus							
<i>Spongurus lacunosus</i>	—	n.d.	—	Rüst 1892: 159	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
<i>Spongurus plantaeformis</i>	—	n.d.	—	Rüst 1892: 159	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Spongurus variabilis</i>	—	n.d.	—	Rüst 1892: 158	Lower Devonian	—	Southern Urals, Russia
Srakaeosphaera (327)							
<i>Srakaeosphaera minuta</i>	—	n.d.	Td	Sashida in Sashida et al. 1997: 12	Middle Permian	Capitanian	Sra Kaeo Group, Ban Bo Rae, Sra Kaeo, Thailand
Stauracontium							
<i>Stauracontium inaequale</i>	E	—	—	Rüst 1892: 145	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Stauracontium incompletum</i>	—	n.d.	—	Rüst 1892: 145	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Stauracontium xiphophorum</i>	E	—	—	Rüst 1892: 145	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
Stauralastrum							
<i>Stauralastrum aculeatum</i>	L	—	—	Rüst 1892: 171	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Staurentactinia (186)							
<i>Staurentactinia nazarovi</i>	L	—	T	Schwartzapfel & Holdsworth 1996: 202	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA
Staurodoras							
<i>Staurodoras brevispinosa</i>	—	n.d.	—	Aberdeen 1940: 136	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Staurodoras gracilis</i>	—	n.d.	—	Hinde 1890: 49	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Staurodruppa</i> (123)							
<i>Staurodruppa foxii</i>	E	—	—	Hinde 1899b: 217	Middle Devonian	Givetian	Chypons Farm, Mullion Parrish, Cornwall, England, UK
<i>Staurodruppa nana</i>	E	—	—	Hinde 1899a: 52	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Staurodruppa nucula</i>	E	—	—	Hinde 1899a: 52	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Staurodruppa praelonga</i>	E	—	Ts	Hinde 1899a: 51	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Staurodruppa? prolata</i>	E	—	—	Foreman 1963: 275	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Staurolonche</i>							
<i>Staurolonche davidi</i>	E	—	—	Hinde 1899a: 46	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Staurolonche insignis</i>	E	—	—	Rüst 1892: 144	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Staurolonche laterna</i>	E	—	—	Hinde 1899a: 47	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Staurolonche macracantha</i>	E	—	—	Rüst 1892: 144	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Staurolonche micropora</i>	—	n.d.	—	Rüst 1892: 143	Lower Silurian	—	Cabrières, Hérault, France
<i>Staurolonche scitula</i>	—	n.d.	—	Hinde 1899a: 47	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Staurolonche spinigera</i>	—	n.d.	—	Rüst 1892: 144	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Staurolonche tenella</i>	E	—	—	Hinde 1899a: 47	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Staurolonchidium</i>							
<i>Staurolonchidium coheni</i>	E	—	—	Rüst 1892: 144	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Staurolonchidium obliquum</i>	—	n.d.	—	Hinde 1899a: 47	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Stauroplegma</i> (328)							
<i>Stauroplegma barbatum</i>	—	n.d.	—	Hinde 1890: 50	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK
<i>Stauroplegma brevispina</i>	—	n.d.	Td	Hinde 1890: 50	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK
<i>Stauroplegma compressum</i>	—	n.d.	—	Hinde 1890: 50	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK
<i>Stauroplegma diffusum</i>	—	n.d.	—	Hinde 1890: 50	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK
<i>Stauroplegma houxiense</i>	—	n.d.	—	Liu 1992: 128	Upper Carboniferous	Bashkirian	Houxia Formation, Ewigrong-Houxia districts of Ulumuqi, Xinjiang, China
<i>Stauroplegma lepidum</i>	S?	—	—	Sheng & Wang 1982: 60	Middle Devonian	Givetian	Qizigiao Formation, Matangwu, Xintian district, Hunan, China
<i>Stauroplegma nanjingensis</i>	—	n.d.	—	Zhang, Wu & Liu 1992: 299	Upper Permian	Changhsingian	Dalong Formation, Zhengpanshan near Longtan, E Nanjing, China
<i>Stauroplegma pulcherrimum</i>	S?	—	—	Sheng & Wang 1982: 60	Middle Devonian	Givetian	Qizigiao Formation, Matangwu, Xintian district, Hunan, China
<i>Stauroplegma robustospina</i>	S?	—	—	Sheng & Wang 1982: 60	Middle Devonian	Givetian	Qizigiao Formation, Matangwu, Xintian district, Hunan, China
<i>Stauroplegma tianshanense</i>	—	n.d.	—	Liu 1992: 128	Upper Carboniferous	Bashkirian	Houxia Formation, Ewigrong-Houxia districts of Ulumuqi, Xinjiang, China
<i>Staurosphaera</i>							
<i>Staurosphaera crassispina</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1570	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Staurosphaera fragilis</i>	—	n.d.	—	Rüst 1892: 143	Lower Silurian	—	Cabrières, Hérault, France
<i>Staurosphaera ornata</i>	E	—	—	Hinde 1899a: 46	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Staurosphaera pusilla</i>	E	—	—	Hinde 1899a: 46	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Staurosphaera quadrangularis</i>	—	n.d.	—	Rüst 1892: 143	Lower Silurian	—	Cabrières, Hérault, France

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Staurospheara (continuation)							
