

Clarifying the nomenclatural uncertainties
surrounding *Cistus pouzolzii* Delile, *C.* × *florentinus* Lam.,
and *C.* × *varius* Pourr. (Cistaceae)

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Clarifying the nomenclatural uncertainties surrounding *Cistus pouzolzii* Delile, *C. × florentinus* Lam., and *C. × varius* Pourr. (Cistaceae)

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ABSTRACT

Three names in the genus *Cistus* L. are analysed from a nomenclatural perspective: *Cistus pouzolzii* Delile, *C. × florentinus* Lam., and *C. × varius* Pourr. The corresponding lectotypes for *C. pouzolzii* Delile and *C. varius* Pourr. are designated based on specimens preserved in the herbarium of Muséum national d'Histoire naturelle de Paris, at P. The name *C. × florentinus* was studied by Demoly, who designated its lectotype from a specimen preserved in the P herbarium in 1994. Through the typification of *C. × varius* Pourr., we conclude, as Demoly previously stated, that the name *C. varius* Pourr. should definitively be considered a later synonym of *C. × florentinus* Lam., the priority name for naming the hybrid between *C. monspeliensis* L. and *C. salviifolius* L. Finally, the lectotypification of *C. pouzolzii* L. led us to conclude that it is an independent species unrelated to the aforementioned hybrid.

KEY WORDS

Cistaceae,
Cistus,
hybrid,
Mediterranean Basin,
lectotypification.

RÉSUMÉ

Clarification des incertitudes nomenclaturales entourant Cistus pouzolzii Delile, C. × florentinus Lam. et C. × varius Pourr. (Cistaceae).

Trois noms du genre *Cistus* L. sont analysés d'un point de vue nomenclatural : *Cistus pouzolzii* Delile, *C. florentinus* Lam. et *C. × varius* Pourr. Les lectotypes correspondants pour *C. pouzolzii* Delile et *C. × varius* sont désignés sur la base des spécimens conservés dans l'herbier du Muséum national d'Histoire naturelle de Paris, à P. Le nom *C. florentinus* Lam. a été étudié par Demoly qui, en 1994, a désigné son lectotype à partir d'un spécimen conservé dans l'herbier P. Grâce à la typification de *C. × varius* Pourr., nous concluons, comme Demoly l'a déjà indiqué, que le nom *C. × varius* doit être définitivement considéré comme un synonyme ultérieur de *C. florentinus* Lam., le nom prioritaire pour nommer l'hybride entre *C. monspeliensis* L. et *C. salviifolius* L. Enfin, la lectotypification de *C. pouzolzii* Delile nous a permis de conclure qu'il s'agit d'une espèce indépendante non liée à l'hybride susmentionné.

MOTS CLÉS

Cistaceae,
Cistus,
hybride,
bassin méditerranéen,
lectotypification.

INTRODUCTION

The genus *Cistus* L., including *Halimium* (Dunal) Spach, contains 34 accepted species (48 taxa considering subspecies) and approximately 80 nothotaxa, however, more than 850 names have been published (Dunal 1824; Sweet 1825-1830; Spach 1836; Grosser 1903; Dansereau 1939; Guzmán & Vargas 2005; POWO 2024; WFO 2024). Typification through the study of protologues and original materials is essential for the correct application of names and their synonyms.

Cistus pouzolzii Delile is a western Mediterranean species, previously known from southern France, Algeria, Morocco, and recently found in the Iberian Peninsula (Sánchez-Gómez *et al.* 2024). Morphological (e.g., Grenier & Godron 1847; Pouzol 1857; Willkomm 1857-1863; Gard 1912; Warburg & Warburg 1930) and genetic studies (e.g., Guzmán & Vargas 2005, 2009, 2010; Guzmán *et al.* 2009; Civeyrel *et al.* 2011; Totta *et al.* 2016; Sánchez-Gómez *et al.* 2024) confirm that *C. pouzolzii* is a distinct species. However, since the description of *C. pouzolzii* (Delile 1840), different names have been used to refer to this species (e.g., *C. varius* Pourr., pro sp. and pro hybr. as *C. × varius* and *C. × florentinus* Lam., as a hybrid between *C. crispus* L. and *C. monspeliensis* L.).

The name *C. varius* Pourr. was considered a priority name for *C. pouzolzii* for a long time (Clos 1858; Timbal-Lagrave 1875; Willkomm 1878; Battandier & Trabut 1888; Warburg & Warburg 1930; Dansereau 1939; Warburg 1968; Greuter *et al.* 1984). However, neither the locality nor the description of Pourret's protologue (1788) fit the characteristics of *C. pouzolzii* (Rouy & Foucaud 1895; Aubin 1985, 1986, 1990).

Grosser (1903: 30) also synonymised it with *C. × varius*, but considered it as a hybrid between *C. crispus* and *C. monspeliensis* L., an opinion followed by Martín-Bolaños & Guinea (1949: 169-173) and also suggested as a possibility by Warburg (1968). M. Bornet performed artificial crosses, however, this hybrid could not be obtained (Gard 1907, 1910, 1912). Furthermore, it was not found in nature until the recent description of the supposed hybrid *C. pintii* F. M. Vázquez Pardo (Bellard & Hervás 2021; Tejerina & Vázquez 2023).

On the other hand, *C. × varius* has been interpreted as a hybrid between *C. monspeliensis* L. and *C. salviifolius* L. and

in this case, the priority name is *C. × florentinus* (Lamarck 1786; Rouy & Foucaud 1895; Dobignard & Chatelain 2011; Tison & de Foucault 2014). *Cistus × florentinus* is a relatively common hybrid in the Mediterranean region when both parental species are present. It has also been introduced as an ornamental plant in various parts of the world (Şen & Duman 2021; GBIF 2023). This hybrid is often fertile and backcrosses with the parent species (Dansereau 1943), which have been recently typified (Ferrer-Gallego *et al.* 2013).

Some of the *Cistus* species described by Lamarck or Pourret have also been typified (Carazo & Jiménez 1989; Demoly 2002, 2006; Ibáñez *et al.* 2009; Ferrer-Gallego 2016; Tejerina & Vázquez 2021). However, the application of the name *C. × varius*, its confusion with *C. pouzolzii*, and its relationship with *C. × florentinus* still need to be clarified.

The discovery of original material and the typification of these three names have allowed for the correct application of the names and clarified a nomenclatural debate that has lasted for over 200 years.

MATERIAL AND METHODS

A bibliographic search of the studied names, including manuscripts from various electronic repositories, was conducted. Images of herbarium sheets from the following herbaria have been reviewed. The codes follow Thiers (2025).

