

REVISION OF THE SAPOTACEAE OF THE MALAYSIAN AREA
IN A WIDER SENSE

XVII.¹⁾ *Aulandra* H. J. Lam

by

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Aulandra H. J. Lam, Bull. Jard. Bot. Bzg, sér. 3, 8, 1927, 415, f. 6; H. J. Lam, Hooker Icon. Pl. 1938, t. 3360; Baehni, Candollea 9, 1942, 419 — *Palaquium*, § *Palaquioides* Dubard, Bull. Soc. Bot. Fr. 56, Mém. 16, 1909, 19.

Trees. Leaves alternate, stipulate, entire, tertiary nerves transverse. Inflorescences cauliflorous, flowers terminal or axillary along short vermiform brachyblasts covered by numerous scars of bracts. Flowers bisexual, 6-merous. Sepals 6, in 2 whorls of three, united at the base. Petals 6, united at the base. Stamens 18 or 19, filaments partly tubuliformly united and the tube inserted on the corolla, anthers free, dehiscing extrorsely. Ovary 6-celled; style short or long, filiform. Fruit a berry, one-seeded, scar of seed covering almost the entire seed, albumen none.

Type species: *Aulandra longifolia* H. J. Lam.

Distr.: Three species in Borneo.

Key to the species

1.a. Leaves very large, 32—97 by 7.2—28 cm. Secondary nerves 22—36 pair . . . 2
b. Leaves smaller, 17—30 by 5—9.5 cm. Secondary nerves 9—15 pair

