

A JOURNAL ON TAXONOMIC BOTANY,
PLANT SOCIOLOGY AND ECOLOGY

REINWARDTIA

Editors

KUSWATA KARTAWINATA
GREGORI G. HAMBALI
MIEN A. RIFAI

Published by

HERBARIUM BOGORIENSE
LEMBAGA BIOLOGI NASIONAL — LIPI
BOGOR, INDONESIA

Reinwardtia Vol. 10, Part 1, 1 — 106

28 February 1982

IO ISSN 0034 — 365X

**TWO NEW SPECIES OF ACRONYCHIA (RUTACEAE) FROM
NEW GUINEA ***

T. G. HARTLEY

*Herbarium Australiense, C.S.I.R.O. Division of Plant Industry, Canberra,
A.C.T. 2601, Australia*

ABSTRACT

Two new species of *Acronychia* from New Guinea, *A. glauca* Hartley and *A. wisseliana* Hartley, are described and illustrated.

ABSTRAK

Dua jenis baru *Acronychia* dari Irian, *A. glauca* Hartley and *A. wisseliana* Hartley dipertelakan dan digambar.

Since the publication of a revision of *Acronychia* (Hartley, 1974), I have examined a number of additional collections of the genus. Among these are the following two new species from New Guinea.

Acronychia glauca Hartley, *sp. nov.* — Fig. 1 a, b.

Frutex 0.5 m altus; ramulis glabris, manifeste glaucis; foliis unifoliolatis; petiolo glabro, manifeste glauco, 0.2—0.5 cm longo; foliolo coriaceo, glauco (praecipue in costa), elliptico. 2—3.5 cm longo, 1—1.8 cm lato, basi acuto vel cuneato, apice obtuso vel obtuse acuminato, acumine usque 0.5 cm longo, venis primariis utrinsecus costae 6—9; inflorescentiis unifloris, 0.8—1 cm longis, axe puberulo, mox glauco, pedicello subtilitei-adpresse pubescenti, ca 2 mm longo; floribus ca 4 mm longis; sepalis subtiliter adpresse pubescentibus, rotundatis, 0.6—0.8 mm longis, 1.2—1.4 mm latis; petalis abaxialiter adpresse pubescentibus, adaxialiter glabris; disco glabro, ca 0.2 mm alto, 1.2 mm lato; ovario dense pubescenti, sine fissuris septicialibus; stylo glabro; fructibus non visis. Holotypus: *Sleumer & Vink BW 14188* (CANB).

* A proposal to conserve the generic name *Acronychia* J.R. & G. Forster against *Jambolifera* L. (Hartley in *Taxon* 23: 435-437, 1974), was accepted by the L.A.P.T. Committee on Spermatophyta (*Taxon* 24: 247, 1975), and has been incorporated into the most recent edition of the International Code of Botanical Nomenclature (Reg. Veg. 97, 1978).

Shrub 0.5 m high; branchlets glabrous, manifestly glaucous. Leaves unifoliolate; petiole glabrous, manifestly glaucous, 0.2—0.5 cm long; leaflet coriaceous, glaucous (mainly on the midrib), elliptic, 2—3.5 cm long, 1—1.8 cm wide, the base acute to cuneate, the apex obtuse to obtusely acuminate, the acumen to 0.5 cm long, the main veins 6 to 9 on each side of the midrib. Inflorescences 1-flowered, 0.8—1 cm long; axis puberulent, soon becoming glaucous; pedicel finely appressed pubescent, about 2 mm long. Flowers about 4 mm long; sepals finely appressed pubescent, rounded, 0.6—0.8 mm long, 1.2—1.4 mm wide; petals appressed pubescent abaxially, glabrous adaxially; disc glabrous, about 0.2 mm high, 1.2 mm wide; ovary densely pubescent, without septicial fissures; style glabrous. Fruits not seen.

DISTRIBUTION: Known only from the type collection.

IRIAN JAYA. Vogelkop Peninsula: Arfak Mountains, Angi Lakes, Angi Gita Lake, Mt. Sensenemes, common in open fire-vegetation with low scrub, 2400 m, *Sleumer & Vink BW U188* (CANB, holotype).

This species appears to be most closely related to *Acronychia arfakensis* Gibbs, which is known only from Mt. Koebré, Arfak Mountains. The main differences between the two are that here the branchlets and petioles are strongly glaucous and the ovary is entirely pubescent whereas in *A. arfakensis* these vegetative parts are not noticeably glaucous and the ovary is entirely glabrous or with a few hairs only at the apex.

