

IX. PROVISIONAL KEY TO THE GENERA OF LORANTHACEAE AND VISCACEAE OF THE FLORA MALESIANA REGION

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Precursor publications by the author are in press or in preparation prior to a treatment of the mistletoe families Loranthaceae and Viscaceae for the Flora Malesiana. The provisional keys to genera set out below is offered as an indication of the genera which are accepted for the region. Comments on the key, and advice on difficulties or inconsistencies will be welcomed by the author. A preliminary specimen identification list includes about 4,000 records, mostly captured from collections in L, and the author can check determinations against this list on request.

The most recent comprehensive treatment of Loranthaceae for the region is that by Danser [Bull. Jard. Bot. Buitenzorg. III, 11 (1931) 233–519]. This paper includes within the Loranthaceae the subfamilies Loranhoideae and Viscoideae, but the two differ in many respects, and are now generally treated as a distinct families, the Loranthaceae s.s. and the Viscaceae.

In the Loranthaceae s.s. the number of species accepted in the present revision is similar to that accepted by Danser, but there are differences in the circumscription of some genera and of many species. Some comments on Danser's very significant contribution to the knowledge of Loranthaceae are included in a conspectus of the genera *Scurrula* and *Taxillus* in *Blumea* 36 (1991) 63–85.

KEY TO THE FAMILIES

- 1a. Flowers more than 3 mm long, hermaphrodite (except in *Loranthus*), with a distinct calyx and corolla (calyx usually a collar-like limb at the apex of the ovary) **Loranthaceae**
- b. Flowers up to 3 mm long, unisexual, with a single whorl of perianth . . . **Viscaceae**

KEY TO THE GENERA OF VISCACEAE

- 1a. Plants leafy 2
- b. Plants with leaves reduced to scales 4
- 2a. Plants glabrous 3
- b. Plants white to golden or brown stellate hairy, especially on young parts **Notothixos**
- 3a. Inflorescence a spike of decussate sessile 3-flowered cymes. Anthers opening by slits **Ginallia**
- b. Inflorescence a single 3-flowered cyme, sometimes with subsidiary cymes arising within or adjacent to the first one. Anthers opening by pores **Viscum**

- 4a. Flowers minute, in clusters on the shoulders of the internodes, the individual flowers surrounded by hairs. Stem internodes usually flattened in one plane . . . **Korthalsella**
 b. Flowers small, in cymes, subtended by bracts. Stem internodes terete, angular or somewhat flattened, in the latter case with the succeeding ones at right angles . . . **Viscum**

KEY TO THE GENERA OF LORANTHACEAE

- 1a. Inflorescence a head with an involucre of enlarged imbricate or valvate bracts completely or partially enclosing the flowers 2
 b. Inflorescence not a head, or if so, the floral bracts not enlarged and imbricate or valvate, nor forming an involucre around the entire inflorescence 9
- 2a. Involucre formed from 2 or more enlarged bracts 3
 b. Involucre of one piece, formed from the stem periderm and rupturing irregularly as the inflorescence develops (Philippines, New Guinea) **Cyne**
- 3a. Involucral bracts 2, connate at the margins 4
 b. Involucral bracts 4 or more, free, usually imbricate 5
- 4a. Flowers in the inflorescence 6, in 2 opposite triads, sessile (New Guinea) **Distrianthes**
 b. Flowers in the inflorescence 8–12, in 2 opposite rows, pedicellate, with a bract at the apex of each pedicel (New Guinea) **Papuanthes**
- 5a. Flowers in the inflorescence (at least the outer ones) in simple dichasia (triads) . . . 6
 b. Flowers in the inflorescence single in the axil of each bract 8
- 6a. Inflorescence capitate, flowers pedicellate or sessile on a flat receptacle, involucral segments broad, developed from non-fertile bracts 7
 b. Inflorescence in reality a subumbellate raceme of triads spirally crowded at the apex of the axis, involucral segments narrow, developed from the bracts of the outer flowers and fused to the pedicels and rays (Borneo) **Lampas**
- 7a. Flowers in triads in the axils of the bracts, each flower surrounded by 3 smaller bracts (Philippines) **Thaumasianthes**
 b. Flowers in triads not in the axils of bracts (except the outer triads), each flower subtended by a single smaller bract (Malaya, Sumatra, Java, Borneo, Philippines, New Guinea) **Lepeostegeres**
- 8a. Involucral bracts enclosing individual flowers, which are inserted in hollows of the axis (Malaya, Sumatra, Java, Borneo) **Elytranthe**
 b. Involucral bracts enclosing the whole inflorescence; flowers not inserted in hollows of the axis (Malaya, Sumatra, Borneo, Philippines) **Lepidaria**
- 9a. Flowers in simple dichasia (triads or rarely tetrads), these in most species aggregated into larger inflorescences 10
 b. Flowers single in the inflorescences 18
- 10a. Petals fused to the middle or higher (sometimes with the corolla tube deeply slit on one side) 11
 b. Petals free completely or almost to the base (sometimes coherent for some time after anthesis) 14

