83. MALPIGHIACEAE

by E. Launert*

Niedenzu in *Pflanzenr*. IV:141 (1928); Cufodontis, *Enum*.: 402-405 (1956); Launert, 35. Malpighiaceae in *Fl. Zamb*., 2(1): 109-125 (1961) & Malpighiaceae in *Fl. Trop.E.Afr*.: 27 pp. (1968); Thulin, 66. Malpighiaceae in *Fl. Somalia* 1: 260-264 (1993).

Mostly woody climbers, sometimes shrubs or small trees, with unicellular appressed (sometimes forked) medifixed ± stiff hairs. Leaves opposite, in whorls of three or alternate, simple and entire, often with glands near the base of the blade or the petiole; stipules present or absent. Inflorescence terminal or axillary, usually many-flowered and racemose (more rarely flowers solitary); bracts and bracteoles present. Flowers regular or irregular, bisexual in African genera. Sepals 5, free or united at the base, persistent, often with glands outside. Petals 5, frequently clawed, free, imbricate, entire, or with fringed or dentate margins. Stamens 10, in two series with those of the outer series opposite the petals; filaments often united at the base; anthers dehiscing longitudinally, introrse, basifixed or dorsifixed, 2-thecous. Ovary superior, carpels united, 3 (rarely 2, 4, or 5)-locular and -lobed, with 1 pendulous axile ovule in each locule; styles as many as the carpels with usually entire stigmas. Fruit a schizocarp, usually winged forming a samara 1, rarely a fleshy drupe.

A large family of about 60 genera and 800 species, with a mainly pantropical distribution, but extending into the subtropics, most abundant in the New World: 3 genera and 9 species, 2 poorly known, in the Flora area.

2

3

Key to genera

1. Leaves spirally arranged.

Leaves opposite.

2. Mericarps with a pronounced dorsal wing, lateral wing entirely reduced; calyx sometimes with 2 circular glands.

1. Acridocarpus

 Mericarps with a shield-like circular lateral wing; dorsal wing much reduced, crest-like.

4. Caucanthus

- 3. Styles shorter than or as long as ovary and shorter than, as long as or only slightly exceeding the stamens.

 4. Caucanthus
- Styles always longer than ovary and distinctly exceeding the stamens.
- Sepals not enclosing petals in bud; petals clawed; fruits up to 3 cm diameter; growing in deciduous bushland and woodland.
 Triaspis
- Sepals clearly enclosing petals in bud; petals not clawed; fruits 3-4 cm diameter; growing in wet evergreen forest.
 3. Flabellaria

1. ACRIDOCARPUS Guill. & Perr. (Sept. 1831)

Erect, suberect, trailing or climbing shrubs, rarely small trees. Leaves alternate, petiolate, entire, usually with glands on under surface at base, and sometimes with 2 rows of smaller glands parallel to the margins, without stipules. Inflorescences few to many-flowered corymbs, racemes or panicles, axillary or terminating leafy branches; bracts present and persistent, small; bracteoles at base of pedicels, sometimes with a circular gland at base. Flowers regular or nearly so. Calyx leathery, with 1 or more subcircular sessile or sunken glands; lobes 5, equal or subequal, obtuse. Petals 5, white or yellow, usually clawed, longer than the sepals, entire, fimbriate or lacerate. Stamens 10; anthers basifixed, glabrous; filaments usually thick, somewhat broadened and united at base, glabrous. Ovary 3-locular, but usually

with 1 locule abortive, usually densely silky or tomentosesilky; styles 2, curved inwards. Samara with a straight or oblique dorsal wing.

A genus of about 30 species, mainly occurring in tropical Africa; one species in Madagascar, one in New Caledonia; 2, possibly 3, taxa in Ethiopia.

1. Leaf-blade 0.5-1.25(-1.5) cm broad, not longer than 6 cm, usually densely ferrugineous-villous or subtomentose or greyish pubescent.

1. A. glaucescens var. ferrugineus

- Leaf-blade 3.3-6.5(-8) cm broad, 8-24 cm long.

2. A. ugandensis

1. A. glaucescens Engl. (1902)

- type: Somalia, Ruspoli & Riva 200 (FT holo.).