HERBARIUM ABBREVIATIONS

ABH	Universidad de Alicante, Alicante;
BC	Institut Botànic de Barcelona, Barcelona;
BM	The Natural History Museum, London;
BR	Meise Botanic Garden, Meise;
COI	Herbarium of the University of Coimbra, Coimbra;
FI	University of Florence, University Museum System, Museum of Natural History, Firenze;
CJBG (G)	Jardin Botanique de Genève, Genève;
LY	Université Claude Bernard Lyon 1, Lyon;
MA	Real Jardín Botánico-CSIC Madrid;
MAF	Facultad de Farmacia, Universidad Complutense, Madrid;
MPU	Université de Montpellier Montpellier;
MUB	Universidad de Murcia, Murcia;
MW	Moscow State University, Moscow;
OXF	University of Oxford Oxford;
P	Muséum national d'Histoire naturelle, Paris;

SBT	The Bergius Foundation at the Royal Swedish Academy of Sciences;
SLA	Société des Lettres, Sciences et Arts de l'Aveyron, Rodez;
UPS	Museum of Evolution Uppsala.

For typification purpose, diagnoses, descriptions, and other information in the protologues, as well as herbarium specimens that may constitute the original material were studied.

To identify the authors of the labels on the sheets, the handwriting has been compared with those available in various publications and manuscripts, including the handwriting of William Sherard (1659-1728) (Ghazanfar & Osborne 2015), Sébastien Vaillant (1669-1722), Pietro Antonio Micheli (1679-1737) (Università di Firenze 2018), Jean Baptiste Monet de Lamarck (1744-1829) (Lamarck 1816; Dean 1908; Burdet 1976), Antoine-Laurent (1748-1836) and Adrien de Jussieu (1797-1853) (Burdet 1976), Pierre André Pourret (1754-1818) (Ibáñez *et al.* 2009; RJB-CSIC 2024), Alire Raffeneau Delile (1778-1850) (Burdet 1974), Pierre Marie Casimir de Pouzolz (1785-1858) and Édouard Spach (1801-1879) (Burdet 1978).

The handling and measurement of the images of herbarium specimens were performed using the digital tool Annotate-on v1.9.56 RECOLNAT-ANR-11-INBS-0004 (Pignal *et al.* 2024).

For nomenclatural information, the *International Code of Nomenclature for algae, fungi, and plants* (Shenzhen Code) (Turland *et al.* 2018) was followed, providing bibliographic references, the protologue locality and type material.

The currently accepted names are *Cistus pouzolzii* Delile and *Cistus × florentinus* Lam.

TYPIFICATIONS AND NOTES

Family CISTACEAE Juss.
Genus *Cistus* L.

Cistus pouzolzii Delile
(Fig. 1)

Supplementum seminum anni 1839, ex Horto Botanico regio Monspeliensi: 2 (Delile 1840).

TYPE MATERIAL. — France • Gard, La Grand-Combe près d'Alais et le Vigan; s.d.; *P.M.C. de Pouzolz* [s.n.]; lectotype: P[P00789786]! (Fig. 1), here designated.

TYPIFICATION REMARKS

Cistus pouzolzii was discovered by Pierre Marie Casimir de Pouzolz and validly published by Delile (1840) as a new species from the *Hortus regius Monspeliensis*. The diagnosis of the protologue is very precise: “*Cistus Pouzolzii*. *Nova species in Hort. Monsp. Cinereo-glaucus, pilosus; foliis sessilibus oblongis nervosis, vernalibus margine crispis; pedunculis cymosis subsecundis; calycis fructiferi sepalis exterioribus auriculato-cordatis, capsula ovata, apice sericeo-pilosula*” [*Cistus Pouzolzii*. New species in Hort. Monsp. Cinereous-glaucous, pilose; leaves sessile oblong nervose, vernalis with crispate margins; peduncles subsecondly cymose; fruiting calyx outer sepals

auriculate-cordate, capsule ovate with apex sericeous-pilosulose]. In addition to the Latin diagnosis, a French text is included with the indication of the type locality and the mention of the collector: “Cette espèce a été découverte dans le département du Gard, aux environs des villes d'Alais et du Vigan, par M. le capitaine De Pouzolz, de Nîmes, qui [s]’est occupé avec succès [sic.] du perfectionnement de la flore de France et de celle d'Espagne.” [This species was discovered in the department of Gard, near the towns of Alais and Vigan, by Captain De Pouzolz, from Nîmes, who successfully worked on improving the flora of France and that of Spain.]

Delile’s herbarium is preserved at the University of Montpellier (MPU), with duplicates in other herbaria (Stafleu & Cowan 1976-1988). Seven sheets collected by Pouzolz between 1833 and 1838 have been located at MPU (MPU013797, MPU013798, MPU013799, MPU013800, MPU013801, MPU013802 and MPU013803), which, in addition to the original labels, were also labelled as “Isosyntype” by Andrine J. M. Faure. Further material at M, barcoded M0112494, bears a label without date but with the handwriting and signature of Delile (see Burdet 1974: 233): “HERBARIUM REGIUM MONACENSE. / *Cistus Pouzolzii* / quae habent semina non germinaverunt / [signature of Delile] / D’alais. France meridionale / Delile / HERB. ZUCCARINII. / Herb. Univ. Ludov. Maximil.”. This specimen is a duplicate given by Delile to Joseph Gerhard Zuccarini (b.-d.), second curator of the herbarium of Munich (1835-1848); his herbarium was incorporated into M in 1849 (Hertel & Schreiber 1988).

At P, a relevant sheet barcoded P00789786 bears three labels, but without any date. Label 1 [handwritten by Delile]: “*Cistus pouzolzii* – Alais / (Gard)”; Label 2 [handwritten by Pouzolz]: “*Cistus pouzolzii* Delile / la grand-combe près d'Alais / le Vigan / de Pouzolz”; Label 3 [printed label]: “HERB. MUS. PARIS. / Herbier donné par M. Loret.” The sheet is part of the herbarium donated by Henri Loret (1811-1888) to the *Herbier du Muséum de Paris*. Loret was in charge of the herbaria of the Université de Montpellier (Stafleu & Cowan 1976-1988; Decoursier-Sandoz & Charpin 2023).

In conclusion, considering the handwritten labels and the collection dates, all the specimens mentioned above can be part of the original material used by Delile to describe his species. Unfortunately, none of these specimens belong to the same gathering, so they are not duplicates. Perhaps the only duplicates could be specimens MPU013797 and MPU013802, both collected in June 1837, apparently from the same locality. However, we selected the specimen barcoded P00789786 as the lectotype of the name *Cistus pouzolzii*. Its characters coincide completely with the diagnosis, as do the collector and the locality mentioned in the protologue. Furthermore, the specimen (leaves sessile, oblong with undulate margin; unilateral cyme; fruiting sepals cordate-ovate; petals equal to sepals in anthesis) is very complete and well preserved, which coincides with the traditional concept and current usage of the name (Rouy & Foucaud 1895; Tison & de Foucault 2014; Sánchez-Gómez *et al.* 2024).



FIG. 1. — Lectotype of *Cistus pouzolzii* Delile. (P00789786).



Fig. 2. — Lectotype of *Cistus florentinus* Lam. (P06986452).

