

A detailed botanical illustration of the plant Combretum longistipitatum. The illustration shows several large, ovate leaves with prominent, dark, pinnate venation. The leaves are arranged in a cluster, with some showing the underside. Interspersed among the leaves are several flowers, which have a distinct, star-like or tubular shape with a central cluster of stamens. The entire illustration is rendered in a monochromatic style, using shades of brown and tan on a light background.

Novitates Gabonenses 89:
Combretum longistipitatum Jongkind, sp. nov.
(Combretaceae), a new liana species from Gabon

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Novitates Gabonenses 89:

***Combretum longistipitatum* Jongkind, sp. nov. (Combretaceae), a new liana species from Gabon**

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KEY WORDS

Combretaceae,
Combretum,
Gabon,
Moukalaba-Doudou,
new species.

ABSTRACT

The new species *Combretum longistipitatum* Jongkind, sp. nov. (Combretaceae) from Gabon is described and illustrated. This liana differs from other *Combretum* subgen. *Combretum* species by the exceptionally long stipe of the fruit compared to the size of the wings. The only location where the new species is known from is now part of Moukalaba-Doudou National Park.

RÉSUMÉ

Novitates Gabonenses 89: Combretum longistipitatum Jongkind, sp. nov. (Combretaceae), une nouvelle espèce lianescente du Gabon.

Une nouvelle espèce de *Combretum* du Gabon est décrite et illustrée: *Combretum longistipitatum* Jongkind, sp. nov. (Combretaceae). Elle se distingue des autres espèces de *Combretum* subgen. *Combretum* par le pédoncule du fruit très long, par rapport à la taille des ailes. La seule station connue fait aujourd'hui partie du parc national de Moukalaba-Doudou.

MOTS CLÉS

Combretaceae,
Combretum,
Gabon,
Moukalaba-Doudou,
espèce nouvelle.



FIG. 1. — Map showing the only known location of *Combretum longistipitatum* Jongkind, sp. nov. (●) within the Moukalaba-Doudou National Park (green area).

INTRODUCTION

In 2000, during a botanical survey east of the Doudou Mountains in Gabon, a fruiting *Combretum* Loeff. liana was collected. It could not be identified with the, at that time just published, Combretaceae part of the *Flore du Gabon* (Jongkind 1999). With 4-winged fruits and (inconspicuous) scales it clearly belongs to *Combretum* subg. *Combretum*. Many species in this subgenus have more or less similar winged fruits and without flowers one can often not be sure that an unidentifiable specimen belongs to an undescribed species. However in this case the fruits are different, the stipe of the fruit is exceptionally long, also compared to the size of the wings. There are a few other *Combretum* species, like *C. aphanopetalum* Engl. & Diels and *C. multinervium* Exell, that also have fruits with stipes that are longer than in most other species but they combine this character with equally large wings. There are also still several *Combretum* species from which we do not know the fruits, like *C. adrianii* Jongkind or *C. ivanii* Jongkind, but they have leaves that are clearly different from this specimen. It is clear that this specimen belongs to an undescribed species and because of the long stipe of the fruit it is here named *Combretum longistipitatum* Jongkind, sp. nov. Including this new species we recognize now 47 *Combretum* species from Gabon (Jongkind 1999, 2006b).

In 2002 the forest where the new species was found became part of Moukalaba-Doudou National Park (parc national de Moukalaba-Doudou), a protected area of more than 4 500 km².

SYSTEMATICS

Combretum longistipitatum Jongkind, sp. nov. (Figs 1; 2)

TYPUS. — **Gabon.** Ogooué-Maritime, Doudou Mountains, Nord-Ouest de Doussala, 2°28.4'S, 10°33.9'E, 120 m., fr., 25.IX.2000, Bourobou, Nzabi, Nziengui & Mayombo-Nzengue 495 (holo-, WAG[WAG.1477676]!; iso-, LBV); only material known.

DIAGNOSIS. — This liana differs from other *Combretum* subg. *Combretum* species by the exceptional long stipe of the fruit compared to the size of the wings. The samara is in diameter only 1.5-2 × the length of the stipe. The leaf blade differs from that of most other *Combretum* subg. *Combretum* species by its relatively low number of main lateral nerves, its conspicuous hair-tuft domatia and its acute, not acuminate, apex.

ETYMOLOGY. — The specific epithet refers to the long stipe of the fruit.

HABITAT AND DISTRIBUTION. — Lowland forest in the Ogooué-Maritime Province of Gabon (Fig. 1).

CONSERVATION STATUS. — *Combretum longistipitatum*, sp. nov. is known from a single locality. Following the IUCN Red List Categories and Criteria (IUCN 2012) it should be considered as “Critically Endangered” under Criterion B. However, there is still a lot of botanically poorly known forest in the Moukalaba-Doudou National Park and it is highly unlikely that the only known collection is from the last plant of an almost extinct species. Lianas are easily overlooked in botanical surveys and many such *Combretum* species usually flower and fruit high up in the forest canopy. On the other side, I have been in different parts of Gabon specially looking for *Combretum* and would have col-