Acronychia wisseliana Hartley, *sp. nov.* — Fig. 1 c-f.

Frutex(?); ramulis glabris, mox suberosis; foliis trifoliolatis (foliis infrequentibus unifoliolatis); petiolo glabro, 0.4—1.4 cm longo; foliolis subcoriaceis vel coriaceis, glabris, ellipticis vel elliptico-oblongis, 1.8—3.5 cm longis, 0.8—1.5 cm latis, basi acutis vel cuneatis, apice obtusis vel retusis, venis primariis utrinsecus costae 8—10; inflorescentiis unifloris vel paucifloris, 1.2—3 cm longis, axe et ramis glabratis, pedicellis subtiliter adpresse pubescentibus, 3.5—4 mm longis; floribus 6.5 mm longis; serai's glabratis, rotundatis 0.5—0.7 mm longis, 0.8—1 mm latis; petalis abaxialiter subtiliter adpresse pubescentibus, adaxialiter glabris; disco glabro, 0.6 mm alto, 1.3 mm lato; ovario glabro, fissuris scoticidalibus ca 1/8 longitudine extensis; stylo basin versus pubescenti, aliter glabro; fructibus in sicco rubiginosis glabris, fissuris septicialibus ca 1/3 longitudine extensis, subglobosis, ca 8 mm latis, basi et apice rotundatis; epicarpio in sicco ca 1.5 mm crasso, mesocarpio subligneo; endocarpio cartilagineo; seminibus nigricantibus, ca 3 mm longis. Holotypus: *Eyma 4802* (BO).

Shrub(?); branchlets glabrous, soon developing cork tissue. Leaves trifoliolate (occasional leaves unifoliolate); petiole glabrous, 0.4—1.4 cm long; leaflets subcoriaceous to coriaceous, glabrous, elliptic to elliptic-oblong, 1.8—3.5 cm long, 0.8—1.5 cm wide, the base acute to cuneate, the