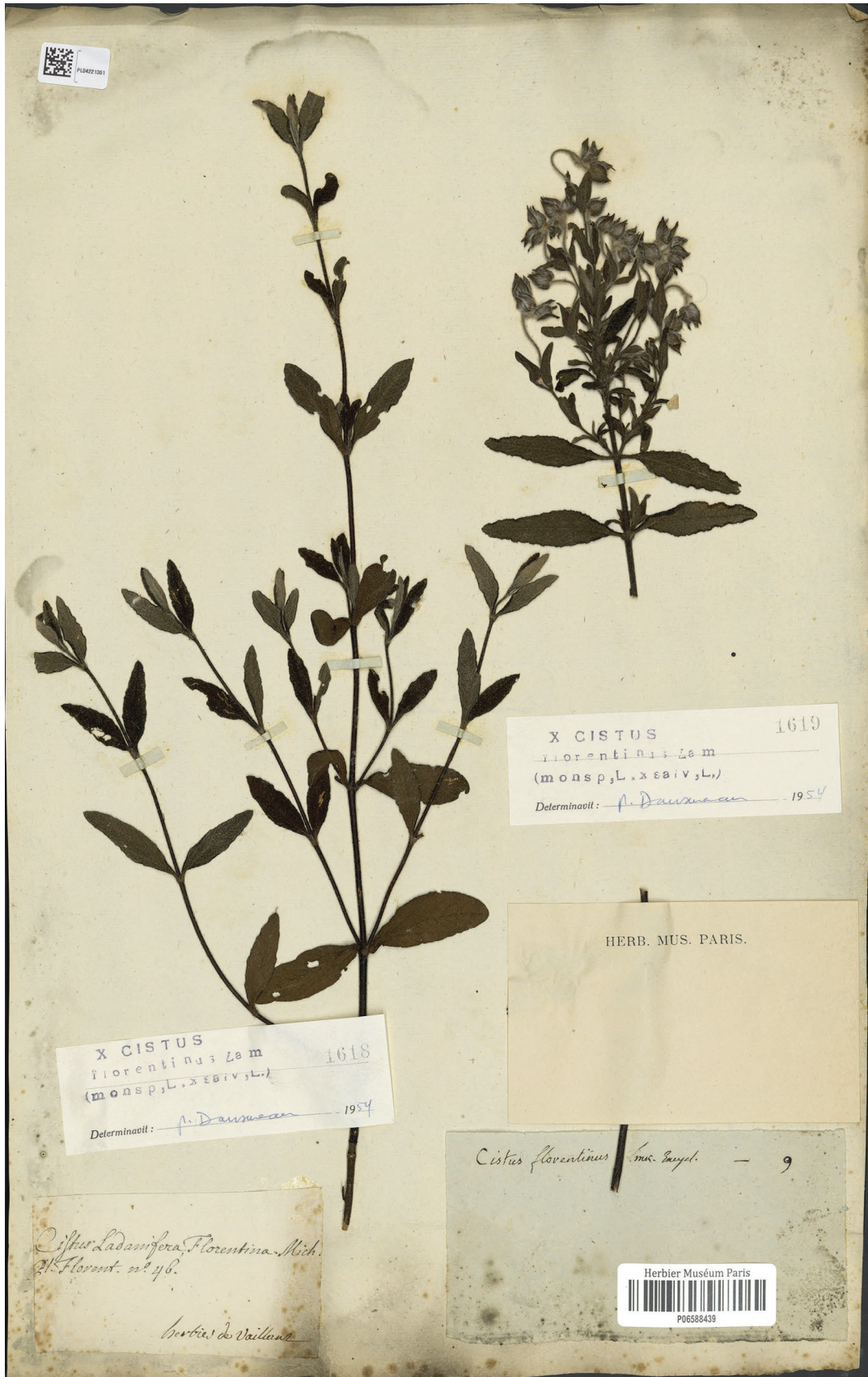


FIG. 3. — Probable isolectotype of *Cistus florentinus* Lam. (Herbier Vaillant, P06588439).



FIG. 4. — Probable isolectotype of *Cistus florentinus* Lam. (OXF[SHER-2748]). Credit: Oxford University Herbarium.



Fig. 5. — Original material of *Cistus varius* Pourr. Historical Collection Pourret.

Cistus × *florentinus* Lam.

[*C. monspeliensis* L. × *C. salviifolius* L.]
(Figs. 2; 3; 4)

Encyclopédie méthodique. Botanique 2: 17 (Lamarck 1786), pro sp.

TYPE MATERIAL. — Italy • Cet arbrisseau passe pour originaire d'Italie; s.d.; P.A. Micheli [s.n.]; lectotype: P-JU[P06986452]! (Fig. 2); designated by Demoly (1994: 76); probable isolectotypes: P[P06588439]! (Fig. 3), OXF[SHER-2748]! (Fig. 4). — *Cistus* × *varius* Pourr., *Histoire et Mémoires de l'Académie royale des Sciences*,

Inscriptions et Belles Lettres de Toulouse 3: 312 (Pourret 1788), pro sp.; syn. nov. (see below).

REMARKS

Cistus florentinus was published as a new species by Lamarck (1786) in the second volume of the *Encyclopédie méthodique*, basing on plants preserved in the “Herbier de Lamarck” and the “Herbier Jussieu” (both at P), to which the author had access as “Garde des herbiers du cabinet du Roi” (Aymonin 1981; Ferrer-Gallego 2016).

The protologue of *Cistus florentinus* (Lamarck 1786: 17) includes a diagnosis: “18. Ciste de Florence, *Cistus Florentinus*.”



Fig. 6. — Manuscript accompanying the Pourret sheet. Historical Collection Pourret.

Cistus fruticosus exstipulatus, foliis angusto-lanceolatis rugosis subtus reticulatis subsessilibus, pedunculis villosis subtrifloris. N.", followed by a mention of the Jussieu herbarium: "*Cistus ladanifera Florentina*. Michael. D. Sherard. ex herb. Juss.", and a detailed description in French, at the end of which it states: "Cet arbrisseau passe pour originaire d'Italie. ♪. (v.s. in h. Juss.)" [This shrub is thought to have originated in Italy. ♪ symbol that indicates shrub or woody plant. ("v.s." meaning "vue sèche", it has been seen in a dry state from the Jussieu herbarium)].

In the handwritten catalogue "*Catalogue de l'herbier de Antoine Laurent de Jussieu 1868*" (MNHN 1868: 543), it is

noted under the genus *Cistus* 2514, with "Numéros d'ordre 12.647 / florentinus Lamk. / Localités et orige. ex. herb. Sherardi / Synonymes et noms mis postérieurement (à *Cistus italicus* Pourr".

Braem (1995: 30) also noted the existence of a *Cistus florentinus* specimen in the Jussieu herbarium (Sheet Number 935/3); Aubin (1986: 135) and Demoly (1994: 76) also studied this specimen.

The Jussieu Herbarium is one of the "historical herbaria" of the Herbarium du Muséum national d'Histoire naturelle in Paris (MNHN), which has provided an image at P06986452. On the cover of the folder is the handwritten annotation "23 C.

florentinus Pourr.” and inside is the sheet with the Jussieu herbarium label and five additional labels (Fig. 2).