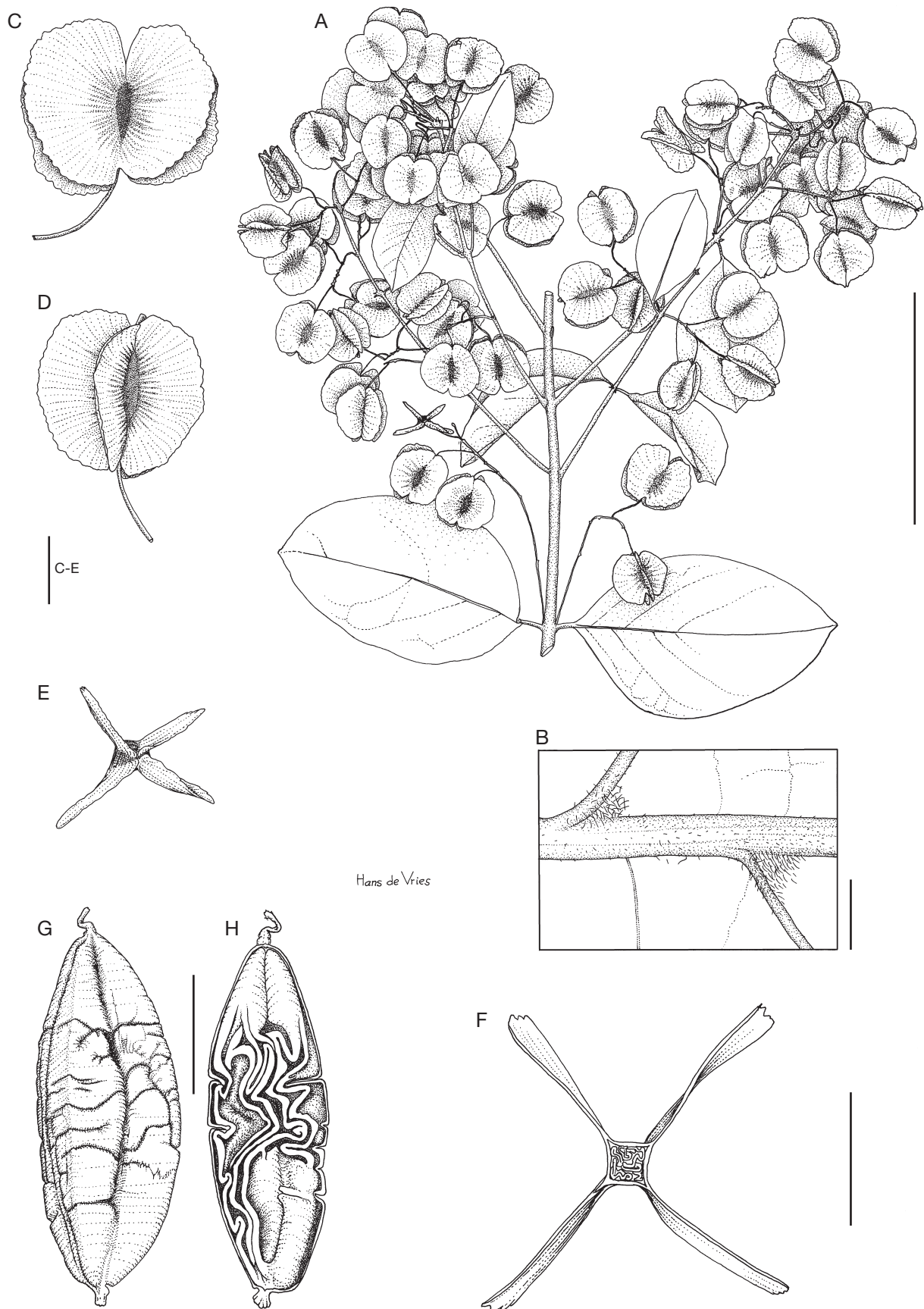


FIG. 2. — *Combretum longistipitatum* Jongkind, sp. nov., Bourobou et al. 495 (WAG.1477676): A, fruiting branch; B, detail of leaf from below showing hair-tuft domatia; C & D, fruit; E, fruit, apical view; F, fruit in cross section, showing seed; G, Seed covered by the seed coat; H, seed, longitudinal section showing irregularly folded cotyledons. Drawn by Hans de Vries. Scale bars: A, 10 cm; B, 1 mm; C-F, 1 cm; G, H, 3 mm.

lected *C. longistipitatum*, sp. nov., fertile or sterile, if it had been encountered. Amongst the more than 700 *Combretum* specimens collected in Gabon (Jongkind 2006a) there is only one from this species. Hence it is not likely that *C. longistipitatum*, sp. nov. is a common or widespread species.

Still, without more data it not possible to correctly select an IUCN category of threat, for the moment the species has to be listed as Data Deficient (DD).

NOTE

Of the flowers only a few remnants were found, persisting amongst the fruits. The upper receptacle is relatively short and petals are present. The presence of petals is taxonomically significant because there are several species in *Combretum* subg. *Combretum* without petals. The flower remnants are too small and old to clearly establish the shape or the indumentum of the receptacle and petals. The new species can not be included in the key to the species in the Flore du Gabon (Jongkind 1999) because most flower characters are still not known.

DESCRIPTION

Liana. Twigs covered with dense tiny ordinary hairs and scales. Leaves opposite; petiole 5-12 mm long; blade elliptic, 5.5-11.5 × 3-7.5 cm, below with scattered small hairs and small, inconspicuous scales, midrib impressed above, prominent beneath, 4 or 5 pairs of main lateral nerves most with conspicuous hairy domatia in the axil below, tertiary nervation widely spaced scalariform with a reticulate pattern in between, base cuneate, apex acute with a mucronate tip. Scales inconspicuous, c. 20 µm in diameter, with c. 8 radial

walls. Inflorescence a spike 2-3.4 cm long. Flower 4-merous, with petals. Fruit 22-27 mm wide, a samara with 4 papery wings, subcircular in outline, with scattered tiny hairs and inconspicuous scales, stipe 11-18 mm long, slender and flexible. Cotyledons 2, irregularly folded in seed.

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