- 11a. Anthers basifix 12
- b. Anthers apparently dorsifix, immobile (Malaya, Sumatra, Java, Borneo) **Loxanthera**
- 12a. Inflorescence umbellate or racemose, lacking an involucre of enlarged bracts . . . 13
- b. Inflorescence a subumbellate raceme of triads spirally crowded at the apex of the axis, involucre segments narrow, developed from the bracts of the outer flowers, fused to the pedicels and rays (Borneo) **Lampas**
- 13a. Inflorescence umbellate (most parts of Malesia except Sumatra) **Amyema**
- b. Inflorescence racemose (Malaya, Sumatra, Borneo, New Guinea) . . **Amylothecha**
- 14a. Inflorescence a sessile head. 15
- b. Inflorescence racemose or umbellate 16
- 15a. Inflorescence with an involucre of one piece, formed from the stem periderm and rupturing irregularly as the inflorescence develops (Philippines, New Guinea) **Cyne**
- b. Inflorescence subtended by the floral bracts but these not enlarged to form an involucre enclosing the entire inflorescence (most parts of Malesia except Sumatra) **Amyema**
- 16a. Inflorescence racemose 17
- b. Inflorescence umbellate, sometimes contracted to a head without an involucre (most parts of Malesia except Sumatra) **Amyema**
- 17a. Racemes with whorls of triads (Moluccas, New Guinea, Solomon Islands) **Dactylophora**
- b. Racemes with decussate triads (Philippines, Celebes, Lesser Sunda Islands to Solomon Islands) **Decaisnina**
- 18a. Petals fused to the middle or higher (sometimes with the corolla tube deeply slit on one side) 19
- b. Petals free completely or almost to the base (but sometimes coherent for some time after anthesis) 26
- 19a. Corolla 6-merous 20
- b. Corolla 5- or 4-merous 24
- 20a. Bracts 3 under each flower, sometimes partly united 21
- b. Bracts single under each flower 23
- 21a. Inflorescence a spike or raceme 22
- b. Inflorescence a solitary flower on a short, sometimes articulate pedicel (New Guinea, Solomon Islands) **Sogerianthe**
- 22a. Inflorescence axis decussately flattened, flowers borne in hollows (Malaya, Sumatra, Java, Borneo) **Elytranthe**
- b. Inflorescence axis terete or quadrangular, flowers not borne in hollows (all of Malesia) **Macrosolen**
- 23a. Flowers strongly reflexed upwards from a pendulous axis; corolla thick in texture, more than 60 mm long (Malaya, Borneo) **Trithecanthera**
- b. Flowers not reflexed on the axis; corolla thin in texture, less than 60 mm long (Malaya, Sumatra, Borneo, New Guinea) **Amylothecha**

- 24a. Corolla mostly 4-merous, zygomorphic with a deep split on the inner side of the curved tube 25
- b. Corolla 5-merous, slightly zygomorphic, not deeply split on one side (all of Malesia) **Dendrophthoë**
- 25a. Fruit obovoid, club-like, distinctly stipitate, not warty; inflorescence usually a 3- to 10-flowered simple raceme, rarely a 2-flowered umbel (Malaya, Sumatra, Java, Borneo, Philippines, Celebes, Lesser Sunda Islands, Moluccas) **Scurrula**
- b. Fruit ellipsoid, not stipitate, warty (in the Malesian species); inflorescence a few-flowered simple umbel (2-flowered in the Malesian species) (Malaya, Borneo, Philippines) **Taxillus**
- 26a. Anthers basifix, immobile 27
- b. Anthers dorsifix, versatile (Philippines, Lesser Sunda Isl., New Guinea, Solomon Isl.) **Cecarria**
- 27a. Inflorescence a raceme, spike or contracted to a head 28
- b. Inflorescence a simple umbel or a solitary flower (most parts of Malesia except Sumatra) **Amyema**
- 28a. Inflorescence a raceme or spike 29
- b. Inflorescence sessile, capitate, a very condensed spike without involucre (Malaya, Sumatra, Java, Borneo) **Barathranthus**
- 29a. Flowers hermaphrodite; anthers linear (Malaya, Sumatra, Java, Borneo, Philippines, Celebes) **Helixanthera**
- b. Flowers mostly unisexual; anthers globose or subglobose (Sumatra) . . **Loranthus**