Launert, in Kew Bull. 19: 351-352 (1965).

Upright, sparingly branched shrub, up to 2.5 m high. Younger branches densely rusty-red- or greyish-silky, older ones usually glabrous, with conspicuous lenticels. Leaf-blade linear, linear-lanceolate, oblanceolate, oblonglanceolate to narrowly elliptic, 1.5-6 x 0.5-1.25(-1.5) cm, glabrous to densely hairy, rigidly leathery, with rolled margins; apex acute to obtuse, sometimes finely apiculate; base cuneate or attenuate, mostly without, rarely with a pair of small glands beneath near insertion of petiole; petiole 1-3 mm long, channeled above, glabrous or somewhat silky. Inflorescences on leafy shoots terminating in few-to many-flowered pyramidal racemes, 3-8(-12) cm long; rhachis robust, usually densely rusty-red-silky; bracts and bracteoles narrow-pointed, bracts 2-2.5 mm long, persistent; bracteoles up to 1.5 mm long, without glands. Flowers 12.5-17.5 mm in diameter. Sepals broadly ovate to ovatecircular, rarely oblong-ovate, 2.5-4 mm long, rusty-redsilky or glabrescent outside, with a pair of circular glands at the very base or with glands on the commissures (altogether 3-5). Petals yellow, broadly clawed. Stamens with

^{*} formerly, Department of Botany, The British Museum (Natural History), Cromwell Road, London SW7 5BD, England.

samara: single-seeded, dry dehiscent fruit, having a wing-like extension of the pericarp.

ovate-oblong 4–5 mm long anthers; filaments rather thick, c 1 mm long, glabrous. Ovary densely silky; styles 2, 7.5–10 mm long. Wing of samara obliquely ovate, obovate-oblong, or elliptic, $15-20(-25) \times 12-14 (-17)$ mm, sometimes extending around nut to the base.

- Leaf-blade densely rusty-red villous to subtomentose on both surfaces, older ones rusty-red- or greyish-silky pubescent, mainly beneath, rarely glabrescent; calyx-lobes distinctly biglandular at the very base; samara-wing ovate, extending nearly to the base of the nut.

 var. ferrugineus
- Leaf-blade usually quite glabrous, only when young sometimes slightly rusty-red-silky; calyx-lobes with 3-5 usually small and differently-sized glands on the commissures between the lobes.
- 2. Leaf-blade linear or linear-lanceolate, 1.5 x 0.5 cm; samara-wing obliquely obovate or obovate-oblong, not extending to the base of the nut. var. glaucescens
- Leaf-blade oblanceolate, oblong-lanceolate or elliptic-lanceolate, 2-6 x 0.5-1.5 cm; samara-wing broadly obliquely ovate to elliptic, sometimes extending to the base of the nut.

var. ferrugineus (Engl.) Launert

in Kew Bull. 19: 352 (1965); A. ferrugineus Engl. (1905) – type: Somalia/Kenya border area, Ellenbeck 2207 (B holo. destr.); Kenya, J. Adamson 96 (EA neo., K isoneo.).

Fig. 83.1.

Semi-desert scrub, growing among rocks; c 500 m. HA; Kenya, and Somali Republic. *Ellis* 354.

The other 2 taxa, var. glaucescens and var. graniticus are so far only known from Somalia. Much of the Ogaden area (HA BA and SD) is still poorly known botanically and either of these varieties may turn up in the future [ed.].