1. “Muséum d’Histoire naturelle de Paris / Herbarium d’Antoine Laurent de Jussieu / Donné au Muséum par les enfants d’Adrien de Jussieu en 1857. / Catal. N° 12.647”. [printed label].

2. “*Cistus ladanifera*, Florentina Michael / Sherard 1717”. [handwriting by Antoine de Jussieu].

3. “*Cistus italicus* P. / (Pourret)” [signed by Pourret].

4. “*Cistus florentinus* Lamarck dict. / Ex Pourr. Fl. narbon. p. 16 accedit ad ejusdem *C. varius*.” [handwriting by Lamarck].

5. “*Stephanocarpus Monspelienis Spach*” [handwriting by Spach].

6. “*C. florentinus* Lam. (*salvifolius* × *monspelienis*) *Determinavit: Dansereau 5 XI 1938*”. [modern label by Dansereau].

In addition to this specimen from the Jussieu herbarium, two other sheets have been located. The first is in the *Herbier Vaillant* (P06588439) with Label 1: “*Cistus ladanifera* Florentina. Mich. Pl. Florent. n° 46. / herbier de Vaillant” and Label 2: “*Cistus florentinus* Lmk. Encycl. – 9” (Fig. 3). Another Sherard specimen exists in the Sherard Herbarium at OXF[SHER-2748]. It was annotated by William Sherard as “*Cistus ladanifera*, Florentina. / Fl. N° 46.” (Fig. 4).

Both the *Herbier Jussieu* and *Herbier Vaillant* sheets feature the name “Michaeli” and the abbreviation “Mich.,” which undoubtedly refer to Pier Antonio Micheli, an Italian botanist and curator of the botanical garden in Florence. Micheli was a close associate of Sherard and Vaillant, with whom he exchanged plants (Dandy 1958; Stafleu & Cowan 1976-1988; Nepi 2009).

The English botanist William Sherard studied botany in Paris from 1686 to 1688 under Joseph Pitton de Tournefort (1656-1708) and in Leiden with Paul Hermann (1646-1695). He later founded a chair of botany at Oxford, which was later held by Johann Jacob Dillenius (1684-1747). Sherard’s herbarium, library and manuscripts are preserved at OXF, with additional material stored at E, P-JU, and in the Sloane Herbarium (BM) (Stafleu & Cowan 1976-1988). Sherard travelled extensively throughout Europe, meeting Micheli in Florence in 1697 (Ramsbottom 1957; Jarvis 2016), and visiting his teacher and friend, Tournefort. In May 1721, he visited Vaillant in Paris (Jackson 1874).

The sheet from the Jussieu herbarium (Fig. 2) contains a specimen with inflorescences, whereas the sheets from the Vaillant herbarium (Fig. 3) and the Sherard herbarium (Fig. 4) contain fragments, one with inflorescences and another in a vegetative state. Based on their morphological features and stage of anthesis, these three sheets might correspond to a single gathering. The specimen from the Jussieu herbarium sheet (P06986452) matches both the vegetative and floral characteristics described by Lamarck. Furthermore, the sheet has a manuscript label from Lamarck and the phrase of the protologue “*Cistus ladanifera* Florentina. Michael. D. Sherard. ex herb. Juss.,” is identical to label 2, confirming that it is the specimen used by Lamarck. It is undoubtedly a syntype of *C. florentinus* Lam. and was indicated as the type of the name by Demoly (1994: 76). The other two specimens can be considered probable duplicates.

Cistus × *varius* Pourr.

[*C. monsperiensis* L. × *C. salvifolius* L.]
(Fig. 5)

Histoire et Mémoires de l’Académie Royale des Sciences, Inscriptions et Belles Lettres de Toulouse 3: 312 (Pourret 1788), pro sp. — *C. albidus* subsp. *varius* (Pourr.) Nyman, *Conspectus Florae Europaeae*: 70 (Nyman 1878).

TYPE MATERIAL. — Italy • Cet arbrisseau passe pour originaire d’Italie; s.d.; P.A. Micheli [s.n.]; lectotype: P-JU[P06986452]!, here designated: Probable isolectotypes; P[P06588439]! (Fig. 3), OXF[SHER-2748]! (Fig. 4).

OTHER ORIGINAL MATERIAL. — France • Aux environs de Narbonne, à Portel.; s.d.; [s.c., s.n.]: “Herb. Mus. Paris. / Environs de Narbonne / Collection de l’Abbé Pourret, extraite de l’Herbier légué par M. le Dr. Barbier. 1847”, P[without barcode]! (Fig. 5).

TYPIIFICATION REMARKS

The historical circumstances experienced by Pierre-André Pourret (1754-1818) resulted in the scattering or loss of his herbaria and writings during the French Revolution of 1789 and the Spanish invasion of 1808 (Galibert 1856; Maugeret 1862; Leresche & Levier 1881; Gard 1932; Láinz 1988).

Aymonin (1963: 136) pointed out that a neotype of *C. × varius* should be selected, because most of the *Cistus* specimens in the Pourret collection were destroyed. However, specimens of this genus collected by Pourret are preserved in various herbaria, mainly in MAF and P (Guétrot 1931; Stafleu & Cowan 1976-1988; Lourteig & Jovet 1997).

The MAF-Pourret herbarium is preserved at the Complutense University of Madrid (Gutiérrez-Bustillo & Navarro 1989; Muñoz et al. 1993), but it does not contain any specimens of *C. × varius* (Gard 1932; J. Pizarro, pers. comm.), nor does the Royal College “Alfonso XII” (González Bueno et al. 2018), or the BC-Salvador herbarium (Gavioli et al. 2023). Searches have also been conducted in other herbaria (e.g., BM, FI, G, MPU, SBT, and UPS) that house Pourret’s materials, but none contain specimens of *C. × varius*.

At P, Pourret’s plants are interspersed in the general herbarium, except for the *Cistus* species, which form a separate collection (Lourteig & Jovet 1997). Among Pourret’s herbaria in P is the collection donated in 1847 by Dr. Joseph-Athanase, Baron de Barbier, to the Muséum national d’Histoire naturelle in Paris (Jardin des Plantes). This donation includes the herbarium that Pourret had deposited in the Natural History Cabinet of the Loménie de Brienne brothers, of which he was the director (Lapeyrouse 1813; Stafleu & Cowan 1976-1988). These specimens were accompanied by a printed label stating the following: “Collection de l’abbé Pourret, extraite de l’Herbier légué par M. le Dr. Barbier, 1847.” (Pons 1893; Bonnet 1916).

