

## A New Species of *Acmanthera* (Malpighiaceae)

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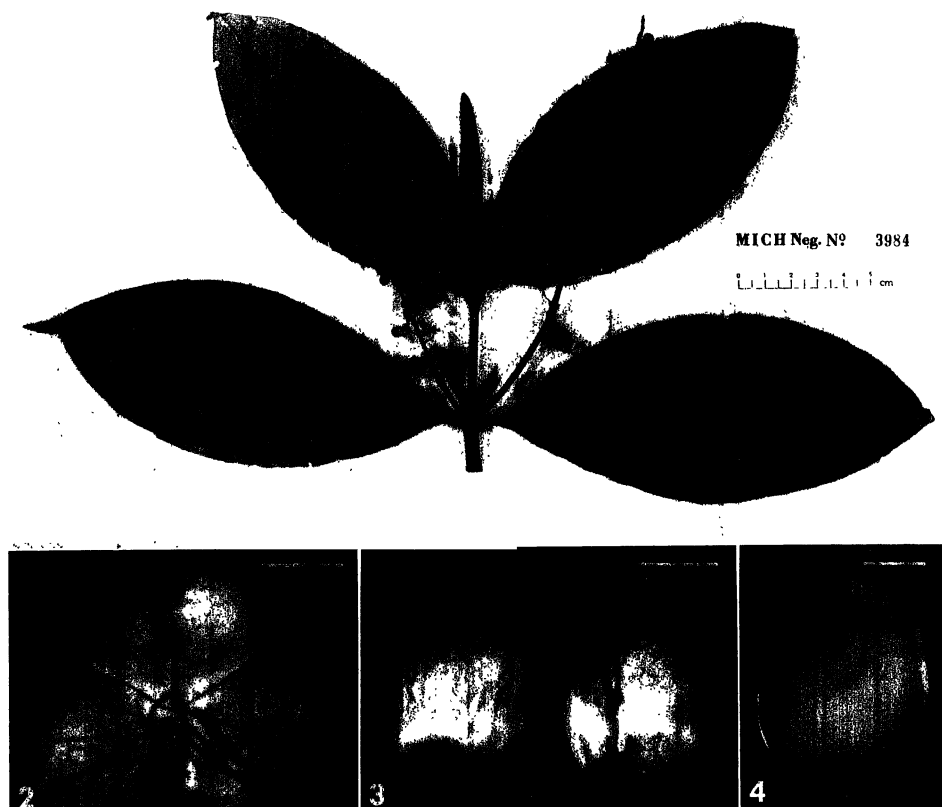
**ABSTRACT.** *Acmanthera minima* Anderson is described and illustrated. A key and distribution map for all six species of the genus are provided.

*Acmanthera* (Adr. Jussieu) Grisebach is a small genus of Malpighiaceae known only from Brazilian Amazonia. I revised the five species then known in 1975. One of the recent expeditions of the Projeto Flora Amazônica has now discovered an additional, quite distinctive species.

### *Acmanthera minima* W. R. Anderson, sp. nov. (figs. 1–4)

Suffrutex 60 cm altus, ramis vegetativis foliisque mox glabris. Stipulae 8 cm longae, glabrae, inter- et intrapetolariter omnino connatae, vagina stipulacea complanata, in sectione transversali angustissime elliptica. Bracteae bracteolaeque minutae, membranaceae. Sepala glabra. Connectivi appendicula apicalis 0.3–0.4 mm longa, plana, membranacea, apice acuta eglandulosaque. Coccus 4.0 mm diametro, basi inflatus.

