

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

XXI¹⁾. *Eberhardtia* Lecomte

by

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Eberhardtia Lecomte, Bull. Mus. Hist. Nat. Paris 26, 1920, 345; Fl. Gén. Indo-Chine 3, 7, 1930, 882.

Trees. Leaves scattered along the branchlets, simple, entire, petiolate, secondary nerves diminishing until inconspicuous near margin, tertiary nerves transverse. Stipules large, caducous. Flowers in axillary clusters. Sepals 5, imbricate. Corolla gamopetalous, 5-lobed, each lobe consisting of two broad lateral and one linear, median lobe. Stamens 5, oppositi- and epipetalous, filaments thickened except for the apical part. Staminodes 5, alternipetalous, inserted between the corolla-lobes, filaments thickened, antheroid membranous, sagittate. Ovary 5-celled. Style 1. Fruit a berry, 5-seeded, scar of seed linear, albumen copious, cotyledons thin.

Type species: *E. tonkinensis* Lecomte.

Distribution: Three species in Indo-China.

Remarks. This genus undoubtedly is closely related to *Planchonella* but differs from that genus by the peculiarily shaped corolla-lobes. The three species, none of which is completely known, resemble each other very much and it might well be that in the future they should be united under the specific epithet *aurata*.

Key to the species

- 1a. Leaves broadest above the middle 2
- b. Leaves broadest below or in the middle 2. *E. krempfii*
- 2a. Base of leaf broadly cuneate 3. *E. aurata*
- b. Base of leaf narrowly cuneate 1. *E. tonkinensis*

1. *E. tonkinensis* Lecomte, l. c., 1920, 346, fig.; idem, l. c. 1930, 882, f. 96 — Fig. 1c.

Trees, 10—15 m. Branchlets stout, up to 5 mm in diam., ferruginously tomentose, but soon glabrous; terminal cone up to 10 mm long, stipules

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, 81—128; XIII—XVI in *Blumea* IX, 1958, 21—142; XVII in *Blumea*, Suppl. IV, 1958, 263—267; IIb, IXa, XVIII, XIX in *Nova Guinea* NS 10, 1, 1959, 131—143; XX—XXII in the present issue.

lanceolate, sometimes slightly oblique, up to 9 by 2.5 mm, acutely acuminate, crested on outside, tomentose on outside, glabrous on inside, caducous. *Leaves* oblong-obovate, 16—23 by 5—7.5 cm, subabruptly acutely acuminate at apex, cuneate and sometimes narrowly so at base; subcoriaceous, ferruginously tomentose and denser so on midrib and lateral nerves when young, glabrous above and sericeous below when mature; midrib slightly impressed above and narrowly crested as well, prominent and rounded below, secondary nerves 16—19 pairs, ascending at an angle of c. 65°, slightly curved but stronger so near the margin, prominulous above, prominent below, tertiary nerves slender, inconspicuous on either side. Petioles stout, 2—2.5 cm long, deeply grooved above, rounded below, glabrous or subglabrous. *Flowers* in 4—7-flowered clusters; pedicels angular, 2.5—5 mm long, yellowish brown sericeous. *Sepals* oblong or elliptic-oblong, 4—6 by 2—3 mm, obtuse or rounded at apex, crested and sericeous on outside, glabrous on inside, the inner sepals with membranous, glabrous and fimbriate margins. *Corolla* 7—8 mm long, entirely glabrous, lobes 3-lobed, the lateral ones obovate-orbicular, 3—4 by 2—3 mm, rounded, the median one oblong, 3—3.5 mm long, obtuse, in bud incurved at apex. *Stamens* 2.5—3.5 mm long, entirely glabrous, filaments subulate, thickened except at apex, 1.5—2 mm long, anthers ovoid, 1—1.5 mm long, obtuse and mucronulate at apex, dehiscing laterally. *Staminodes* pyramidal, broadened at base, 1.5—3 mm long, with a versatile sagittate, membranous, c. 1.5 mm, acute appendage at apex. *Ovary* ovoid, subabruptly narrowed into the style, 5-celled, glabrous, the style included 3—3.5 mm long. *Fruits* unknown.

Type specimen: *Eberhardt 5027* in P.

Distribution: Indo-China.

TONKIN. Vinh-Yên prov., Tam Dao Range: *Eberhardt 5027* (P), fl.