One of these specimens, which was sent to us by the MNHN (Fig. 5), is handwritten in the lower left corner as “*Cistus florentinus* Pourr.,” in addition to the previously mentioned label “Herb. Mus. Paris. Collection de l’abbé Pourret, extraite de l’Herbier légué par M. le Dr. Barbier, 1847.” to which has been added by hand “Environs de Narbonne” and another handwritten label, possibly later,

stating: “*Cistus Florentinus* Pourr. pourrait être le même que le *C. Florentinus* Lam. [...le] *C. salvifolio monspeliensis* [...le] p. [2]7. voir l’observation de Pourret / à vérifier”. The specimen is accompanied by two calligraphed sheets (Fig. 6) containing the classification, synonymy, diagnosis, description, place of origin, and observations. The diagnosis is almost identical to that published by Pourret: “*Cistus foliis sub-lanceolatis, basi angustioribus, breviter petiolatis, utrinque rugosis, subtus tomentosus, margine crispis, pedunculis axillaribus bracteatis triflorisque. Pourr.*” and the synonyms mentioned are “*Cistus ladanifera florentina* Sherard, herb. D. Juss.” and “*Cistus varius* P. Prosp. hist. *Cistus*”. The specimen bears three fragments with similar morphological characteristics, e.g., lanceolate leaves that narrow at the base, briefly petiolate, with crisped margins and trifloral inflorescences. This specimen is undoubtedly a good candidate to be selected as the lectotype of the name *Cistus* × *varius*.

However, in the protologue, Pourret also refers to a concrete specimen from M. de Jussieu’s herbarium that resembles his *C. varius* under the name “*Cistus ladanifera florentina*. Sherard.” Concretely, in the protologue, is mentioned “*Nota*. M. de JUSSIEU a dans son herbier un échantillon d’un Ciste presque semblable au nôtre, sous le nom de *Cistus ladanifera florentina*. SHERARD.” This material is the specimen selected as the lectotype of *C. florentinus*, which bears Pourret’s annotation “*Cistus italicus*” (i.e., P-JU[P06986452]). Lamarck’s annotation on this specimen in the Jussieu herbarium, which reads: “*Ex Pourr. Fl. narbon. p. 16 accedit ad ejusdem C. varium*”, likely refers to Pourret’s manuscripts, to which Lamarck appears to have had access (Timbal-Lagrave 1861: 31). Moreover, Pourret himself communicated many plants observed in Narbonne to Lamarck (Lamarck 1786). In conclusion, this specimen can be considered a syntype of the name *Cistus* × *varius*, as it was cited by Pourret in his protologue. According to Article 9.12 of the International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) (Turland *et al.* 2018), this material has priority in the selection of the type over other original material. Consequently, this specimen is designated as the lectotype of Pourret’s name. The specimens P[P06588439] and OXF[SHER-2748] are possibly duplicates of P-JU[P06986452].

The manuscript *Chloris Narbonensis*, submitted by Pourret in 1783 to the Académie Royale des Sciences, Inscriptions et Belles Lettres de Toulouse, was reviewed by Philippe Picot, Baron de Lapeyrouse, between May and July 1784. However, its publication was delayed until 1788, and only an excerpt was published (Pourret 1788; Timbal-Lagrave 1861, 1875). Therefore, Lamarck’s 1786 publication takes priority. As noted by Rouy & Foucaud (1895), the protologue for *C. × varius* aligns more closely with *C. × florentinus* than with *C. pouzolzii*, which is not found in Narbonne.

Through consultation of original materials and the typification carried out in this work, it is now fully confirmed that both *C. × varius* and *C. × florentinus* refer to the same hybrid between *C. monspeliensis* L. and *C. salvifolius* L., with Lamarck’s name having priority and the Pourret’s name being its homotypic synonym. This resolution clarifies the

controversies surrounding the name *C. pouzolzii* and reaffirms the currently accepted interpretation (Demoly & Montserrat-Recoder 1993; Dobignard & Chatelain 2011; Tison & de Foucault 2014; POWO 2024).

CONCLUSION

According to the original material, it is confirmed that *Cistus* × *varius* corresponds to the hybrid between *C. monspeliensis* L. and *C. salvifolius* L., whose priority name is *C. × florentinus* (Demoly 1996). *Cistus pouzolzii* is the correct name for Delile’s species, which is well characterized by its subshrubby habit of 20–80 cm, fragrant, tomentose-hairy indumentum, sessile leaves with undulate edges, unilateral inflorescence, small flowers (2 cm) with five sepals longer than the pedicel, hairy, white petals with a very transient yellow base, and a filiform style equal to the length of the stamens; hairy capsules, large seeds (Marrero *et al.* 2008).

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REFERENCES

- AUBIN P. 1985. — Observations sur la flore du sud-est de la France (Gard, Vaucluse et Corse). *Bulletin de la Société Botanique de France. Lettres botaniques* 132 (4-5): 347-348. <https://doi.org/10.1080/01811797.1985.10824682>
- AUBIN P. 1986. — Deuxième aperçu sur la flore des environs de Génolhac (Gard), La Cézarenque. *Bulletin mensuel de la Société Linnéenne et des sociétés botaniques de Lyon* 55 (4): 133-136. <https://doi.org/10.3406/linly.1986.10756>
- AUBIN P. 1990. — Observations sur *Chamaecytisus elongatus* (Waldst. et Kit.) Link et *Cistus pouzolzii* Delile. *Bulletin de la Société Botanique du Centre-Ouest* 21: 143-145.
- AYMONIN G. G. 1963. — Problèmes de typification pour quelques taxa de la Flore française (Herbiers de Paris). *Bulletin de la Société Botanique de France* 110 (3-4): 128-141. <https://doi.org/10.1080/000378941.1963.10838138>
- AYMONIN G. G. 1981. — L’Herbier de Lamarck. *Revue d’histoire des sciences* 34 (1): 25-58.
- BATTANDIER J. A. & TRABUT L. C. 1888. — *Flore de l’Algérie. Dicotylédones. 1^{er} Fascicule Thalamiflores*. Typographie Adolphe Jourdan, Alger, xii + 183 p.
- BELLARD I. & HERVÁS J. L. 2021. — Híbridos de *Cistus* en Despeñaperros y sus inmediaciones (Jaén). *Micobotánica-Jaén* 16 (4): 96-107. <https://www.micobotanicajaen.com/Revista/Hemeroteca/PDF/A16N04.pdf> [accessed 15 May 2026].
- BONNET E. 1916. — Le cabinet d’histoire naturelle des frères Loménie de Brienne, l’herbier de l’abbé Pourret et le legs fait par le Dr. Barbier au Muséum en 1847. Histoire et documents. *Bulletin du Muséum National d’Histoire Naturelle* 6: 278-286.
- BRAEM G. J. 1995. — *Guide to the Jussieu Herbarium*. IDC Publishers, Leiden, 135 p.

