

***Melanophylla angustior* (Melanophyllaceae), a new species from southeastern Madagascar**

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KEY WORDS

Melanophylla,
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ABSTRACT

Melanophylla angustior, the seventh species of the Madagascan endemic family Melanophyllaceae, is described and illustrated. It is known from only a remnant lowland forest in the southeast of the island, at the Manombo Special Reserve.

RÉSUMÉ

Melanophylla angustior (Melanophyllaceae) une nouvelle espèce du sud-est de Madagascar.

MOTS CLÉS

Melanophylla,
Melanophyllaceae,
Madagascar,
forêt de basse altitude.

Une nouvelle espèce de *Melanophylla*, la septième parmi les Melanophyllaceae, famille endémique de Madagascar, est décrite et illustrée. Elle est connue seulement d'un reste de forêt au sud-est de l'île, située dans la Réserve Spéciale de Manombo.

Recent collecting in the lowland forests of southeastern Madagascar has brought to light an undescribed species of *Melanophylla*, a genus endemic to the island. Originally treated in the Cornaceae for the *Flore de Madagascar et des Comores* (KERAUDREN 1958), the genus is sometimes considered to represent the endemic fami-

ly Melanophyllaceae Takhtajan ex Airy Shaw (AIRY SHAW 1972). The new species can be readily separated from the six currently recognized species (SCHATZ et al. 1998) on the basis of combinations of leaf blade shape and size, petiole length, pedicel length, flower colour, and geography.

Melanophylla angustior McPherson & Rabenantoandro, **sp. nov.**

A speciebus cognitibus combinatione formae (oblongae, anguste ellipticae vel anguste obovatae) cum amplitudine foliorum (20-30 cm × 5-7.5 cm), longitudine petiolorum (3-4.7 cm), longitudine pedicellorum (0-1 mm), et colore florum (albo) differt.

TYPUS. — *Rabenantoandro & McPherson 774*, Madagascar, Prov. Fianarantsoa, Réserve Spéciale de Manombo, forêt dense humide de basse altitude sur latérite, 23°01'19"S, 47°43'56"E, 30 m, 14 Nov. 2001 (holo-, MO!; iso-, P!, TEF!).

Tree c. 8 m tall; branches 7-9 mm in diameter just below their leafy portions, light-coloured, glabrous, marked by closely spaced leafscars, each of which half-encircles the stem and displays c. 10 protruding leaf traces. Leaves somewhat clustered near the branch ends, the leafy portion of the stem c. 5-8 cm long. Petioles 3-4.7 cm long, 2-4 mm wide except at the amplexicaul base (5-9 mm wide), the width near the apex c. 2 mm in side view, caniculate, the rims of the channel often thin and wing-like the entire length of the petiole, not suberose at maturity, glabrous except for the margins of the wings, which are often minutely and obscurely pubescent; petiole length/blade length ratio c. 1/5-1/7. Blades oblong, narrowly elliptic, or narrowly obovate; 20-30 cm long, 5-7.5 cm wide (excepting the reduced leaves immediately below the inflorescence); length/width ratio 4/1-5/1; fibrous on being torn (as are other species in the genus); base rather broadly acute; apex narrowly obtuse or briefly acuminate-obtuse; margin subentire to shallowly dentate, especially distally, somewhat revolute; venation slightly raised adaxially, more prominent abaxially, the midrib pinkish in vivo, the secondary veins 10-12 on each side of the midrib; surfaces glabrous; texture chartaceous to subcoriaceous on drying. Inflorescence terminal, panicle, c. 9.5-14 cm long, c. 8-10 cm in diameter, of c. 8 major branches, the lower ones in the axils of reduced leaves and c. 6.5-8.5 cm long; axes, bracts, and bracteoles minutely pubescent; each flower subtended by a roughly triangular bract 1.5-2 mm long and two smaller bracteoles that are attached immediately beneath the ovary; pedicels 0-0.5 (-1) mm long (and thus the flowers

sessile or nearly so). Flowers apparently protandrous, the stamens opening quickly and soon falling, the styles remaining and apparently receptive for a longer period. Buds up to 5.5 mm long. Calyx epigynous, c. 1 mm long, 2 mm in diameter, 5-lobed (the lobes c. 0.5 mm long), somewhat pubescent abaxially and more so on the margin. Corolla in bud ellipsoidal, up to 3.5 mm long, 2.5 mm in diameter, the 5 petals slightly imbricate in bud, reflexed at anthesis and 4-5 mm long, 1.5-2 mm wide, yellowish white, the margins and adaxial surface minutely papillose. Stamens 5, 2.5-3 mm long, the filaments 1.5-2 mm long, attached basally/abaxially between the lobes of the sagittate anthers, these 2 mm long and laterally dehiscent. Ovary 2-2.5 mm long, 1-1.5 mm in diameter, glabrous or minutely pubescent; styles 3, 2.5-3.5 mm long at anthesis, the distal half flaring somewhat into the papillose-glandular adaxial stigmatic surfaces. Fruit unknown. — Fig. 1.