Shrublet 60 cm tall; vegetative stems sericeous?, soon glabrate. Leaves initially sericeous (at least on the midrib), quite glabrate at maturity; lamina 14.5–16.5 cm long, 6–7 cm wide, elliptical, cuneate at the base and then decurrent on the petiole, abruptly short-acuminate at the apex, with 11–13 lateral veins interconnected by many fine scalariform veinlets prominent on both sides; petiole ca. 8 mm long; stipules 8 cm long, glabrous, the 4 at a node completely connate to form a single strongly flattened sheath, linear-elliptical in cross-section. Inflorescence 10–12 cm long, densely and persistently sericeous; internode below the inflorescence 1.5–5.0 cm long, sparsely sericeous, bearing at its apex a pair of miniature leaves, these mostly soon deciduous; flowers borne on the pseudoraceme in clusters of 2–3, each cluster presumably representing a reduced cincinnus; bracts and bracteoles minute, 0.2–0.4 mm long and wide, triangular or ovate, flat, membranous, persistent or eventually deciduous. Pedicel 8 mm long in fruit, loosely sericeous. Sepals (in fruit) 2–3 mm long beyond glands, ca. 2.4 mm wide, broadly ovate or orbicular, broadly rounded at the apex, glabrous on both sides, membranous at the margin; glands 1.2–2.2 mm long, not revolute at the apex. Petals unknown. Filaments 1.5–2.0 mm long, longer opposite petals than sepals, 0.8 mm wide; anthers with the locules 1.0–1.3 mm long, the wings 0.9–1.2 mm long, 0.2–0.3 mm wide, the apical appendage of the connective 0.3–0.4 mm long, 0.2 mm wide, triangular, flat, membranous, acute and eglandular at the apex, inflexed. Ovary densely pilose-sericeous; styles (in fruit) 3.0–3.5 mm long, the stigma apical. Coccus 4 mm in diameter,



FIGS. 1-4. *Acmanthera minima*. 1. Isotype specimen. 2. Complete fruit, viewed from above; scale = 2 mm. 3. Separate cocci, viewed from abaxial side (left) and adaxial side (right); scale = 2 mm. 4. Embryo; scale = 1 mm.

spheroidal, sparsely pilose-sericeous, with an inflated, aerenchymatous base. Embryo with the cotyledons thick, unequal, the smaller folded up from the base, the larger embracing it.

TYPE: Brazil, Amazonas, Rodovia do Estanho, entre os km 795 e 790 da Transamazônica [ca. 8°10'S, 61°49'W]; campina baixa; solo arenoso, branco; 26 Nov 1979; *Vieira, Zarucchi, Silva, Mota, and Monteiro 185* (holotype: INPA; isotype: MICH).

This is the shortest species of *Acmanthera*; all the others are larger shrubs or trees. *Acmanthera minima* most resembles *A. parviflora*, from which it is easily distinguished by its small stature, longer glabrous stipules, and glabrous sepals. The eventual collection of flowers of *A. minima* and fruits of *A. parviflora* will probably reveal additional differences between them. *Acmanthera minima* is assignable to sect. *Microglossa*, although