- BURDET H. M. 1974. — Cartulae ad botanicorum graphicem IV. *Candollea* 29: 207-240.
- BURDET H. M. 1976. — Cartulae ad botanicorum graphicem VIII. *Candollea* 31: 127-158.
- BURDET H. M. 1978. — Cartulae ad botanicorum graphicem XIII. *Candollea* 33: 365-408.
- CARAZO C. & JIMÉNEZ M. J. — 1989. Estudios taxonómicos en el Gen. *Cistus* L. Sec. *Ladanium* (Spach) Willk. (Cistaceae) en la provincia de Madrid. *Botanica Complutensis* 14: 109-122. <https://revistas.ucm.es/index.php/BOCM/article/view/BOCM8989120109A> [accessed 15 May 2026].
- CIVEYREL L., LECLERCQ J., DEMOLY J.-P., AGNAN Y., QUÈBRE N., PÉLISSIER C. & OTTO T. 2011. — Molecular systematics, character evolution, and pollen morphology of *Cistus* and *Halimium* (Cistaceae). *Plant Systematics and Evolution* 295 (1-4): 23-54. <https://doi.org/10.1007/s00606-011-0458-7>
- CLOS D. 1858. — Pourret et son Histoire des Cistes. Mémoires. *Académie des Sciences, Inscriptions et Belles-Lettres de Toulouse* 2: 244-265.
- DANDY J. E. 1958. — *The Sloane herbarium: an annotated list of the Horti sicci composing it; with biographical details of the principal contributors*. Balding & Mansell, London, 246 p. <https://www.biodiversitylibrary.org/page/54155210>
- DANSEREAU P. M. 1939. — Monographie du genre *Cistus* L. Thèse Université Genève, 1939, thèse no. 1003. *Boissiera* 4: 1-90.
- DANSEREAU P. M. 1943. — Études sur les hybrides de Cistes. V. Le comportement du *Cistus florentinus* Lam. *Candollea* 10: 9-22.
- DEAN B. 1908. — The Lamarck Manuscript in Harvard. *The American Naturalist* 42 (495): 145-153. <https://www.jstor.org/stable/2455675> [accessed 15 May 2026].
- DECOURSIER-SANDOZ F. & CHARPIN A. 2023. — Henri Joseph Loret, floriste montpelliérain. *Le Journal de Botanique* 105: 3-8. <https://doi.org/10.3406/jobot.2023.2391>
- DELILE A. R. 1840. — *Supplementum seminum anni 1839, ex Horto Botanico regio Mospeliensi*. Typis J. Martel Natu Majoris, Mospelii, 4 p. <https://seedlists.naturalis.nl/content/supplementum-seminum-anni-1839-ex-horto-botanico-regio-mospeliensi> [accessed 15 May 2026].
- DEMOLY J.-P. 1994. — L'identité du *Cistus varius* Pourr. (Cistaceae). *Acta Botanica Gallica* 141 (1): 73-80.
- DEMOLY J.-P. 1996. — Les hybrides binaires rares du genre *Cistus* L. (Cistaceae). *Anales del Jardín Botánico de Madrid* 54: 241-254.
- DEMOLY J.-P. 2002. — Notes et nouveautés nomenclaturales pour des hybrides du genre *Cistus* L. (Cistaceae). 3^e partie : Hybrides de *C. ladanifer* L., *C. laurifolius* L. et *C. populifolius* L. *Biocosme Mésogéen* 18 (4): 147-156.
- DEMOLY J.-P. 2006. — Notes taxonomiques, chorologiques et nouveautés nomenclaturales pour le genre *Cistus* L. élargi, incluant *Halimium* (Dunal) Spach (Cistaceae). *Acta Botanica Gallica* 153 (3): 309-323.
- DEMOLY J.-P. & MONTERRAT-RECORDER P. 1993. — *Cistus*, in CASTROVIEJO S., AEDO C., CIRUJANO S., LAÍNZ M., MONTERRAT-RECORDER P., MORALES R., MUÑOZ GARMENDIA F., NAVARRO C., PAIVA J. & SORIANO C. (eds), *Flora ibérica: plantas vasculares de la Península Ibérica e Islas Baleares. Vol. III Plumbaginaceae (partim)-Capparaceae*. Real Jardín Botánico, CSIC, Madrid: 319-337.
- DOBIGNARD A. & CHATELAIN C. 2011. — *Index synonymique de la Flore d'Afrique du nord Volume 3: Dicotyledoneae: Balsaminaceae – Euphorbiaceae*. Conservatoire et Jardin botaniques de la Ville de Genève, Genève, 449 p.
- DUNAL F. 1824. — Ordo XV. CISTINEAE, in CANDOLLE A. P. (ed.), *Prodromus systematis naturalis regni vegetabilis. Pars prima*. Victor Masson, Paris: 263-286.
- FERRER-GALLEGÓ P. P. 2016. — Typification of three Lamarck's names in *Cistus* L. (Cistaceae). *Phytotaxa* 255 (3): 259-266. <http://dx.doi.org/10.11646/phytotaxa.255.3.7>
- FERRER-GALLEGÓ P. P., LAGUNA E. & CRESPO M. B. 2013. — Typification of six Linnaean names in *Cistus* L. (Cistaceae). *Taxon* 62 (5): 1046-1049. <https://doi.org/10.12705/1625.6>
- GALIBERT L. 1856. — *Biographie de Pierre-André Pourret*. Imprimerie d'Emmanuel Caillard, Narbonne, 21 p.
- GARD M. 1907. — Rôle de l'Anatomie comparée dans la distinction des espèces de Cistes. *Comptes rendus hebdomadaires des séances de l'Académie des sciences* 144: 1229-1232.
- GARD M. 1910. — Recherches sur les hybrides artificiels de cistes, obtenus par M. Ed. Bornet. Premier Mémoire. Notes inédites et résultats expérimentaux. *Annales des sciences naturelles, Botanique* 12: 71-116.
- GARD M. 1912. — Recherches sur les hybrides artificiels de Cistes, obtenus par Ed. Bornet. Deuxième mémoire. Les espèces et les hybrides binaires. Avec notes inédites de Ed. Bornet. *Beihefte zum Botanischen Centralblatt. Abt. 2*, 29: 306-394.
- GARD M. 1932. — L'herbier de Pourret. *Bulletin de la Société Botanique de France* 79 (7-8): 635-637.
- GAVIOLI L., NUALART N., LÓPEZ-PUJOL J. & IBÁÑEZ N. 2023. — Taxa proposed by Pourret based on the specimens conserved in Salvador herbarium (eighteenth century). *Plant Biosystems* 158 (1): 10-23. <https://doi.org/10.1080/11263504.2023.2287529>
- GBIF 2023. — *The Global Biodiversity Information Facility. Cistus florentinus* Lam. in GBIF Secretariat. GBIF Backbone Taxonomy. <https://doi.org/10.15468/39omei>
- GHAZANFAR S. & OSBORNE J. 2015. — Typification of *Zygophyllum propinquum* Decne. and *Z. coccineum* L. (Zygophyllaceae) and a key to *Tetraena* in SW Asia. *Kew Bulletin* 70 (3): 38.
- GONZÁLEZ BUENO A., PEREA D. & VELAYOS M. 2018. — Los materiales de la 'Flora Gallecica' de Pierre-André Pourret (1754-1818). *Botánica Complutensis* 42: 161-171. <https://doi.org/10.5209/BOCM.61375>
- GRENIER J. C. M. & GODRON D. A. 1848. — *Flore de France. Tome 1(1)*. J. B. Baillièrre, Paris, iii + 330 p.
- GREUTER W., BURDET H. M. & LONG G. 1984. — *Med-Checklist. Volume 1. Conservatoire et Jardin Botanique Ville de Genève, Genève, 330 p.*
- GROSSER W. C. H. 1903. — Cistaceae, in ENGLER A. (ed), *Das Pflanzenreich 14 (IV.193)*. Wilhelm Engelmann, Leipzig: 1-161. <https://bibdigital.rjb.csic.es/idurl/1/10042>
- GUÉTROT M. 1931. — Un herbier probablement inconnu de l'abbé Pourret. *Bulletin de la Société Botanique de France* 78 (4): 434-437. <https://doi.org/10.1080/00378941.1931.10832902>
- GUTIÉRREZ-BUSTILLO M. & NAVARRO C. 1989. — El herbario de P.A. Pourret (1754-1818) conservado en el MAF. *Acta Botanica Malacitana* 14: 193-195. <https://doi.org/10.24310/abm.v14i.9372>
- GUZMÁN B. & VARGAS P. 2005. — Systematics, character evolution, and biogeography of *Cistus* L. (Cistaceae) based on ITS, trnL-trnF, and matK sequences. *Molecular Phylogenetics and Evolution* 37: 644-660. <https://doi.org/10.1016/j.ympev.2005.04.026>
- GUZMÁN B. & VARGAS P. 2009. — Historical biogeography and character evolution of Cistaceae (Malvales) based on analysis of plastid rbcL and trnL-trnF sequences. *Organism, Diversity & Evolution* 9 (2): 83-99. <https://doi.org/10.1016/j.ode.2009.01.001>
- GUZMÁN B. & VARGAS P. 2010. — Unexpected synchronous differentiation in Mediterranean and Canarian *Cistus* (Cistaceae). *Perspectives in Plant Ecology, Evolution and Systematics* 12 (3): 163-174. <https://doi.org/10.1016/j.ppees.2009.09.002>
- GUZMÁN B., LLEDÓ M. D. & VARGAS P. 2009. — Adaptive Radiation in Mediterranean *Cistus* (Cistaceae). *PLoS ONE* 4 (7): e6362. <https://doi.org/10.1371/journal.pone.0006362>
- HERTEL H. & SCHREIBER A. 1988. — Die Botanische Staatssammlung München 1813-1988. *Mitteilungen der Botanischen Staatssammlung München* 26: 81-512.
- IBÁÑEZ N., MONTERRAT J. M. & SORIANO I. 2009. — Typification of the names of some Iberian species described by Lamarck. *Candollea* 64 (1): 143-148.
- JACKSON B. D. 1874. — A Sketch of the Life of William Sherard. *The Journal of Botany, British and Foreign* 12: 129-138.