The new species is unique within its genus in its combination of narrow leaf blades (5-7.5 cm wide, the length/width ratio 4/1-5/1), relatively short petioles (3-4.7 cm long, the length/blade length ratio c. 1/5-1/7), and sessile or subsessile, yellowish white flowers. In SCHATZ et al. (1998), the new species would key either to the couplet separating *M. madagascariensis* and *M. perrieri* (if the leaves were considered coriaceous), or else to *M. aucubifolia* (if the leaves were considered chartaceous). However, *M. madagascariensis* differs in having wider leaf blades (length/width ratio c. 2/1), thicker and longer petioles (petiole/blade ratio 1/2-1/3), evident pedicels (1-3 mm long), and smaller flowers; *Melanophylla perrieri* differs in having wider leaf blades (length/width ratio c. 3/1), pedicels 1-3 mm long, and pink flowers; *Melanophylla aucubifolia* differs in having wider leaf blades (length/width ratio c. 3/1), relatively longer petioles (petiole/blade ratio c. 1/3), and pedicels 3-5 mm long. Geographically, *Melanophylla angustior* occurs well south of all known populations of the above three species.

CONSERVATION STATUS. — Given that the new species appears to be infrequent in the single, but stable, small forest from which it is known, we consider it Endangered, as it satisfies the IUCN's criterion D for that category (IUCN 2001).

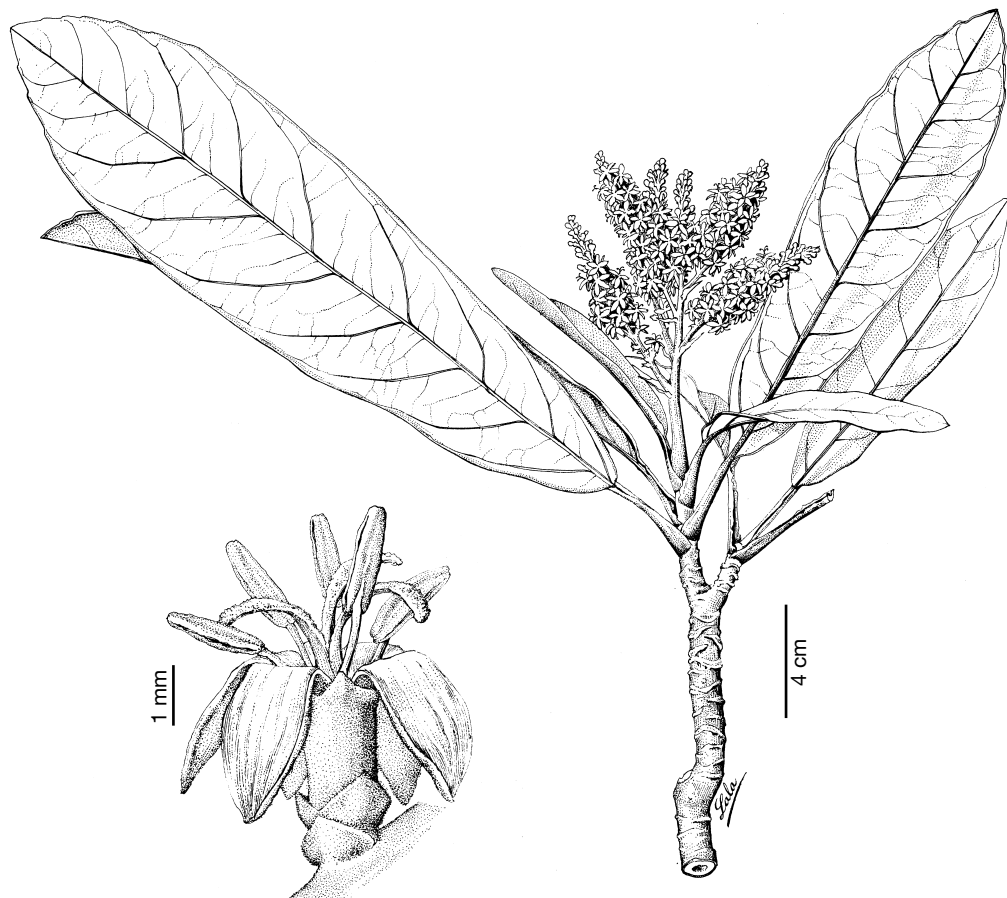


Fig. 1. — *Melanophylla angustior*: flowering shoot and flower. (Rabenantoandro & McPherson 774).

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