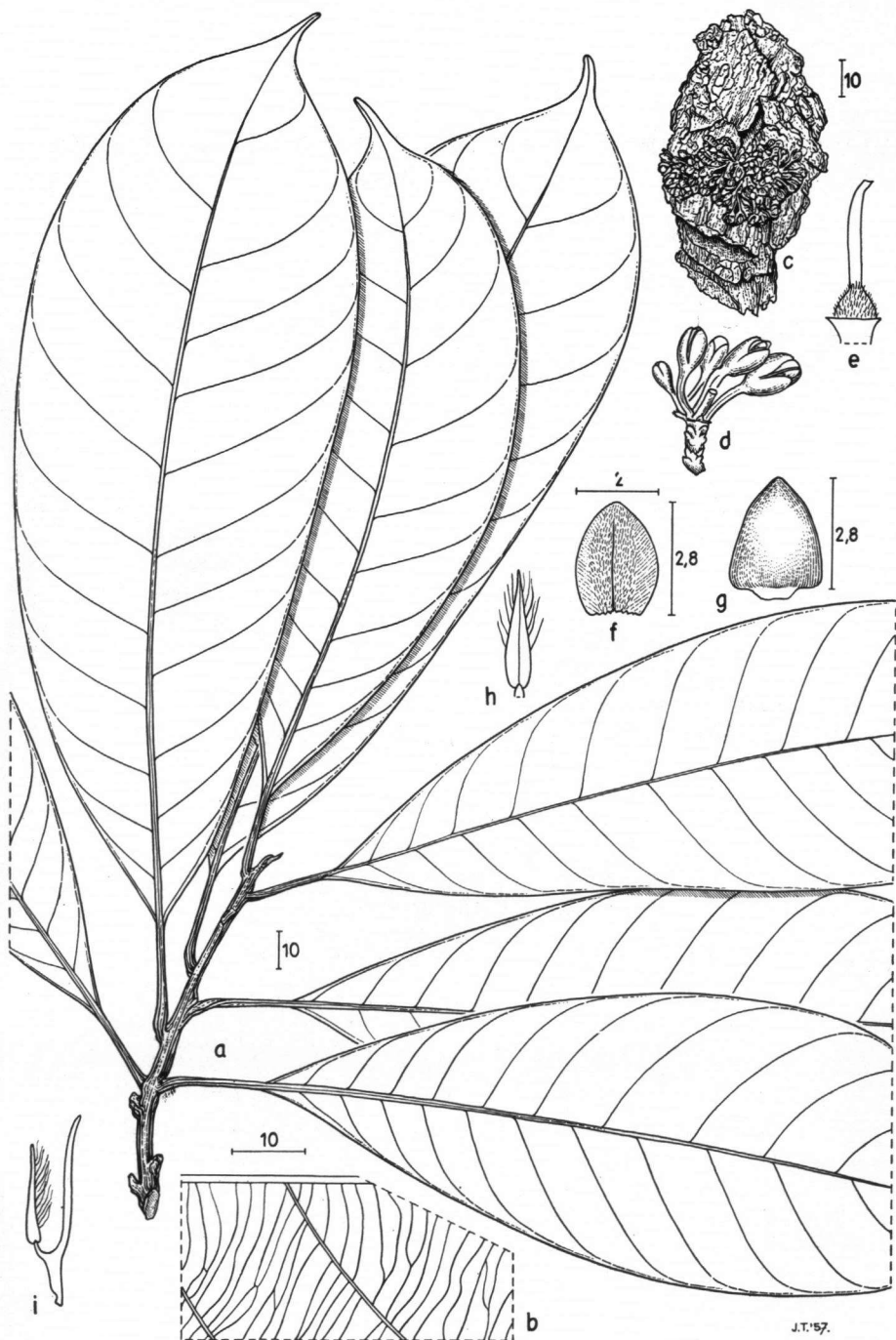
1. *A. beccarii* (Pierre) van Royen

2.a. Leaves oblong-obovate, 60—70 by 18 cm. Secondary nerves 32—35 pair. Flowers on very short brachyblasts. Petioles 6—7 cm long 2. *A. cauliflora* H. J. Lam

b. Leaves oblanceolate, 32—97 by 7.2—28 cm. Secondary nerves 22—36 pair. Flowers on elongate brachyblasts. Petioles 2—5.5 cm long 3. *A. longifolia* H. J. Lam

1. *A. beccarii* (Pierre) van Royen, nov. comb. — *Palaquium beccarii* Pierre ex Dubard, Bull. Soc. bot. Fr. 56, Mém. 16, 1909, 20, *Palaquium* § *Palaquioides*; H. J. Lam, Bull. Jard. Bot. Bzg, sér. 3, 7, 1925, 47; H. J. Lam, l. c. sér. 3, 8, 1927, 398 — Fig. 1.

¹⁾ I—III in *Blumea* VI, 1952, 547—595; IV—V in *Blumea* VII, 1953, 364—412; IVa in *Blumea* VII, 1954, 481—483; IIa, IVb, Va, VI—IX in *Blumea* VIII, 1957, 201—509; X—XII in *Nova Guinea*, NS 8, 1957, 87—128; XIII—XVI in *Blumea* IX, 1958, 21—142; XVII in the present issue.



