An Enumeration of the Malesian Species of Aralia L.

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The species of Aralia in South-east Asia and the adjacent islands have been subject to considerable misunderstanding. The present account takes a broad view of specific limits, following along lines originally proposed by van Steenis (Bull. Bot. Gard. Buitenz. ser. 3, 17 (1948) 391).

Aralia


Sparingly branched shrubs or small trees, or climbing, rarely (extra Malesia) herbaceous, glabrous or hairy, often prickly. Leaves pinnate to tri-pinnate, usually with leaflets at the insertion of the lateral pinnae; leaflets serrate; petiole with a sheathing base. Inflorescence a terminal panicle; flowers sessile or pedicellate, with an articulation below the flower; calyx with 5–6 teeth; petals 5–6, imbricate; ovary 2–6 celled; styles 2–6 free or shortly connate below. Fruit a fleshy drupe; pyrenes cartilaginous compressed; endosperm uniform.


Ecol. Usually on scrubby hillsides and in second growth, often in ravines or near streams, or in thickets near or above the limit of tree-growth. Occurring at low altitudes (100 m) but usually in the montane zone, up to 3000 m.

Notes. Hui-Lin Li in Sargentia 2 (1942) 101, treats some species that extend into Malesia. Merrill considered that the climbing habit and recurved spines of Acanthophora justified its separation as a distinct genus, but more recent authors have not agreed.

**KEY TO THE SPECIES**

1. a. Flowers sessile (capitate) or very shortly pedicellate .................................. 2
   b. Flowers pedicellate (umbellate) ................................................................. 3

2. a. Flowers sessile, underside of leaf ± densely tomentose, hairs of the branches and inflorescence ± appressed and felted, bracts around the capitula enveloped in hairs ........................................ 1. A. dasyphylla
   b. Flowers short pedicellate, underside of leaf sparsely tomentose, hairs of the branches and inflorescence ± patent, bracts around the capitula less densely tomentose .................................................. 2. A. javanica

3. a. Climbing or scrambling liane, spines curved .................................. 3. A. scandens
   b. Erect shrubs or small trees, spines straight ........................................... 4

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4. a. Leaflets glaucous beneath, margins with few crenations, fruit small (± 3 mm long) .............................................. 4. A. bipinnata
   b. Leaflets green (or with fawn pubescence) beneath, margins serrate, fruit rather larger (4–6 mm long) ............................... 5

5. a. Young parts and under-surface of leaves glabrous (but with small spines) .............................................. 5. A. jerox
   b. Young parts and under-surface of leaves pubescent .......................... 6. A. montana


Prickly shrub or small tree, often unbranched, to about 5 m high, young parts densely brown pubescent. Leaves forming large rosettes at the summit of the stems, about 1 m long (or more), bi- or tripinnate, the petiole, rachis and lateral rachides prickly or unarmed, densely pubescent; leaflets subsessile or petiolo, c. 5 mm long (or longer), usually densely pubescent on the lower surface, less dense above, ovate to oblong-ovate, c. 5-14 (18) × 3-5 (10) cm, base rounded to sub-cordate, apex acuminate, margin finely or sometimes coarsely serrulate. Inflorescence a large terminal panicle, densely brown pubescent, ultimate branches arranged racemose, ending in heads of several sessile flowers.

Distr. Malay Peninsula, Sumatra, West and Central Java. Also northwards to southern China.

Ecol. Primary forest and second growth in deep ravines or open hillsides, occurring from low altitudes (± 100 m) to 2,500 m.

Notes. The capitulate flowers are characteristic (see also under A. javanica). The presence of this species in the Malay Peninsula has often been overlooked, though it extends into southern China. Variability is discussed by van Steenis (Bull. Bot. Gard. Btzg. ser 3, 17 (1948) 391).


A shrub or small tree, often unbranched, young parts covered with brown pubescence which persists on the stems and rachides of the inflorescence as patent hairs. Leaves tufted at the ends of the branches, bipinnate; leaflets variable in size, subsessile or the petiolo, up to 2 cm long, blade ovate to elliptic, up to 18 × 8 cm (usually smaller), both surfaces with sparse short appressed bristy hairs, base cuneate to truncate, apex acuminate, margin finely and unevenly serrulate. Inflorescence a large terminal panicle; the ultimate branches bearing heads (or sub-umbrellas) of c. 10 flowers, surrounded by an involucrum of small linear bracts.


Ecol. Mountain forests, 2000-3000 m.

Notes. This imperfectly known species may prove to be a form of the widespread A. dasypylla, from which it appears to differ in the shortly pedicellate flowers, the sparser leaf-tomentum, the more patent hairs on the inflorescence branches and the bracts of the umbrellas less thickly enveloped in hairs.

Prickly scendent shrub, glabrous, reaching a height of 10 m or more, stems c. 2.5 cm thick. Leaves dispersed (± 30 cm apart), up to 1.5 m long, tri- or quadri-pinnate, prickly on the petiole, rhachides, and sometimes on the leaf veins; leaflets ovate to elliptic-ovate or ovate-lanceolate, base rounded or sub-cordate, apex acuminate, margins finely spinulose-denticulate. Inflorescence a large terminal spiny panicle, the main rachis to c. 60 cm long, bearing secondary branches singly or in whors, up to 50 cm long; the ultimate branches 1–4 cm long, subtended by lanceolate bracts, racemously arranged, ending in umbellules; umbellules 10–20 flowered, pedicels slender 10–12 mm long.