<i>Staurospheara rotunda</i>	—	n.d.	—	Aberdeen 1940: 135	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Staurospheara sancta</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1570	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Staurospheara setispina</i>	—	n.d.	—	Rüst 1892: 143	Lower Devonian	—	Southern Urals, Russia
Staurophaerella							
<i>Staurophaerella setispiniformis</i>	—	n.d.	—	Demanet 1938: 29	Lower Carboniferous	Visean	Dinant Synclinorium, Belgium
Staurostylus							
<i>Staurostylus caucasicus</i>	—	n.d.	—	Khabakov 1932: 224	Carboniferous	—	Left river bank of Kala-kulak, Elbrus, Caucasus, Russia
<i>Staurostylus tenuispinus</i>	—	n.d.	—	Rüst 1892: 143	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Staurostylus varispinatus</i>	—	n.d.	—	Aberdeen 1940: 135	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Staurostylus xiphophorus</i>	—	n.d.	Td	Rüst 1892: 143	Lower Devonian	—	Southern Urals, Russia
Stichocapsa							
<i>Stichocapsa anguillula</i>	—	n.d.	—	Rüst 1892: 192	Lower Devonian	—	Southern Urals, Russia
<i>Stichocapsa biceps</i>	—	n.d.	—	Rüst 1892: 191	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Stichocapsa bukkiana</i>	—	n.d.	—	Rüst 1892: 191	Carboniferous	—	Bükk-Gebirge, Inner Western Carpathians, Hungary
<i>Stichocapsa citriformis</i>	—	n.d.	—	Rüst 1892: 191	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Stichocapsa ellipsoides</i>	—	n.d.	—	Rüst 1892: 191	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Stichocapsa elpenor</i>	—	n.d.	—	Rüst 1892: 192	Lower Devonian	—	Southern Urals, Russia
<i>Stichocapsa gravida</i>	—	n.d.	—	Rüst 1892: 191	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Stichocapsa pupa</i>	—	n.d.	—	Rüst 1892: 191	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Stichocapsa taenia</i>	—	n.d.	—	Rüst 1892: 192	Lower Devonian	—	Southern Urals, Russia
Stichopera							
<i>Stichopera aculeata</i>	—	n.d.	—	Rüst 1892: 186	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Stigmospheara							
<i>Stigmospheara echinata</i>	—	n.d.	—	Hinde 1899b: 215	Middle Devonian	Givetian	Chypons Farm, Mullion Parish, Cornwall, England, UK
<i>Stigmospheara mira</i>	E	—	Td	Rüst 1892: 135	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Stigmospheara rothpletzii</i>	E	—	—	Rüst 1892: 135	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Stigmospheara suspecta</i>	E	—	—	Rüst 1892: 135	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
Stigmospheerostylus (124)							
<i>Stigmospheerostylus bazhaiensis</i>	E	—	—	Wang in Wang & Luo 2009: 136	Upper Devonian	Frasnian	Xiangshuidong Formation, Bazhai, Ziyun County, Guizhou, China
<i>Stigmospheerostylus cubicus</i>	E	—	—	Luo, Aitchison & Wang 2002: 116	Middle Devonian	Givetian	Tanhe Formation, Wuxiangling section, S of Nanning, Guangxi Zhuang Region, SW China
<i>Stigmospheerostylus dobruskinae</i>	E	—	—	Kozur & Mostler 1989: 188	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Stigmospheerostylus favusa</i>	E	—	—	Maldonado & Noble 2010: 85	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Stigmospheerostylus inaequalis</i>	—	n.d.	—	Hinde 1899b: 216	Middle Devonian	Givetian	Chypons Farm, Mullion Parish, Cornwall, England, UK
<i>Stigmospheerostylus istanbulensis</i>	E	—	—	Noble, Tekin, Gedik & Pehlivan 2008: 51	Lower Carboniferous	Tournaisian	Baltalimanı Formation, İstanbul, Turkey
<i>Stigmospheerostylus leveni</i>	E	—	—	Kozur & Mostler 1989: 189	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Stigmospaerostylus</i> (124) continuation							
<i>Stigmospaerostylus meyeni</i>	E	—	—	Kozur & Mostler 1989: 189	Lower Permian	Sakmarian	Sarabil Formation, Sakhmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Stigmospaerostylus notabilis</i>	E	—	Ts	Rüst 1892: 142	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Stigmospaerostylus qinzhouensis</i>	E	—	—	Wang in Wang et al. 2012: 110	Lower Carboniferous	Tournaisian	Shijia Formation, Bancheng, Qinzhou area, Guangxi Zhuang Region, SW China
<i>Stigmospaerostylus sakmaraensis</i>	E	—	—	Kozur & Mostler 1989: 189	Lower Permian	Sakmarian	Sarabil Formation, Sakhmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Stigmospaerostylus sakmaraensis elevatus</i>	E	—	—	Kozur & Mostler 1989: 190	Lower Permian	Sakmarian	Sarabil Formation, Sakhmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Stigmospaerostylus sakmaraensis sakmaraensis</i>	E	—	—	Kozur & Mostler 1989: 189	Lower Permian	Sakmarian	Sarabil Formation, Sakhmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Stigmospaerostylus wildei</i>	E	—	—	Noble & Jin 2010: 125	Middle Permian	Capitanian	Bell Canyon Formation, Guadalupe Mts., Culberson County, W Texas, USA
<i>Stigmospaerostylus yaoi</i>	E	—	—	Kozur & Mostler 1989: 190	Lower Permian	Sakmarian	Sarabil Formation, Sakhmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Stigmospaerostylus? coronatus</i>	E	—	—	Kozur & Mostler 1989: 188	Lower Permian	Sakmarian	Sarabil Formation, Sakhmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Stigmospaerostylus? variospinus</i>	E	—	—	Kozur & Mostler 1989: 190	Lower Permian	Sakmarian	Sarabil Formation, Sakhmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Stylectinosphaera</i> (305)							
<i>Stylectinosphaera prima</i>	IS (O&F)	—	T	Noble 1994: 36	Middle Silurian	Homerian	Caballos Novaculite Formation, Payne Hills, Bourland Mts., Marathon Basin, W Texas, USA