Trees. Branchlets angular, 2—5 mm in diam., ferruginously tomentose, glabrescent; terminal cone up to 5 mm long, greyish or ferruginously tomentose, stipules lanceolate, up to 1.5 by 1 mm, acute, ferruginously tomentose without, glabrous within, caducous. *Leaves* scattered, oblong-obovate to elliptic, (17—)23—30 by (5—)7.5—9.5 cm, apex obtusely acuminate, acumen up to 12 mm long, base subabruptly narrowed and decurrent along the sides of the petiole, glabrous above except sparsely whitish tomentose along the basal part of midrib, glabrous below except along the midrib, coriaceous; midrib prominent and angular on either side, secondary nerves 9—15 pair, ascending at an angle of 50°—55°, straight or slightly curved, subabruptly curved at their tips, diminishing until inconspicuous near margins of leaf, grooved above, prominent below, tertiary nerves inconspicuous above, slender and prominent below. Petioles (1.5—)2—3.5 cm long, flat above, when young ferruginously tomentose but soon glabrous. *Flowers* cauliflorous, along vermiform brachyblasts borne on big warts below the leaves, brachyblasts up to 11 mm long, with numerous scars of bracts which are deltoid, up to 1.5 by 1 mm large with subacute apex, ferruginously tomentose without, glabrous within, pedicels angular, 2—5.5 mm long, ferruginously tomentose. Outer sepals ovate, 2.5—3 by 2—2.5 mm, apex subobtusely, ferruginously tomentose at outside, glabrous at inside, inner sepals elliptic-ovate, slightly smaller than the outer ones, obtuse, crested at outside, ferruginously or greyish tomentose without, glabrous within, margin in both series of sepals fimbriate. *Corolla* seen in bud only, up to 3 mm long, glabrous on either side, lobes oblong, c. 2.5 by 1 mm, rounded. *Stamens* 18, in 3 rows, c. 1.5 mm long, filaments broadly subulate, united (?), c. 0.3 mm long, glabrous, anthers cordate-sagittate, 1—1.5 mm long, acute, acumen bifurcate or emarginate, with long whitish hairs at outside, which easily fall off. *Ovary* conoid, c. 0.5 by 1 mm, ferruginously tomentose, at base glabrous. Style subulate, c. 2 mm long, with 6 grooves, glabrous except for a few hairs at the apex. *Fruits* unknown.

Type specimen: *Beccari 3347* in P.

Distr.: Borneo.

BORNEO. Sarawak, Mt. Balang, Batang-Lupar: *Beccari 3347* (FI, G, P), fl. April.

Remarks. According to Dubard the type specimen is *Teysmann s.n.* (HP 5068) but this seems to be an error since on the sheet of the type specimen in Paris clearly *Beccari* is indicated as being the collector.

Though the flowers are very young and it is not clear whether a staminal tube is present or not, yet owing to a slight cohering at the base of the filaments this species is transferred to *Aulandra*. Also the following details strengthened the opinion that this is a right decision:

The number of stamens is 18 and the anthers are pubescent when young. The cauliflorous inflorescence with the elongate, vermiform brachyblasts covered with scars of bracts and the terminal flowers too point to *Aulandra*. Also the leaves with their markedly prominent and angular

Fig. 1. *Aulandra beccarii*, a. sterile branch, b. part of the nervation, c. inflorescence, d. part-inflorescence, e. gynaeceum, f. inner sepal, g. outer sepal, h. stamen (after *Beccari 3347*).

midrib and the acuminate tip show a close resemblance to the other two species.

2. **A. cauliflora** H. J. Lam, Hooker Icon. Pl. 4, 1938, t. 3360.

Trees, 10—15 m tall. Branchlets 4—8 mm in diam., glabrous. Stipules and terminal cone unknown. *Leaves* obovate-oblong, 60—70 by c. 18 cm, obtuse and short acutely acuminate, acumen c. 6 mm long, subabruptly narrowed and narrowly cuneate at base, long decurrent along sides of petiole; chartaceous, glabrous on either side, secondary nerves 32—35 pair, ascending at an angle of 60°—65° (—80° in the basal part), the apical ones curved, the others straight and abruptly curved at their tips, diminishing until inconspicuous near margin, prominulous above, prominent below, tertiary nerves slender, distinct on either side. Petioles stout, 6—7 cm long, glabrous. *Flowers* in cauliflorous inflorescences below the leaves, at apex of short, up to 5 mm long brachyblasts covered with scars of bracts; pedicel 3—6 mm long, ferruginously sericeous. *Sepals* deltoid, 3.5—5 by 2.5—3.5 mm, outer ones acutish, inner ones obtuse or rounded, the latter larger than the outer sepals, all sepals ferruginously sericeous at outside, glabrous at inside. *Corolla* creamy white, c. 8.5 mm long, glabrous, lobes oblong, 5—6 by 2—3 mm, subacute to rounded at apex, reflexed in anthesis. *Stamens* 18 or 19, staminal tube 2.5—3 mm long, glabrous, free parts of filaments 1.5—4 mm long, anthers oblong, 2—3 mm long, acute, ferruginously pilose when young, glabrescent. *Ovary* globose, 1—1.5 mm in diam., ferruginously pilose, style 4—5.5 mm long, glabrous. *Fruits* unknown.