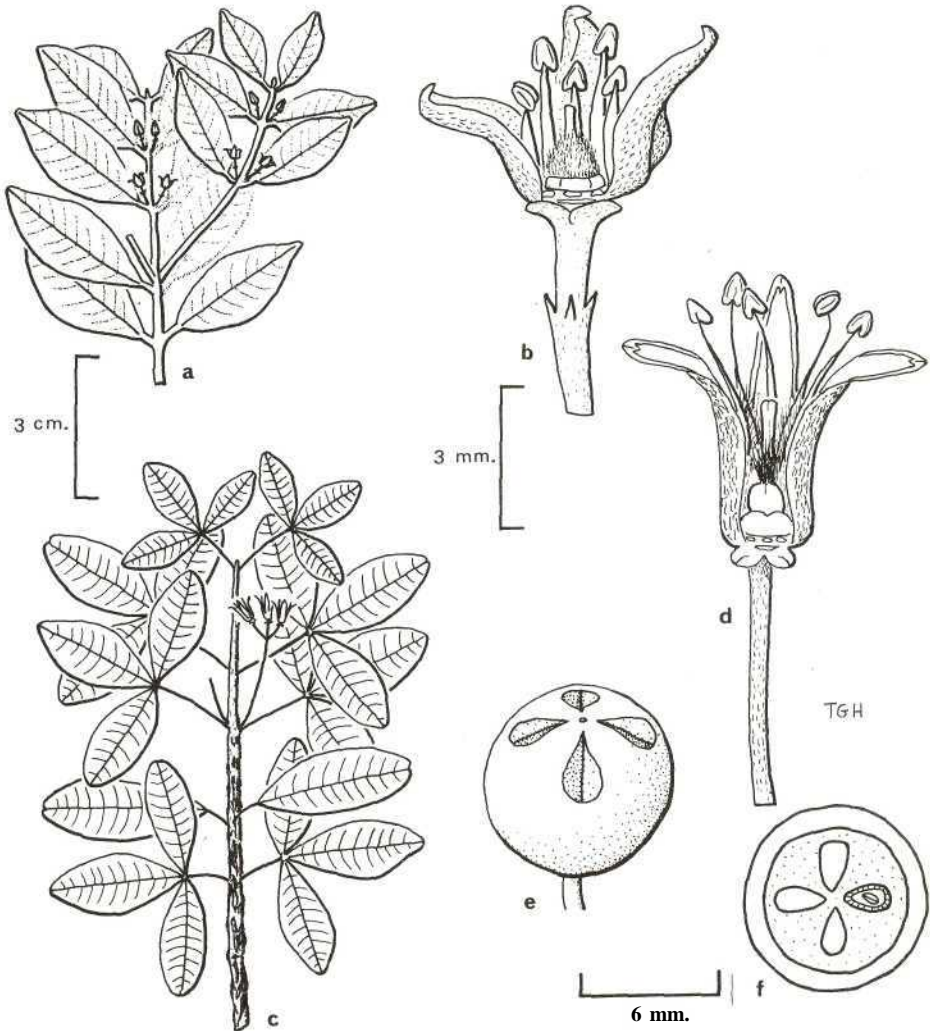


FIG. 1. New species of *Acronyehia*. a, b, *A. glauca* Hartley: a, flowering branchlet; b, flower with one petal and three stamens removed (both drawn from *Sleumer & Vink BW 14188*). c-f, *A. wisseliana* Hartley: c, flowering branchlet; d, flower with one petal and three stamens removed; e, fruit; f, fruit in diagrammatic cross section showing outer fleshy exocarp, subwoody mesocarp (stippled), and the four locules, one containing a seed showing seed coat (hatched) and embryo surrounded by endosperm (all drawn from *Eyma 4802*).

apex obtuse to retuse, the main veins 8 to 10 on each side of the midrib. Inflorescences one to few-flowered, 1.2—3 cm long; axis and branches glabrate; pedicels finely appressed pubescent, 3.5—4 mm long. Flowers 6.5 mm long; sepals glabrate, rounded, 0.5—0.7 mm long, 0.8—1 mm wide; petals finely appressed pubescent abaxially, glabrous adaxially; disc glabrous, 0.6 mm high, 1.3 mm wide; ovary glabrous, with septicial fissures extending for about one third the length; style pubescent toward the base, otherwise glabrous; Fruits drying reddish brown, glabrous, with septicial fissures extending for about one third the length, subglobose, about 8 mm wide, the base and apex rounded; epicarp drying about 1.5 mm thick, the mesocarp subwoody; endocarp cartilaginous. Seeds blackish, about 3 mm long.

DISTRIBUTION. Known only from the type collection.

IRIAN JAYA. Wissel Lake region, Enarotali-Koegapa, heath vegetation Ego-gitoagapa [elevation probably about 1800 m] *Eyma 1802* (BO, holotype).

This species appears to be most closely related to *AcronycMa trifoliolata* Zoll. & Mor. var. *trifoliolata* — a generally more lowland plant which ranges from Java and Christmas Island east, discontinuously, to the Solomon Islands — from which it differs mainly in having shorter petioles, smaller leaflets, and usually smaller inflorescences. Also, the branchlets here have well developed cork tissue, a feature I have not seen in any of the other species of *AcronycMa*.

LITERATURE CITED

- HARTLEY, T. G. (1974). A revision of the genus *AcronycMa* (Rutaceae). *In* J. Arnold Arb. 55: 469—523, 525—567.

CONTENTS
VOL. 10 No. 1

	Page
RIFAI, M. A. In memoriam Prof. Ir. Kusnoto Setyodiwiryo	1
KOSTERMANS, A. J. G. H. In memoriam Professor Anwari Dilmy ...	5
JACOBS, M. Kostermans seventy-five	9
STEENIS, C. G. G. J. VAN & VELDKAMP, J. F. Miscellaneous botanical notes XXVI	21
KARTAWINATA, K. <i>Chydenanthus</i> Miers (Lecythidaceae)	27
NAYAR, M. P. Revision of the genus <i>Catanthera</i> F. v. Muell. (Melas- tomataceae)	35
KOSTERMANS, A. J. G. H. The genus <i>Cynometra</i> F. v. Muell.	63
———— The genus <i>Vatica</i> (Dipterocarpaceae) in Ceylon	69
———— The genus <i>Mastixia</i> Bl. (Cornaceae) in Ceylon	81
HARTLEY, T. G. Two new species of <i>Acronychia</i> (Rutaceae) from New Guinea	93
SEETHARAM, Y. N. Two new names in the genus <i>Garcinia</i> L.	97
RIFAI, M. A. A new <i>Melanographium</i> with mononematous conidio- phores	99
PRAWIROATMODJO, S. Anatomical evidence for reinstating <i>Schizos- tachyum longispiculatum</i> and <i>S. biflorum</i>	103

Distributor

LEMBAGA BIOLOGI NASIONAL — LIPI
JALAN RAYA JUANDA 18
BOGOR — INDONESIA