<i>Stylodictya</i>							
<i>Stylodictya polaris</i>	E	—	—	Rüst 1892: 169	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
<i>Stylodictya zittelii</i>	—	n.d.	—	Rüst 1892: 168	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
<i>Stylodiscus</i>							
<i>Stylodiscus dictyosus</i>	E?	—	—	Rüst 1892: 162	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Stylosphaera</i>							
<i>Stylosphaera acuta</i>	E	—	—	Rüst 1892: 142	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Stylosphaera obtusa</i>	E	—	—	Hinde 1899a: 45	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Stylosphaera quasiobtusa</i>	—	n.d.	—	Aberdeen 1940: 135	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Stylosphaera vetusta</i>	E	—	—	Hinde 1899a: 46	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Stylosphaera? magnaspina</i>	S	—	—	Noble 1994: 39	Upper Silurian	Gorstian	Caballos Novaculite Formation, Payne Hills, Bourland Mts., Marathon Basin, W Texas, USA
<i>Stylostaurus</i>							
<i>Stylostaurus hindei</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1570	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Stylotrochus</i>							
<i>Stylotrochus dolfussi</i>	—	n.d.	—	Rüst 1892: 173	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Styptosphaera</i>							
<i>Styptosphaera antiqua</i>	—	n.d.	—	Hinde 1890: 47	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Subechidnina (58)							
<i>Subechidnina delicata</i>	Ar	—	—	Won & Iams 2002: 26	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Subechidnina florea</i>	Ar	—	—	Won & Iams 2002: 26	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Subechidnina gracilis</i>	Ar	—	Ts	Won & Iams 2002: 27	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
<i>Subechidnina pressa</i>	Ar	—	—	Won & Iams 2002: 27	Upper Cambrian	Stage 10	Cow Head Group, Western Newfoundland, Canada
Svalbardoscopiculum (68)							
<i>Svalbardoscopiculum arenigium</i>	Ar	—	T	Maletz & Bruton 2007: 259	Lower Ordovician	Floian	Valhallfonna Formation, Buldrebreen arm, Ny Frieslan, Spitsbergen, Norway
Syntagentactinia (135)							
<i>Syntagentactinia afflicata</i>	E	n.n.	—	Nazarov 1988: pl. 11 fig. 6	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Syntagentactinia afflictta</i>	E	—	—	Nazarov & Ormiston 1990: 19	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Syntagentactinia afflictta</i>	E	inv.	—	Nazarov & Ormiston 1993: 40	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Syntagentactinia biocculosa</i>	E	—	T	Nazarov in Nazarov & Popov 1980: 56	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Syntagentactinia excelsa</i>	E	—	—	Nazarov & Ormiston 1993: 40	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Syntagentactinia excelsa</i>	E	n.n.	—	Nazarov 1988: 122	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Syntagentactinia pauca</i>	E	—	—	Nazarov in Nazarov & Popov 1980: 57	Middle Ordovician	Darriwilian	Bestomaksk Formation, Chagan River, Chingiz Range, Kazakhstan
<i>Syntagentactinia pentarhachia</i>	—	n.n.	—	Li 1991: 75	Upper Silurian	Gorstian	Mayila Complex, Keerhada, S Mayila Mt., Xinjiang, China
<i>Syntagentactinia? angulata</i>	E	—	—	Pouille & Danelian in Pouille et al. 2014: 152	Middle Ordovician	upper Darriwilian	Shundy Formation, Balkhash region, Kazakhstan
Tamonella (248)							
<i>Tamonella aculeata</i>	S	—	—	Feng in Feng et al. 2006a: 37	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
Tetracircinata (206)							
<i>Tetracircinata recondita</i>	L	—	Ts	Nazarov & Ormiston 1984: 74	Lower Permian	Artinskian	Makyutov Complex, Sim Village, Chalyabinskaya Region, Kazakhstan
Tetraedroclathrum (158)							
<i>Tetraedroclathrum cabrierense</i>	—	n.n.	Tn	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
Tetragregnon (207)							
<i>Tetragregnon iowaensis</i>	L	—	—	Nestell, Pope & Nestell 2012: 239	Upper Carboniferous	Moscovian	Mouse Creek Formation, Excello Shale Member, south-central Iowa, USA
<i>Tetragregnon japonicum</i>	L	—	—	Sashida & Tonishi 1985: 13	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Tetragregnon longispinatum</i>	L	—	—	Feng in Feng et al. 2006b: 827	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Tetragregnon nitidus</i>	L	—	—	Nazarov & Ormiston 1985: 23	Middle Permian	Capitanian	Bell Canyon Formation, Guadalupe Mts, Culbertson County, W Texas, USA
<i>Tetragregnon pyramidatus</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 73	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Tetragregnon scalpratus</i>	L	—	—	Nazarov & Ormiston 1985: 23	Middle Permian	Capitanian	Bell Canyon Formation, Guadalupe Mts, Culbertson County, W Texas, USA

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Tetragregnion (207) continuation							
<i>Tetragregnion sphaericus</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 72	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Tetragregnion sycamorensis</i>	L	—	T	Ormiston & Lane 1976: 167	Lower Carboniferous	Tournaisian	Sycamore Limestone, southern Arbuckle Mountains, Oklahoma, USA