Type specimen: *Richards 1125* in K.

Distr.: Borneo.

BORNEO. Sarawak, in secondary forest on hill ridge, alt. 300 m: *Richards 1125* (K), fl. Aug., creamy white, tree with flowers from near ground to c. 7 m.

Remarks: If more material becomes available this species might be united with the following one.

3. **A. longifolia** H. J. Lam, Bull. Jard. Bot. Bzg., sér. 3, 8, 1927, 415, f. 6.

Trees, up to 12 m tall. Branchlets stout, 7—12 mm in diam., glabrous except for the extreme puberulous tip which becomes soon glabrous. Stipules lanceolate, 2—3 by 1—1.5 mm, acute, ferruginously puberulous at outside, glabrous at inside, caducous. *Leaves* alternate or conferted at tip of branchlets, oblanceolate, 32—97 by 7.2—28 cm, obtusely acuminate at apex, acumen up to 2.4 cm long, base narrowly cuneate, decurrent along upper side of petiole; subcoriaceous, glabrous on either side, or sparsely ferruginously sericeous at underside of midrib, the latter angular on either side, secondary nerves 22—36 pair, straight but curved at their tips and diminishing until inconspicuous, ascending at an angle of 60°—70°, grooved or prominulous above, prominent below, tertiary nerves slender. Petioles 2—5.5 cm long, flat above, crested below, rugulose at underside of the basal part, glabrous. Inflorescences cauliflorous, flowers at apex of up to c. 3 cm long brachyblasts which are branched and covered with scars of bracts, bracts ovate or triangular, up to 1.5 by 1.5 mm, obtuse, ferruginous-

ly tomentose at outside, glabrous at inside. *Flowers* white, pedicels angular, 4—8 mm long, ferruginously tomentose. *Sepals* ovate-lanceolate, 2—6 by 2—3.5 mm, obtuse, ferruginously tomentose at outside, glabrous at inside, inner sepals larger, crested at outside, more rounded at apex than inner sepals, fimbriate at apex and margins membranous and glabrous at outside. *Corolla* 6—8.5 mm long, glabrous, lobes obovate or spatulate, 5—6.5 by 2.5—4 mm, obtuse or truncate at apex. *Stamens* 18, staminal tube 2.5—3.5 mm long, glabrous, apical part of filaments free, anthers lanceolate, c. 3 mm long, acutely acuminate, glabrous, but with ferruginous hairs at inside when young. *Ovary* ovoid, c. 1.5 by 2 mm, ferruginously hirsute, style filiform, 7—9.5 mm long, glabrous, but puberulous at base. *Fruits* ovoid to subglobose, sometimes oblique, 2—2.5 by 2—2.3 cm, acute, at apex with a remnant of the style, 1-seeded, pericarp woody, thin, glabrous; seeds pyriform, 1.5—1.8 by 1.3—1.5 by 0.6—0.8 cm, obtusely acuminate at apex, rounded at base, scar covering about $\frac{3}{4}$ of surface of seed, albumen none.

Type specimen: *Amdjah 238* in L.

Distr.: Borneo.

BORNEO. Indonesian Borneo, Lumbis: *Amdjah 238* (BO, L), fr. July; W. Kutai, near L. Petak, alt. c. 550 m: *Enderit 3101* (B, BO, L), fl. Sept., tree c. 12 m — Sarawak, Gat, Upper Rejang river: *Clemens & Clemens 21531* (K), fl. white, tree, 11 m.