- JARVIS C. E. 2016. — Pier Antonio Micheli (1679–1737) and Carl Linnaeus (1707–1778). *Webbia* 71 (1): 1–24. <https://doi.org/10.1080/00837792.2016.1147210>
- LAÍN Z M. 1988. — ¿Duendes en el herbario de Pourret? *Anales del Jardín Botánico de Madrid* 45 (1): 345–346.
- LAMARCK J.-B. 1786. — CISTE, Cistus, in *Encyclopédie méthodique. Botanique. Tome second*. Chez Panckoucke, Paris: 12–27. <https://bibdigital.rjb.csic.es/idurl/1/9708> [accessed 15 May 2026].
- LAMARCK J.-B. 1816. — *Lamarck's original classification of Eucidaris tribuloides as Cidarites tribuloides*. Centre de Recherche en Histoire des Sciences et des Techniques (CRHST) at the Cité des sciences et de l'industrie & Bibliothèque centrale of the Muséum nationale d'Histoire naturelle, Paris. Available online: https://en.wikipedia.org/wiki/File:Lamarck_pencil_notes.jpg [accessed 3 January 2025].
- LAPEYROUSE P. 1813. — Histoire abrégée des plantes des Pyrénées, et itinéraire des botanistes dans ces montagnes. De l'Imprimerie de Bellegarrigue, Toulouse, 700 p. <https://bibdigital.rjb.csic.es/idurl/1/9478> [accessed 15 May 2026].
- LERESCHE L. & LEVIER E. 1880 [1881]. — Deux Excursions Botaniques dans le nord de l'Espagne et le Portugal en 1878 et 1879. Georges Bridel, Lausanne, 199 p. <https://bibdigital.rjb.csic.es/idurl/1/10015> [accessed 15 May 2026].
- LOURTEIG A. & JOVET P. 1997. — Anciens herbiers conservés au laboratoire de phanérogamie du muséum (Paris). *Journal d'agriculture traditionnelle et de botanique appliquée* 39 (2): 505–560. <https://doi.org/10.3406/jatba.1997.3646>
- MARRERO Á., ALMEIDA R. & RÍOS C. — 2008. *Cistus grancanariae* sp. nov. (Cistaceae), una nueva especie para Gran Canaria (Islas Canarias). *Botanica Macaronésica* 27: 73–88.
- MARTÍN-BOLAÑOS M. & GUINEA E. 1949. — Jarales y jaras (Cistografía hispánica). *Boletín del Instituto Forestal de Investigaciones y Experiencias* 49: 1–228. <https://bibdigital.rjb.csic.es/idurl/1/10152> [accessed 15 May 2026].
- MAUGERET M. A. 1862. — Sur Quelques Botanistes De Narbonne. *Bulletin de la Société Botanique de France* 9 (9): 593–599. <https://doi.org/10.1080/00378941.1862.10836541>
- MNHN 1868. — *Catalogue de l'herbier de Antoine Laurent de Jussieu 1868*. Muséum national d'Histoire naturelle, Paris. Available online: <https://science.mnhn.fr/catalogue/bota-jussieu-1/> [accessed 15 May 2026].
- MUÑOZ I., RODRÍGUEZ R., NAVARRO C. & GUTIÉRREZ-BUSTILLO M. 1993. — Inventory and cataloguing of the herbarium P. A. Pourret (1785–1818) preserved in MAF. *Webbia* 48: 605–610.
- NEPI C. 2009. — L'Erbario Micheli-Targioni. The Micheli-Targioni Herbarium, in RAFFAELLI M. (ed), *Il Museo di Storia Naturale dell'Università di Firenze – Le collezioni botaniche*. Firenze University Press, Firenze: 85–102.
- NYMAN C. F. 1878. — *Conspectus florum europaeae I*. Typis officinae Bohlinianae, Örebro, 240 p. <https://bibdigital.rjb.csic.es/idurl/1/9912> [accessed 15 May 2026].
- PIGNAL M., BERTIN G., CHUPIN L., PEREZ PIMPARÉ E., KLASNJA S., VIGNES-LEBBE R. & DUSOULIER F. 2024. — Récolnat Annotate-On: a tool to improve your experience with virtual collections. *Adansonia*, sér. 3, 46 (13): 133–148. <https://doi.org/10.5252/adansonia2024v46a13> <http://adansonia.com/46/13>
- PONS S. 1893. — Une Lettre De L'abbé Pourret à Pierre De Barréra ; Communiquées. *Bulletin de la Société Botanique de France* 40 (10): LXXI–LXXV. <https://doi.org/10.1080/00378941.1893.10830531>
- POURRET P. A. 1788. — Extrait de la *Chloris Narbonensis*, renfermée dans la relation d'un Voyage fait depuis Narbonne jusqu'au Monserrat, par les Pyrénées. *Histoire et mémoires de l'Académie Royale des Sciences, Inscriptions et Belles Lettres de Toulouse* 3: 297–334. <https://bibdigital.rjb.csic.es/idurl/1/1525864> [accessed 15 May 2026].
- POUZOLZ P. C. M. 1857. — *Flore du département du Gard ; ou, Description des plantes qui croissent naturellement dans ce département*. Tome premier. Chez Teissier, Nîmes, 659 p.
- POWO 2024. — *Plants of the World Online*. Facilitated by the Royal Botanic Gardens, Kew. Available online: <http://www.plantsoftheworldonline.org/> [accessed 23 January 2025].
- RAMSBOTTOM J. 1957. — P. A. Micheli and His Nova Plantarum Genera. *Bulletin du Jardin botanique de l'État à Bruxelles* 27 (4): 773–777. <https://doi.org/10.2307/3666906>
- RJB-CSIC 2024. — *Caligrafías del herbario MA*. Real Jardín Botánico, CSIC. Available online: <http://www.floraiberica.es/caligrafia/index.php> [accessed 8 December 2024].
- ROUY G. & FOUCAUD J. 1895. — *Flore de France*. Tome II. Imprimerie Deslis Frères, Asnières, Rochefort, xi + 349. <https://bibdigital.rjb.csic.es/idurl/1/10251> [accessed 15 May 2026].
- SÁNCHEZ-GÓMEZ P., CÁNOVAS J. L., LAHORA A., CATALÁN A. E. & JIMÉNEZ J. F. 2024. — Disentangling the taxonomical uncertainties about the presence of *Cistus pouzolzii* (Cistaceae) in the Iberian Peninsula. *Mediterranean Botany* 45 (1): e90714. <https://doi.org/10.5209/mbot.90714> [accessed 15 May 2026].
- ŞEN F. & DUMAN H. 2021. — *Cistus florentinus* Lam. (Cistaceae): A New Hybrid Record for the Flora of Turkey. *Bağbahçe Bilim Dergisi* 8 (3): 30–40.
- SHERARD HERBARIUM 2024. — *Sherard Herbarium*. Department of Biology, University of Oxford. Available online: <https://herbaria.plants.ox.ac.uk/bol/sherard> [accessed 7 October 2024].
- SPACH E. 1836. — *Conspectus monographiae Cistacearum. Annales des sciences naturelles. Botanique* 6: 357–375. <https://bibdigital.rjb.csic.es/idurl/1/15703> [accessed 15 May 2026].
- STAFLEU F. A. & COWAN R. S. 1976–1988. — *Taxonomic literature: a selective guide to botanical publications and collections with dates, commentaries and types*. Bohn, Scheltema & Holkema, Utrecht. Available online: <https://www.sil.si.edu/DigitalCollections/tl-2/> [accessed 15 May 2026].
- SWEET R. 1825–1830. — *Cistineae. The natural order of Cistus or rock-rose*. James Ridgway, London, xx + 224 p. <https://doi.org/10.5962/bhl.title.20402>
- TEJERINA A. & VÁZQUEZ PARDO F. M. 2021. — Anotaciones a la diversidad de *Cistus ladanifer* L. (Cistaceae), en el Norte de Extremadura. *Folia Botanica Extremadurensis* 15: 121–127.
- TEJERINA A. & VÁZQUEZ PARDO F. M. 2023. — Anotaciones a la diversidad del género *Cistus* L. (Cistaceae), en Sierra de Gata (Cáceres). *Folia Botanica Extremadurensis* 17: 105–115.
- THIERS B. 2025. — *Index Herbariorum: A Global Directory of Public Herbaria and Associated Staff*. New York Botanical Garden's Virtual Herbarium, New York. Available online: <http://sweetgum.nybg.org/science/ih/> [accessed 7 January 2025].
- TIMBAL-LAGRAVE P.-M.-E. 1861. — Étude sur quelques Cistes de Narbonne. *Mémoires. Académie des Sciences, Inscriptions et Belles-Lettres de Toulouse* 5: 28–61.
- TIMBAL-LAGRAVE P.-M.-E. 1875. — Reliquiae pourretianae. *Bulletin de la Société des Sciences Physiques et Naturelles de Toulouse* 2: 1–147.
- TISON J.-M. & DE FOUCAULT B. (coord). 2014. — *Flora Gallica. Flore de France*. Biotope Éditions, Mèze, xx + 1196 p.
- TOTTA C., ROSATO M., FERRER-GALLEGO P. P., LUCCHESI F. & ROSSELLÓ J. A. 2016. — Temporal frames of 45S rDNA site-number variation in diploid plant lineages: lessons from the rock rose genus *Cistus* (Cistaceae). *Biological Journal of the Linnean Society* 120 (3): 626–636. <https://doi.org/10.1111/bij.12909>
- TURLAND N. J., WIERSEMA J. H., BARRIE F. R., GREUTER W., HAWKSWORTH D. L., HERENDEEN P. S., KNAPP S., KUSBER W.-H., LI D.-Z., MARHOLD K., MAY T. W., MCNEILL J., MONRO A. M., PRADO J., PRICE M. J. & SMITH G. F. (eds). 2018. — *International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017*. Regnum Vegetabile 159. Koeltz Botanical Books, Glashütten, xxxviii + 254 p. <https://doi.org/10.12705/Code.2018>