2. *E. krempfii* Lecomte, l. c. 1920, 348; idem, l. c. 1930, 884 — Fig. 1a.

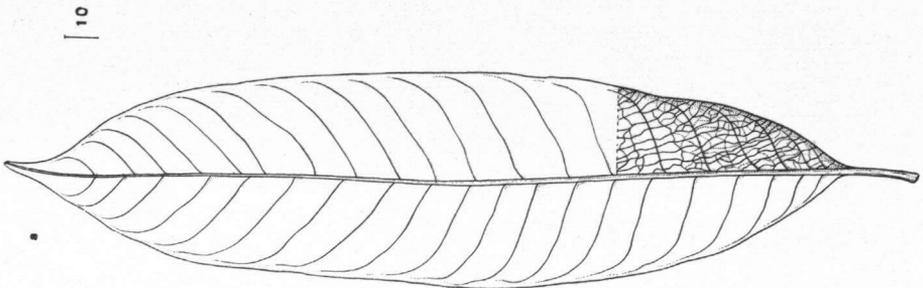
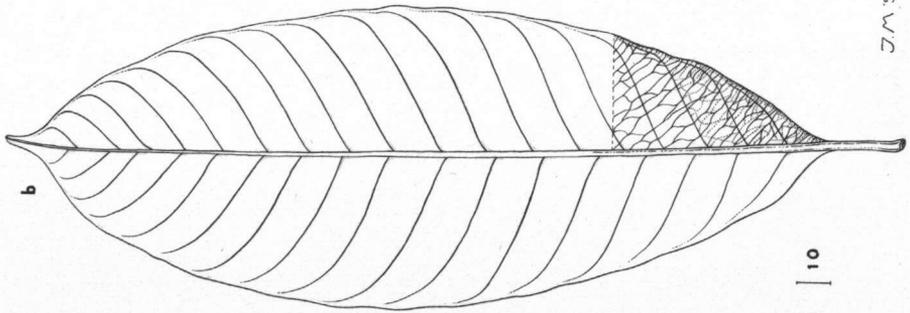
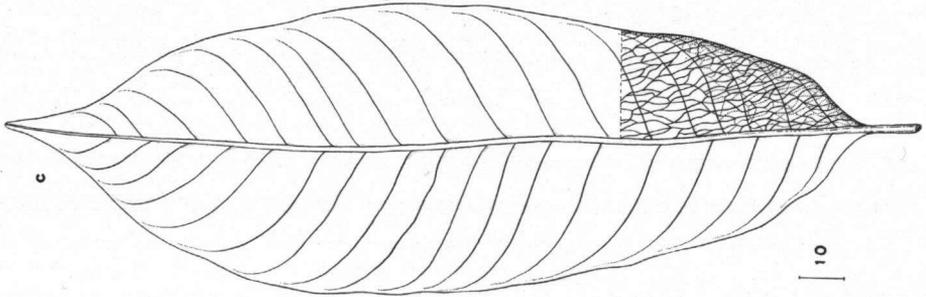
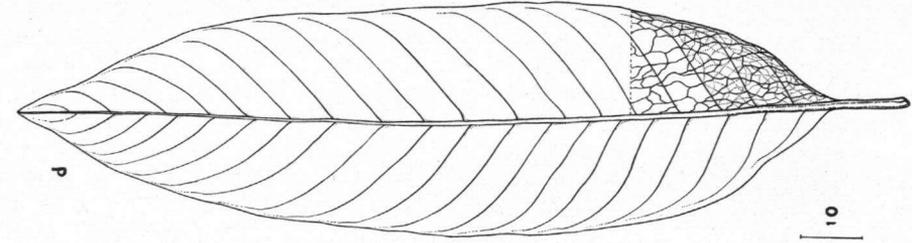
Trees. Branchlets slender, 2—4 mm in diam., dark brown puberulous, glabrescent; terminal cone up to 5 mm long; stipules lanceolate, up to 3 by 1.5 mm long, acute, pubescent on outside, glabrous on inside, caducous. *Leaves* oblong or narrowly elliptic, 15—22 by 3.5—5 cm, subabruptly acutely acuminate at apex, narrowly cuneate at base; thin-coriaceous, glabrous above, brownish sericeous below; midrib narrowly grooved and narrowly crested above, prominent and rounded below, secondary nerves 17—20 pairs, ascending at an angle of c. 50°, slightly curved but stronger so at their tips and diminishing until inconspicuous near margin, inconspicuous above, prominent below, tertiary nerves slender, inconspicuous on either side. Petioles 2—4 cm long, grooved and narrowly crested above, rounded below, ferruginously or dark brown sericeous. *Flowers* unknown. *Fruits* not seen but according to Lecomte: Berry subglobose, c. 4 by 3.5 cm, slightly 5-ribbed, stipitate at base, 5-seeded, pericarp subglabrous. Seeds with a narrow, linear scar, albumen copious, cotyledons elliptic.