<i>Tetragregnion sycamorensis tricarinatus</i>	L	—	—	Won 1983: 166	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Tetragregnion tunicatus</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 74	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Tetragregnion vimineum</i>	L	—	—	Amon, Braun & Chuvashov 1990: 124	Lower Permian	Artinskian	Shelyvaginsk Formation, around Sim Town, Chalyabinskaya region, Urals, Russia
Tetrapylonium							
<i>Tetrapylonium ovatum</i>	—	n.d.	—	Rüst 1892: 174	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Tetraregnion							
<i>Tetraregnon permicus</i>	E	—	—	Kozur & Mostler 1989: 185	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
Tetrasphaera (329)							
<i>Tetrasphaera kuruktagensis</i>	S	—	Th, Ts	Wang in Wang et al. 2008: 397	Middle Ordovician	Dapingian	Heituo Formation, Tarim Basin, Kuruktag region, Xinjiang, China
Tetraspongactinia							
<i>Tetraspongactinia riescheidensis</i>	L	—	—	Won & Seo 2010: 249	Lower Carboniferous	Visean	Bergisches Land, N Westfalia, Germany
<i>Tetraspongactinia triporosa</i>	L	—	—	Won & Seo 2010: 249	Lower Carboniferous	Visean	Bergisches Land, N Westfalia, Germany
Tetraspongoactinia (208)							
<i>Tetraspongoactinia holdsworthi</i>	L	—	T	Won 1998: 257	Lower Carboniferous	Tournaisian	Oese, Rheinische Schiefergebirge, Germany
Tetraspongodiscus							
<i>Tetraspongodiscus stauracanthus</i>	S	—	—	Feng in Feng et al. 2006a: 39	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Tetraspongodiscus tetragonius</i>	S	—	—	Feng in Feng et al. 2006a: 41	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
Tetratormentum (209)							
<i>Tetratormentum acutum</i>	L	—	—	Sashida & Tonishi 1988: 532	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Tetratormentum crateris</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 102	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Tetratormentum diremptum</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 103	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Tetratormentum globiforme</i>	L	—	—	Sashida & Tonishi 1988: 533	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Tetratormentum magniporosa</i>	L	—	—	Won & Seo 2010: 251	Lower Carboniferous	Visean	Bergisches Land, N Westfalia, Germany
<i>Tetratormentum nandanensis</i>	L	—	—	Wu & Feng in Wu et al. 2010: 889	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Tetratormentum narthecium</i>	L	—	T	Nazarov & Ormiston 1985: 42	Upper Carboniferous	Gzhelian	E of Saraktash, Nikol Village, Ural River, Bashkirsk Region, Urals, Russia
<i>Tetratormentum ornistoni</i>	L	—	—	Nestell & Nestell 2010: 48	Middle Permian	Capitanian	Bell Canyon Formation, Apache Mountains, Culberson County, W Texas, USA
<i>Tetratormentum? condensum</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 104	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Tetrentactinia (167)							
<i>Tetrentactinia barysphaera</i>	E	—	T	Foreman 1963: 282	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Tetrentactinia gracilispinosa</i>	E	—	—	Foreman 1963: 284	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Tetrentactinia incondita</i>	E	—	—	Nazarov 1973a: 698	Upper Devonian	Frasnian	Egindinsk Formation, Aitpaika River, N Mugodazhar, S Urals, Kazakhstan
<i>Tetrentactinia inopia</i>	E	—	—	Nazarov in Nazarov et al. 1981: 84	Upper Devonian	Famennian	Duksundinsk Formation, along Duksunda River, Magadan, Russia
<i>Tetrentactinia punciculosa</i>	E	—	—	Nazarov 1975: 74	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
<i>Tetrentactinia quadrispinosa</i>	E	—	—	Foreman 1963: 284	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Tetrentactinia somphosphaera</i>	E	—	—	Foreman 1963: 283	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Tetrentactinia somphozona</i>	E	—	Ts	Foreman 1963: 283	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Tetrentactinia spinulosa</i>	E	—	—	Kiessling & Tragelehn 1994: 238	Upper Devonian	Famennian	Frankenwald, north Bavaria, Germany
<i>Tetrentactinia spongacea</i>	E	—	—	Foreman 1963: 284	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Tetrentactinia teuchestes</i>	E	—	—	Foreman 1963: 283	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
<i>Tetrentactinia veles</i>	E	—	Td	Foreman 1963: 283	Upper Devonian	Famennian	Huron member, Ohio Shale, Ohio, USA
Thecentactinia (126)							
<i>Thecentactinia?</i> <i>indeterminata</i>	E	—	—	Nazarov 1975: 72	Lower Silurian	—	Sakmarsk Formation, Bol'shoy Abimevo Village, Bashkortostan Region, S Urals, Russia
Thecosphaera							
<i>Thecosphaera hexpenetrata</i>	—	n.d.	—	Aberdeen 1940: 134	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
<i>Thecosphaera sexactis</i>	E	—	—	Rüst 1892: 137	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Thecosphaera sicula</i>	—	n.d.	—	Rüst 1892: 137	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Theocampe							
<i>Theocampe bulbosa</i>	—	n.d.	—	Rüst 1892: 185	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Theodiscus							
<i>Theodiscus aculeatus</i>	—	n.d.	—	Hinde & Fox 1895: 639	Carboniferous	Serpukhovian-Bashkirian	Codden Hill bed, Devon, England, UK
<i>Theodiscus brachyacanthus</i>	—	n.d.	—	Rüst 1892: 163	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Theodiscus convexus</i>	—	n.d.	—	Rüst 1892: 163	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Theodiscus gigas</i>	—	n.d.	—	Rüst 1892: 163	Lower Silurian	—	Cabrières, Hérault, France