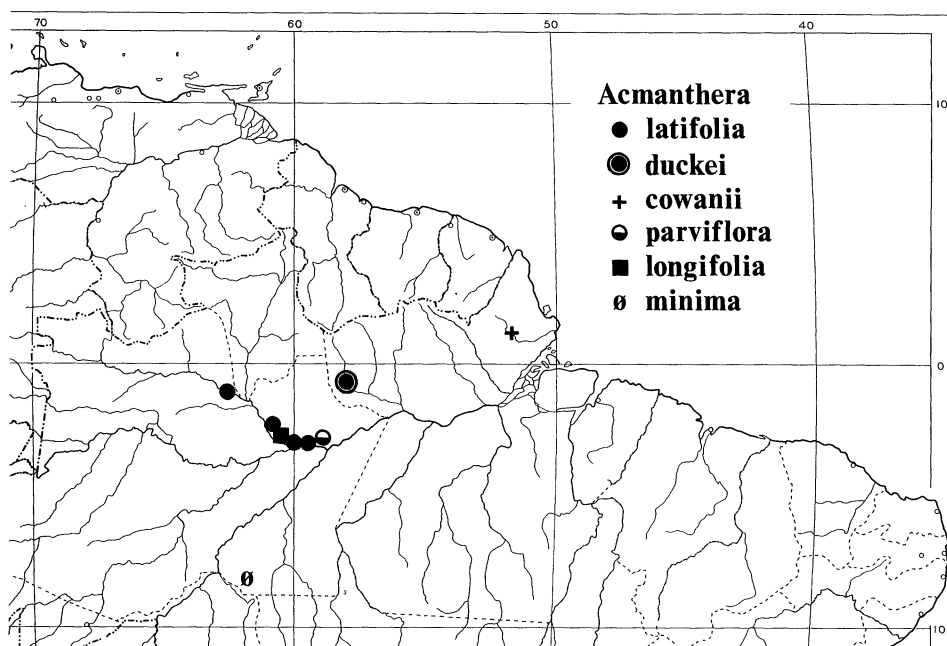


FIG. 5. Distribution of all species of *Acmanthera*. Not mapped is Ducke's collection of *A. cowanii* from the Rio Nhamundá, Pará (see Anderson 1975, p. 47). Goode Base Map No. 103, South America, Copyright The University of Chicago.

its glabrous sepals require a slight modification of the description of that group. The key below will allow identification of all six presently known species of *Acmanthera*. See my 1975 revision for descriptions of the other five species, four of which are illustrated there.

#### KEY TO THE SPECIES OF *ACMANTHERA*

Bracts and bracteoles broadly orbicular and deeply concave, 2.0–4.0 mm long, 2.5–5.0 mm wide, with several parallel longitudinal nerves prominent adaxially.

Stipules 1.5–3.1(–4.3) cm long, the stipular sheath plicate, cruciform in cross-section; bracts and bracteoles uniformly chartaceous, densely and uniformly sericeous ..... *A. latifolia* (Adr. Jussieu) Grisebach

Stipules 11–12 cm long, the stipular sheath smooth, flattened, very narrowly elliptical in cross-section; bracts and bracteoles chartaceous and sericeous in the center, membranous and glabrous toward the margin ..... *A. duckei* Anderson

Bracts and bracteoles narrowly triangular and flat, up to 1.6 mm long and 0.9 mm wide, often much smaller, nerveless or with only the midrib developed and even that obscure.

Stipular sheath plicate, cruciform in cross-section; connective of the anthers extended beyond the locules in an appendage 0.5–1.5 mm long, terminating in a hemispherical gland ..... *A. cowanii* Anderson

Stipular sheath smooth, flattened, linear or very narrowly elliptical in cross-section; connective of the anthers bearing a flat, membranous appendage up to 0.4 mm long, tapering to an acute, non-glandular apex.

Sepals abaxially sericeous in the center and glabrous toward the apex or margin; trees 4–6 m tall.

Leaves, stipules, vegetative branchlets, and ovary sericeous or pilose-sericeous, at least originally; young stems with few, obscure lenticels; leaves up to 23 cm long and 9 cm wide ..... *A. parviflora* Anderson

Leaves, stipules, vegetative branchlets, and ovary glabrous; even the young stems with large, coarse lenticels; larger leaves 23–35 cm long and 7.5–15 cm wide ..... *A. longifolia* Niedenzu

Sepals glabrous; shrublets 60 cm tall ..... *A. minima* Anderson

*Acmanthera minima* is the only species known from southern Amazonia (fig. 5). Its habitat is a low *campina* on white sand. Other species of the genus seem to inhabit forests and are most often collected on the banks of streams; however, many collectors do not note habitat so a reliable comparison is difficult. The *campinas* of northern Amazonia have received much study, and Prance and Schubart (1978) have suggested that some of them originated as Indian clearings. The presence of this distinctive, reduced species of *Acmanthera*, apparently endemic to a southern *campina*, suggests a less recent origin for the southern *campinas*.

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#### LITERATURE CITED

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