Type specimen: *Krempf 1574* in P.

Distribution: Indo-China.

ANNAM. Nha-trang prov., Tan Hoa Massif: *Krempf 1574* (P), fr.

Var. *magnifica* H. Lec., l. c. 1920, 884 — *Chrysophyllum magnificum* Chev., in msc — Fig. 1d.



J.M. '59

Trees. Branchlets stout, 3—6 mm in diam., ferruginously sericeous, glabrescent; terminal cone and stipules unknown. *Leaves* ovate-elliptic or elliptic, 30—35 × 7—8 cm, gradually to subabruptly obtusely acuminate at apex, cuneate at base; coriaceous; glabrous above, brownish sericeous below; midrib grooved and narrowly crested above, prominent and rounded below, secondary nerves 19—22 pairs, ascending at an angle of c. 60°, slightly curved or straight and curved at the tips only, impressed above and narrowly crested as well, prominent below, tertiary nerves prominulous above, stronger so below. Petioles 3—4 cm long, crested above, rounded or slightly crested below. *Flowers* unknown. *Fruits* solitary, axillary, pedicel stout, up to 11 by 2.5 mm, ferruginously sericeous, sepals ovate, up to 5 by 3 mm, obtuse, sericeous on outside, glabrous on inside. Fruits subglobose, c. 3 by 2.5 cm, 5-lobed, rounded at apex, stipitate at base, 2-seeded, pericarp fleshy, ferruginously sericeous. Seeds ellipsoid, but flattened at the side of the scar, c. 2 by 1.5 by 1.2 cm, rounded at either end, scar elliptic, up to 6 mm broad, testa thin, embryo unknown.

Type specimen: *Chevalier 38855* in P.

Distribution: Indo-China (Annam).

Annam, Nha-trang prov., Houba Massif: *Chevalier 38855* (P), fr. Aug.

3. *E. aurata* (Pierre) Lecomte, l. c. 1920, 348; l. c. 1930, 885 — *Planchonella aurata* Pierre ex Dubard, Notul. Syst. 2, 1911, 134 — Fig. 1b.

Trees 6—8 m. Branchlets stout, 5—8 mm in diam., ferruginously tomentose, glabrescent, terminal cone and stipules unknown. *Leaves* oblong-ovate or obovate, 13—29 by 4—9 cm, abruptly obtusely or acutely acuminate, base cuneate; coriaceous, glabrous above, brownish sericeous below; midrib crested above, prominent and rounded below, secondary nerves 16—19 pairs, ascending at an angle of c. 65°, straight, slightly S-shaped or curved, stronger so at their tips, tertiary nerves slender, inconspicuous on either side. Petioles 2—3.5 cm long, angular on either side, ferruginously puberulous, becoming almost entirely glabrous. *Flowers* unknown. Pedicels of fruit stout, up to 12 by 3 mm, puberulous, sepals in fruit oblong, up to 6 by 2.5 mm, obtuse, ferruginously puberulous on outside, glabrous on inside. *Fruits* subglobose, 2—4.5 cm by 1—5 cm, slightly lobed, rounded at apex and with a short remnant of the style; pericarp fleshy, ferruginously puberulous. Seeds ellipsoid but flattened at the side of the scar, 2—4 by c. 1.5 by c. 1 cm, rounded at either end, scar linear, embryo incompletely known.

Type specimen: *Balansa 4338* in P.

Distribution: Indo-China (Tonkin).

Tonkin, Mount Blair, alt. 1400 m: *Balansa 4338* (P), fr. July.

Fig. 1. Leaves of species of *Eberhardtia*, a. *E. krempfii*, b. *E. aurata*, c. *E. tonkinensis*, d. *E. krempfii*, var. *magnifica*. All leaves are drawn from the type specimens and pictured with the same length to make a comparison possible. The scales are given in millimeters.