<i>Theodiscus hastatus</i>	E	—	—	Hinde 1899a: 53	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Theodiscus planus</i>	—	n.d.	—	Rüst 1892: 163	Lower Silurian	—	Cabrières, Hérault, France
Theosyringium							
<i>Theosyringium praecox</i>	—	n.d.	—	Rüst 1892: 184	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Tlecerina (159)							
<i>Tlecerina exilis</i>	E	—	—	Furutani 1983: 111	Lower Devonian	Emsian	Nakahata Formation, S Mt. Yokokurayama, Ochi Town, Kochi, Shikoku, Japan
<i>Tlecerina fenestrata</i>	E	—	—	Furutani 1983: 111	Lower Devonian	Emsian	Nakahata Formation, S Mt. Yokokurayama, Ochi Town, Kochi, Shikoku, Japan
<i>Tlecerina horrida</i>	E	—	T	Furutani 1983: 110	Lower Devonian	Emsian	Nakahata Formation, S Mt. Yokokurayama, Ochi Town, Kochi, Shikoku, Japan
<i>Tlecerina isensis</i>	E	—	—	Kurihara & Sashida 2000: 62	Lower Devonian	Emsian	Shibasudani Formation, Shibasudani Valley, Ohno City, Fukui Prefecture, Japan

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Tomentum (216)							
<i>Tomentum aequilateralis</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 97	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Tomentum aequilateralis orbiculatum</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 97	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Tomentum circumfluum</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 100	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Tomentum circumfusum</i>	L	—	—	Nazarov & Ormiston 1985: 40	Lower Permian	Sakmarian	Maloik Formation, Don Village, Ural River, Orenburgskaya Region, S Urals, Russia
<i>Tomentum coarctatum</i>	L	—	—	Nazarov & Ormiston 1993: 44	Upper Carboniferous	Moscovian	Popovka River in Prikolyma area, Magadan Region, Russia
<i>Tomentum complicatum</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 100	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Tomentum delicatum</i>	L	—	—	Nazarov & Ormiston 1985: 40	Middle Permian	Roadian	Bell Canyon Formation, Guadalupe Mts, Culbertson County, W Texas, USA
<i>Tomentum orientalis</i>	L	—	—	Nazarov & Ormiston 1993: 44	Upper Carboniferous	Moscovian	Popovka River in Prikolyma area, Magadan Region, Russia
<i>Tomentum pervagatum</i>	L	—	—	Nazarov & Ormiston 1985: 40	Upper Carboniferous	Gzhelian	E of Saraktash, Nikol Village, Ural River, Bashkirsk Region, Urals, Russia
<i>Tomentum protei</i>	L	—	T	Nazarov & Ormiston 1983b: 376	Upper Carboniferous	Gzhelian	E of Saraktash, Nikol Village, Ural River, Bashkirsk Region, Urals, Russia
<i>Tomentum protei</i>	—	inv.	—	Nazarov & Ormiston 1985: 40	Upper Carboniferous	Gzhelian	E of Saraktash, Nikol Village, Ural River, Bashkirsk Region, Urals, Russia
<i>Tomentum protei pannosum</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 95	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Tomentum rotundatum</i>	L	—	—	Feng in Feng et al. 2006b: 831	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Tomentum sertulum</i>	L	—	—	Nazarov & Ormiston 1985: 41	Middle Permian	Capitanian	Bell Canyon Formation, Hegler Limestone, Culberson County, W Texas, USA
<i>Tomentum subrotundatum</i>	L	—	—	Nazarov in Isakova & Nazarov 1986: 99	Upper Carboniferous	Gzhelian	Saraktash, Nikol Village, Southern Urals, Russia
<i>Tomentum? inflatum</i>	L	—	—	Nazarov & Ormiston 1985: 41	Middle Permian	Capitanian	Bell Canyon Formation, Hegler Limestone, Culberson County, W Texas, USA
Totillum (232)							
<i>Totillum blomei</i>	N?	—	T	Schwartzapfel & Holdsworth 1996: 146	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA
<i>Totillum undulatum</i>	N?	—	—	Schwartzapfel & Holdsworth 1996: 144	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA
<i>Totillum ziegleri</i>	N?	—	—	Schwartzapfel & Holdsworth 1996: 145	Upper Devonian	upper Famennian	Woodford Formation, Locality 1, Carter County, Oklahoma, USA
Triactiscus							
<i>Triactiscus lanceola</i>	E?	—	—	Hinde 1899a: 53	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
Triactofenestrella (178)							
<i>Triactofenestrella nicolica</i>	L	—	Ts	Nazarov & Ormiston 1984: 79	Upper Carboniferous	Gzhelian	Makyutov Complex, Tarangul River, Kosistek Village, Southern Ural, Kazakhstan
Triaenoentactinosphaera (169)							
<i>Triaenoentactinosphaera regularia</i>	E	—	Ts	Wang 1997: 156	Upper Devonian	Famennian	Gennaren Formation, S Utubulak, NW Jungar Basin, Xinjiang, China
Triaenosphaera (168)							
<i>Triaenosphaera hebes</i>	E	—	—	Won 1983: 167	Lower Carboniferous	Visean	Rheinisches Schiefergebirge, Frankenwald, Germany
<i>Triaenosphaera longispina</i>	E	—	—	Sashida in Sashida et al. 2000b: 250	Lower Carboniferous	Tournaisian	Khlong Kon Limestone, along Highway 42, Saba Yoi area, SE Thailand

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Triaenospaera</i> (168) continuation							
<i>Triaenospaera megacantha</i>	E	—	—	Feng in Feng et al. 2007: 29	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Triaenospaera minuscula</i>	E	—	—	Braun 1989: 89	Lower Carboniferous	upper Tournaisian	Pebbles of siliceous shale from the lower Main-valley near Frankfurt a. M., Germany