- UNIVERSITÀ DI FIRENZE 2018. — *Pier Antonio Micheli dalle escursioni ai manoscritti*. Available online: <https://mostre.sba.unifi.it/micheli/it/48/home-mostra> [accessed 10 January 2025].
- WARBURG E. F. 1968. — *Cistus* L., in TUTIN T. G., HEYWOOD V. H., BURGESS N. A., MOORE D. M., VALENTINE D. H., WALTERS S. M. & WEBB D. A. (eds). *Flora Europaea. Volume 2. Rosaceae to Umbelliferae*. Cambridge University Press, Cambridge: 282-284.
- WARBURG O. & WARBURG E. F. 1930. — A preliminary study of the genus *Cistus*. *Journal of the Royal Horticultural Society* 55 (1): 1-52.
- WFO 2024. — *World Flora Online*. Available online: <http://www.worldfloraonline.org> [accessed 7 January 2025].
- WILLKOMM H. M. 1857-1863. — *Icones et descriptiones plantarum novarum criticarum et rariorum Europae austro-occidentalis praecipue Hispaniae*. Tomus secundus. Sumtibus A. H. Payne, Lipsiae, 182 p. <https://bibdigital.rjb.csic.es/duurl/1/9780>
- WILLKOMM H. M. 1878. — *Cistus* Tourn., in WILLKOMM H. M. & LANGE J. M. C. *Prodromus florum hispanicae*. Volumen III. Sumtibus E. Schweizerbart (E. Koch), Stuttgartiae: 706-713.

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