**Ecol.** Thickets on mountainsides, often near streams, or among second growth. Between 180–1550 m altitude.

**Notes.** The only species with the habit of a liane, with spaced leaves, and recurved spines. The flowers are whitish or yellowish, and slightly fragrant. Visited by numerous small bees. Fruit fleshy, purple. Scrapings of the bark are applied to wounds and a decoction of the boiled bark is drunk to relieve internal pain (Mindanao).


A shrub or small sparsely branched tree to 7 m high, with prickly stems, Leaf to 1.5 m or more long, forming large crowns at the ends of the branches, bipinnate, with some prickles, especially on the petiole or unarmored; leaflets sessile or with a short petiolule, ovate to lanceolate, apex acute or acuminate, base rounded to cordate, margin conspicuously crenate, upper surface green, glabrous, lower surface glaucous, pubescent along the veins and sometimes sparingly on the mesophyll, or almost glabrous throughout. Inflorescence a large terminal panicle, the peduncle and also usually the main branches prickly, the whole either almost glabrous or pubescent; tertiary branches usually 5–10 cm long, ending in umbellules, and bearing a small number of lateral umbellules, or branches; umbellules with many radiating pedicels (about 20–30); pedicels 5–10 mm long.

**Distr.** Philippines: Luzon, Leyte, Negros, Mindoro, Mindanao. West New Guinea: Vogelkop. Also in Taiwan and Okinawa.

**Ecol.** In rather open forests, ravines, and in thickets and second-growth; occurring at about 700 m, but chiefly between 1000–2450 m.

**Notes.** van Steenis discusses the variability in pubescence and the development of spines (Bull. Bot. Gard. BTZG. ser 3, 17 (1948) 392.


Spiny shrub or small tree, usually unbranched, to about 10 m high. Leaves forming a large rosette at the summit of the stem, up to about 1 m long, bi- or tri-pinnate, prickly on the petiole, main rachis, and often on the lateral rhachides; leaflets sessile or petiolules to c. 5 mm, ovate or ovate-oblong, variable in size, base truncate to rounded or cuneate, apex acute acuminate, margin sharply serrate,
both surfaces with small bristle-like spines, especially on the veins. Inflorescence a large terminal panicle, 25–50 cm long, glabrous, tertiary branches disposed singly or in sub-verticils, ending in umbellules; flowers about 10–12 per umbellule.

**Distr.** Sumatra: West Coast, Mt Kerintje. Java: Gede, Patuh and Tang-kuban Prahu.

**Ecol.** In montane scrub and among scattered trees; occurring between 1900-2900 m.


Smaller, probably 0.5-1.0 m tall, leaves tri-pinnate, 30 cm long, spiny all over, leaflets 4–13 × 2–7 mm, rhachides of the ultimate pinnae winged.

**Distr.** Sumatra: known only from Mt Talang.

**Ecol.** Growing about 2500 m altitude.

**Notes.** van Steenis considers this interesting dwarf form to represent the extreme of a series in size variability.


A shrub or small tree, frequently unbranched, with prickly stems. Leaves to 1 m or more long, forming large crowns at the ends of the branches, bipinnate, usually with some prickles, especially on the petiole, or unarmed. Leaflets sessile or with a short petiolule, ovate, up to 14 × 7 cm, apex acute to acuminate, base truncate or rounded, oblique in lateral leaflets, margin sharply serrate, upper surface with the remains of a strigose tomentum, often ± rugose, lower surface often with a ± velvety tomentum, or with more harsh hairs ± confined to the veins. Inflorescence a large terminal panicle, the peduncle and branches tomentose, prickles, if any, confined to the peduncle and main rhachis; secondary branches at intervals along the main rhachis, c. 35 cm long, bearing numerous tertiary branches along their length; tertiary branches usually c. 6 cm long, ending in umbellules, and often bearing a number of lateral umbellules; umbellules with many radiating pedicels; pedicels usually 12–15 mm long, occasionally shorter, pubescent. Lobes 5, 5-celled, glabrous.

**Distr.** Malay Peninsula, Sumatra, Java, Sarawak, Sabah, Celebes.

**Ecol.** Primary and secondary forest, bamboo forest and low-lying moist ground, from near sea level to 2600 m.

**Notes.** This species is considered to include all west Malesian examples with pedicellate flowers and pubescent leaves. This broad concept is contrary to former treatments which have recognized several species (*A. thomsonii, A. armata*). The alliance with *A. chinense* Linn. is also very close. The application of names to this and other Javanese species has been very confused. The position is ably discussed by Koorders and Valeton Bijdr. 7 (1900) 52 et seq. and by van Steenis Bull. Bot. Gard. Btzg Ser 3, 17 (1948) 391. In most specimens the lower leaf surface and the pedicels are densely tomentose, but examples occur in which the leaf is only sparsely hairy and the pedicels may be glabrous. *A. armata* appears to be within the range of variation of the complex as also does *A. decaisneana* Hance of China. The most aberrant specimens are those with glabrous umbellules which are mostly from Sumatra but also from Java: they may indicate that *A. foliolosa* Seem. should also be included in this complex.