<i>Triaenospaera minutus</i>	E	—	—	Sashida & Tonishi 1988: 530	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Triaenospaera sicarius</i>	—	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Triaenospaera sicarius</i>	E	—	T	Deflandre 1973c: 1150	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Triaenospaera tetraculeata</i>	E	—	—	Park & Won 2012: 55	Lower Carboniferous	Tournaisian	Woodman Formation, South Lakeside Mts., Tooele County, Utah, USA
<i>Triaenospaera variabilis</i>	E	—	—	Feng in Feng et al. 2007: 29	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Triaenospaera?</i> <i>bareillensis</i>	E	—	—	Gourmelon 1986: 187	Lower Carboniferous	Tournaisian	Hautes-Pyrénées, France
<i>Triaenospaera?</i> <i>leherissei</i>	E	—	—	Gourmelon 1987: 66	Lower Carboniferous	Tournaisian	Cabrières, Hérault, France
<i>Tricolocapsa</i>							
<i>Tricolocapsa abdominalis</i>	—	n.d.	—	Rüst 1892: 186	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Tricolocapsa anceps</i>	—	n.d.	—	Rüst 1892: 185	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Tricolocapsa grandaeva</i>	—	n.d.	—	Rüst 1892: 185	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Tricolocapsa thoracica</i>	—	n.d.	—	Rüst 1892: 186	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Trifidospongus</i> (179)							
<i>Trifidospongus angustus</i>	L	—	—	Noble & Renne 1990: 389	Middle Permian	Roadian	Dekkas Formation, Eastern Klamath Mountains, California, USA
<i>Trifidospongus dekkasensis</i>	L	—	Ts	Noble & Renne 1990: 388	Middle Permian	Roadian	Dekkas Formation, Eastern Klamath Mountains, California, USA
<i>Trigonospaera</i> (306)							
<i>Trigonospaera calvata</i>	IS (O&F)	—	T	Feng in Feng et al. 2004a: 142	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Trilacertus</i> (187)							
<i>Trilacertus baumgartneri</i>	L	—	Ts	Cheng 1986: 178	Lower Carboniferous	Serpukhovian	Sand Branch Member of Caney Formation, Pittsburg County, Oklahoma, USA
<i>Trilacertus delicatus</i>	L	—	—	Cheng 1986: 178	Upper Carboniferous	Bashkirian	Wesley Formation, Turnpike section, Pittsburg County, Oklahoma, USA
<i>Trilacertus densus</i>	L	—	—	Cheng 1986: 179	Lower Carboniferous	Serpukhovian	Sand Branch Member of Caney Formation, Pittsburg County, Oklahoma, USA
<i>Trilonche</i> (127)							
<i>Trilonche chiangdaensis</i>	E	—	—	Wonganan & Caridroit 2005: 46	Upper Devonian	Famennian	Chiang Dao chert, along the Road 1150 for Phrao City, Chiang Mai, northern Thailand
<i>Trilonche cimelia</i>	E	—	—	Ormiston & Lane 1976: 167	Lower Carboniferous	Tournaisian	Sycamore Limestone, southern Arbuckle Mountains, Oklahoma, USA
<i>Trilonche crassus</i>	E	—	—	He & Feng in He et al. 2011: 491	Upper Permian	Changhsingian	Talung Formation, Hushan section, Nanjing, Jiangsu Region, China
<i>Trilonche dihelicis</i>	E	—	—	Wonganan & Caridroit 2005: 46	Upper Devonian	Famennian	Chiang Dao chert, along the Road 1150 for Phrao City, Chiang Mai, northern Thailand
<i>Trilonche elegans</i>	E	—	—	Hinde 1899a: 48	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Trilonche</i> (127) continuation							
<i>Trilonche nanningensis</i>	E	—	—	Luo, Aitchison & Wang 2002: 118	Middle Devonian	Givetian	Tanhe Formation, Wuxiangling section, S of Nanning, Guangxi Zhuang Region, SW China
<i>Trilonche parapalimbola</i>	E	—	—	Wang in Wang et al. 2003: 133	Upper Devonian	Famennian	Shiti Reservoir Formation, E Banceng, Guangxi Zhuang Region, SW China
<i>Trilonche pittmani</i>	E	—	—	Hinde 1899a: 48	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Trilonche remosa</i>	E	—	—	Luo, Aitchison & Wang 2002: 119	Middle Devonian	Givetian	Tanhe Formation, Wuxiangling section, S of Nanning, Guangxi Zhuang Region, SW China
<i>Trilonche tanheensis</i>	E	—	—	Luo, Aitchison & Wang 2002: 119	Middle Devonian	Givetian	Tanhe Formation, Wuxiangling section, S of Nanning, Guangxi Zhuang Region, SW China
<i>Trilonche textilis</i>	E	—	—	Feng in Feng et al. 2007: 25	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Trilonche trifoliolata</i>	E	—	—	Umeda 1997: 422	Upper Silurian	Pridoli	Jyoro Formation, Kurosegawa Belt, Mt. Konomori, Kochi City, Shikoku, Japan
<i>Trilonche vachardi</i>	E	—	—	Wonganan & Caridroit 2005: 48	Upper Devonian	Frasnian	Chiang Dao chert, along the Road 1150 for Phrao City, Chiang Mai, northern Thailand
<i>Trilonche vetusta</i>	E	—	T	Hinde 1899a: 48	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Trilonche xinpoensis</i>	E	—	—	Luo, Aitchison & Wang 2002: 120	Middle Devonian	Givetian	Tanhe Formation, Wuxiangling section, S of Nanning, Guangxi Zhuang Region, SW China
<i>Trilonche yaoi</i>	E	—	—	Zhang, Xia, Dong & Shang 2008: 188	Lower Carboniferous	lower Tournaisian	Bancheng Formation, SE Guangxi, China
<i>Tripilidium</i>							
<i>Tripilidium dissociatum</i>	—	n.d.	—	Rüst 1892: 178	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Triplanospongios</i> (180)							
<i>Triplanospongios musashiensis</i>	L	—	Ts	Sashida & Tonishi 1988: 536	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Triplococcus</i> (266)							
<i>Triplococcus acanthicus</i>	S	—	T	Danelian & Popov 2003: 333	Lower Ordovician	Floian	Akzhai Mts. S of Betpak-Dala desert, Kazakhstan
<i>Triplococcus aksuranensis</i>	S	—	—	Pouille & Danelian in Pouille et al. 2013: 1147	Middle Ordovician	upper Darriwilian	Shundy Formation, Balkhash region, Kazakhstan
<i>Triposphaera</i> (330)							
<i>Triposphaera armata</i>	—	n.d.	—	Hinde 1890: 56	Middle Ordovician	Darriwilian	Southern Uplands, Peeblesshire, Scotland, UK
<i>Triposphaera densa</i>	—	n.d.	—	Hinde 1890: 55	Middle Ordovician	Darriwilian	Southern Uplands, Peebleshire, Scotland, UK
<i>Triposphaera hastata</i>	—	n.d.	—	Hinde 1890: 55	Middle Ordovician	Darriwilian	Southern Uplands, Peebleshire, Scotland, UK
<i>Triposphaera maxima</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1576	Lower Ordovician	Floian	Normanskill chert, Fly Summit, Washington County, New York, USA
<i>Triposphaera peachii</i>	—	n.d.	Td	Hinde 1890: 55	Middle Ordovician	Darriwilian	Southern Uplands, Peebleshire, Scotland, UK
<i>Triposphaera permica</i>	E	—	—	Kozur & Mostler 1989: 191	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Triposphaera permica irregularis</i>	E	—	—	Kozur & Mostler 1989: 191	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Triposphaera permica permica</i>	E	—	—	Kozur & Mostler 1989: 191	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Triposphaera tetrasphaera</i>	E	—	—	Kozur & Mostler 1989: 191	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
<i>Triplosphaera</i> (330) continuation							
<i>Triplosphaera tribrachiata</i>	E	—	—	Kozur & Mostler 1989: 191	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Triplosphaera uralica</i>	E	—	—	Kozur & Mostler 1989: 192	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Triplosphaera woni</i>	E	—	—	Kozur & Mostler 1989: 192	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Triplosphaera? dumitricai</i>	E	—	—	Kozur & Mostler 1989: 190	Lower Permian	Sakmarian	Sarabil Formation, Sakmarskiy, Orenburgskaya Region, S Urals, Russia
<i>Trissocircus</i>							
<i>Trissocircus primaevus</i>	—	n.d.	—	Rüst 1892: 177	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
<i>Trissocircus quadratus</i>	—	n.d.	—	Rüst 1892: 177	Lower Devonian	—	Southern Urals, Russia
<i>Trochodiscus</i>							
<i>Trochodiscus convexus</i>	E	—	—	Rüst 1892: 164	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Trochodiscus diversispinus</i>	—	n.d.	—	Rüst 1892: 164	Lower Silurian	—	Cabrières, Hérault, France
<i>Trochodiscus longispinus</i>	—	n.d.	—	Rüst 1892: 165	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Trochodiscus nicholsoni</i>	E	—	—	Rüst 1892: 164	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Trochodiscus planatus</i>	E	—	—	Hinde 1899a: 53	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Trochodiscus proavus</i>	—	n.d.	—	Rüst 1892: 164	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Trochodiscus recurvispinus</i>	—	n.d.	—	Rüst 1892: 164	Upper Devonian	—	Schaebenholz, Harz Mountains, Elbingerode, Germany
<i>Trochodiscus serrula</i>	—	n.d.	—	Rüst 1892: 164	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Trochodiscus? dubius</i>	—	n.d.	—	Hinde 1899b: 218	Middle Devonian	Givetian	Chypons Farm, Mullion Parish, Cornwall, England, UK
<i>Tuscaritellum</i> (233)							
<i>Tuscaritellum imitatum</i>	N?	—	—	Deflandre 1972a: 3536	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Tuscaritellum imitatum</i>	N?	—	Ts	Deflandre 1972b: 16	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Uberinterna</i> (128)							
<i>Uberinterna virgispinosum</i>	E	—	T	Sashida & Tonishi 1988: 531	Upper Permian	Changhsingian	Ohirayama Unit, South Chichibu Belt, Kashiwara, Akigawa River, Akiruno City, Tokyo, Japan
<i>Ulcundia</i> (331)							
<i>Ulcundia incompta</i>	—	n.d.	Td	Nazarov 1974b: 111	Middle Ordovician	Darriwilian	Erzhansk Formation, Lake Sasykser, NE Central Kazakhstan
<i>Varispiculum</i> (59)							
<i>Varispiculum ectospiculatum</i>	Ar	—	—	Won & Iams 2015a: 17	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Varispiculum? delicatum</i>	Ar	—	—	Won & Iams 2015a: 18	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Varispiculum? radiatum</i>	Ar	—	—	Won & Iams 2015a: 19	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Wangia</i> (332)							
<i>Wangia biturbinata</i>	—	n.n.	—	Feng 1992: 57	Upper Permian	Changhsingian	Muyinhe Formation, Nanpan, Lancang County, Yunnan, China
<i>Wangia biturbinata</i>	—	n.d.	Td	Feng & Liu 1993: 544	Upper Permian	Changhsingian	Muyinhe Formation, Nanpan, Lancang County, Yunnan, China
<i>Wangia elegans</i>	—	n.n.	—	Feng 1992: 57	Upper Permian	Changhsingian	Muyinhe Formation, Nanpan, Lancang County, Yunnan, China
<i>Wangia elegans</i>	—	n.d.	—	Feng & Liu 1993: 544	Upper Permian	Changhsingian	Muyinhe Formation, Nanpan, Lancang County, Yunnan, China
<i>Wangia kangwuensis</i>	—	n.d.	—	Feng, Fang, Zhang & Huang 1998: 240	Upper Permian	Changhsingian	Papai Formation of Changning-Menglian Belt, Papai Village, Cangyuan County, Yunnan, China

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880–2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Westernbrookia (60)							
<i>Westernbrookia cancella</i>	Ar	—	—	Won, Iams & Reed 2007: 521	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Westernbrookia diversa</i>	Ar	—	T	Won, Iams & Reed 2007: 519	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
<i>Westernbrookia incohota</i>	Ar	—	—	Won & Iams 2013: 23	Lower Ordovician	Floian	Cow Head Group, Western Newfoundland, Canada
<i>Westernbrookia ovata</i>	Ar	—	—	Won, Iams & Reed 2007: 519	Lower Ordovician	lower-middle Tremadocian	Cow Head Group, Western Newfoundland, Canada
Wuyia (130)							
<i>Wuyia dongpanica</i>	E	—	T	Feng in Feng et al. 2007: 33	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
Xiphachistrella (28)							
<i>Xiphachistrella acipensis</i>	Al	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Xiphachistrella acipensis</i>	Al	n.n.	—	Deflandre 1973a: 292	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Xiphachistrella acipensis</i>	Al	—	Ts	Deflandre 1973b: 500	Lower Carboniferous	Visean	Cabrières, Hérault, France
Xiphocabrium (41)							
<i>Xiphocabrium rigidum</i>	Al	n.n.	—	Deflandre 1973a: 293	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Xiphocabrium rigidum</i>	Al	—	T	Deflandre 1973b: 500	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Xiphocabrium?</i> <i>aprelevkensis</i>	Al	n.n.	—	Afanasieva 1997a: 221	Upper Devonian	middle Frasnian	Domanik Formation, borehole Shuda-Yag 1003, SW of Uktha, Timan-Pechora Basin, Russia
Xiphocladiella (42)							
<i>Xiphocladiella cuja</i>	Al	n.n.	—	Deflandre 1960: 216	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Xiphocladiella cuja</i>	Al	n.n.	—	Deflandre 1973a: 291	Lower Carboniferous	Visean	Cabrières, Hérault, France
<i>Xiphocladiella cuja</i>	Al	—	T	Deflandre 1973b: 499	Lower Carboniferous	Visean	Cabrières, Hérault, France
Xiphosphaera							
<i>Xiphosphaera brachyacantha</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1569	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Xiphosphaera macracantha</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1569	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Xiphosphaera macrostyla</i>	—	n.d.	—	Rüst 1892: 141	Lower Silurian	—	Cabrières, Hérault, France
<i>Xiphosphaera minax</i>	E	—	—	Hinde 1899a: 45	Middle Devonian	Givetian	Yarramie Formation, Tamworth Belt, northern NSW Australia
<i>Xiphosphaera parva</i>	—	n.d.	—	Ruedemann & Wilson 1936: 1569	Lower Ordovician	Floian	Deepkill shale, Mt. Merino, Columbia County, New York, USA
<i>Xiphosphaera spinifera</i>	—	n.d.	—	Pulfrey 1932: 195	Lower Carboniferous	Serpukhovian	Calver Sough, Derbyshire, England, UK
Xiphostylus							
<i>Xiphostylus ardea</i>	—	n.d.	—	Rüst 1892: 142	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Xiphostylus asper</i>	—	n.d.	—	Rüst 1892: 142	Lower Silurian	—	Langenstriegis, Germany
<i>Xiphostylus inclinatus</i>	—	n.d.	—	Aberdeen 1940: 135	Upper Devonian	Famennian	Caballos Formation, Marathon Basin, Texas, USA
Yujingella							
<i>Yujingella triacantha</i>	S	—	T	Feng in Feng et al. 2006a: 33	Late Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China

APPENDIX 1. — Continuation of the inventory of Paleozoic radiolarian species (1880-2016).

Original combination	Order	Status	Type	Original description (authorships of cited taxa)	Age originally assigned to n-b type	Stage	Stratigraphic unit from which n-b type was described
Zadrappolus (267)							
<i>Zadrappolus lunaris</i>	S	—	—	Noble 1994: 32	Upper Silurian	Pridoli	Caballos Novaculite Formation, Payne Hills, Bourland Mts., Marathon Basin, W Texas, USA
<i>Zadrappolus spinosus</i>	S	—	—	Furutani 1990: 37	Upper Silurian	Gorstian	Hitoegane Formation, Hida-gaien Belt, E of Hitoegane, Fukuji area, Takayama City, Japan
<i>Zadrappolus tenuis</i>	S	—	—	Furutani 1990: 36	Upper Silurian	Pridoli	Yoshiki Formation, Hida-gaien Belt, Ichinotani Valley, Fukuji area, Takayama City, Gifu, Japan
<i>Zadrappolus yoshikiensis</i>	S	—	T	Furutani 1990: 35	Upper Silurian	Pridoli	Yoshiki Formation, Hida-gaien Belt, Ichinotani Valley, Fukuji area, Takayama City, Gifu, Japan
<i>Zadrappolus?</i> <i>hitoeganensis</i>	S	—	—	Furutani 1990: 37	Upper Silurian	Ludfordian	Hitoegane Formation, Hida-gaien Belt, E of Hitoegane, Fukuji area, Takayama City, Japan
<i>Zadrappolus? nudus</i>	S	—	—	Kurihara 2007: 230	Lower Devonian	Emsian	Hitoegane Formation, Hitoegane Forest Road, Hitoegane, Takayama, Japan
Zhuangodiscus (275)							
<i>Zhuangodiscus biacanthus</i>	S	—	—	Wu & Feng in Wu et al. 2010: 887	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Zhuangodiscus orthacanthus</i>	S	—	T	Wu & Feng in Wu et al. 2010: 887	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
<i>Zhuangodiscus pentacanthus</i>	S	—	—	Wu & Feng in Wu et al. 2010: 889	Upper Permian	Changhsingian	Dalong Formation, Dongpan section, Dongpan Village, Guangxi Zhuang Region, China
Zonodiscus							
<i>Zonodiscus dentatus</i>	—	n.d.	—	Rüst 1892: 162	Lower Silurian	—	Cabrières, Hérault, France
<i>Zonodiscus macrozona</i>	—	n.d.	—	Rüst 1892: 162	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
Zygocircus							
<i>Zygocircus priscus</i>	—	n.d.	—	Rüst 1892: 176	Lower Carboniferous	—	Kieselschiefer, Harz, Germany
<i>Zygocircus simplicissimus</i>	—	n.d.	—	Rüst 1892: 176	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy
Zygorsterhanus							
<i>Zygorsterhanus quadrupes</i>	—	n.d.	—	Rüst 1892: 177	Upper Permian	—	Sosio Valley Area, Western Sicily, Italy