2. A. ugandensis Sprague (1906) ?A. scheffleri Engl. (1905)

A strong woody climber; very young shoots brownish-red and silky, older ones glabrous, lenticellate. Leaf-blade oblong to oblong-elliptic, $(8-)12-20(-28) \times 3.3-6.5(-8) \text{ cm}$, membranous, rusty-red-silky on both surfaces when young, very soon glabrescent, only the midrib beneath remaining with hairs; apex acuminate, usually not apiculate; base commonly rounded, with or without glands: petiole robust, 5–7 mm long, grooved, brownish-red silky to glabrescent. Inflorescence loose, forming axillary fewto many-flowered racemes, up to 10 cm long; axis densely rusty-red-silky; bracts lanceolate, 1.5-2 mm long, acute, persistent; bracteoles very small, lanceolate, without glands. Flowers 25-30 mm in diameter. Calyx with 2 or 3 very small circular glands; lobes ovate to subcircular, 3-4 mm long, somewhat silky outside, glabrescent. Petals yellow. obovate to subcircular, 8-12 x 10 mm, distinctly clawed, lacerate at margins. Stamens with lanceolate or oblong anthers 4–5 mm long; filaments thick, c 3 mm long, glabrous. Ovary densely silky; styles c 1 mm long. Wing of samara obliquely ovate-elliptic c 5 x 1.5(-2.5) cm. Fig. 83.1.6.

In riverine forest climbing on Zanthoxylum sp.; 400-

500 m. IL; ?Sudan, Tanzania. Friis et al. 2575; Pavlov 246.

The description is based on material from Sudan and Tanzania. The Ethiopian material consists of 2 sterile collections in ETH, but *Pavlov* 264 has the note that the plant had yellow flowers. The whereabouts of the fertile duplicate is not known [ed.]. For a more detailed discussion of *A. ugandensis* and its taxonomic status see Launert, *loc. cit.*: 9 (1968).

2. TRIASPIS Burch. (1824)

Small trees, scandent or semiscandent shrubs to woody climbers. Leaves opposite, subopposite, rarely in whorls of 3, usually with 2-4 glands on the under-surface near the base, petiolate or sessile, with or without interpetiolar stipules. Inflorescence terminal or axillary, usually forming many-flowered corymbs, umbels or panicles; bracts and bracteoles usually present and deciduous; pedicels as long as or longer than the peduncle and articulated with it. Flowers regular or irregular. Sepals 5, almost always without glands. Petals 5, clawed, usually with fringed or denticulate margins. Stamens 10; anthers basifixed, usually glabrous; filaments glabrous or farinose-pubescent. Ovary hairy or glabrous, 3-locular (or sometimes 2-locular outside East Africa); styles (2-)3, somewhat curved, with incurving stigmas. Samara with a circular or ovate membranous or leathery lateral wing; dorsal wing shorter and narrower or absent.

An African genus of 15 species, 2 in the Flora area.

- Leaves usually glabrous on both surfaces; secondary nerves usually prominent beneath. 1. T. erlangeri
- Leaves densely pubescent, more so beneath, older ones rarely glabrescent; secondary nerves usually indistinct.
 2. T. niedenzuiana

1. **T.** erlangeri *Engl.* (1905)

- types: HA, between Dagage and Gobelle river, *Ellenbeck* 998 & 1034 (B syn. destr.); GG, road to Hamer Koka (Gondaraba), *Corradi* 6975 (FT neo.).

Woody climber with twining branches, elsewhere a small much-branched erect shrub, up to 3 m high, with branchlettips twining; younger stems grey from appressed or somewhat spreading hairs, very soon glabrescent. Leaf-blade elliptic, elliptic-oblong, rarely-ovate-oblong, (2.5-)3-4.5 (-6) x (1.3-)1.8-2.5(-3.5) cm, obtuse or subobtuse, cuneate, somewhat leathery, pale green to yellowish when dried up; petiole 3-9 mm long, pubescent or glabrous, slightly grooved. Flowers in 4-8-flowered loose corymbs terminating annual branches, 12.5-15 mm in diameter, bracts linear, 3-5 mm long. Sepals ovate or oblong-ovate, c 2 mm long. Petals white, pinkish, or white and tinged with pink, broadly elliptic or elliptic-oblong, 4-5 mm long, shortly clawed. Anthers broadly elliptic, 0.8-1 mm long; filaments thread-like, 3.5-4.2 mm long. Styles c 5 mm long, glabrous. Samara elliptic or elliptic oblong, 1.5-3 x 1.1-2 cm, entire or slightly retuse at apex; dorsal wing reduced to a tiny crest or absent. Fig. 83.2.7 & 8.

In Acacia – Commiphora woodland or bushland on gravelly limestone soil; (600–)850–1650 m. GG SD BA HA; Kenya, and Somalia. Burger 3363; Friis et al. 2936; Vollesen 86/17.

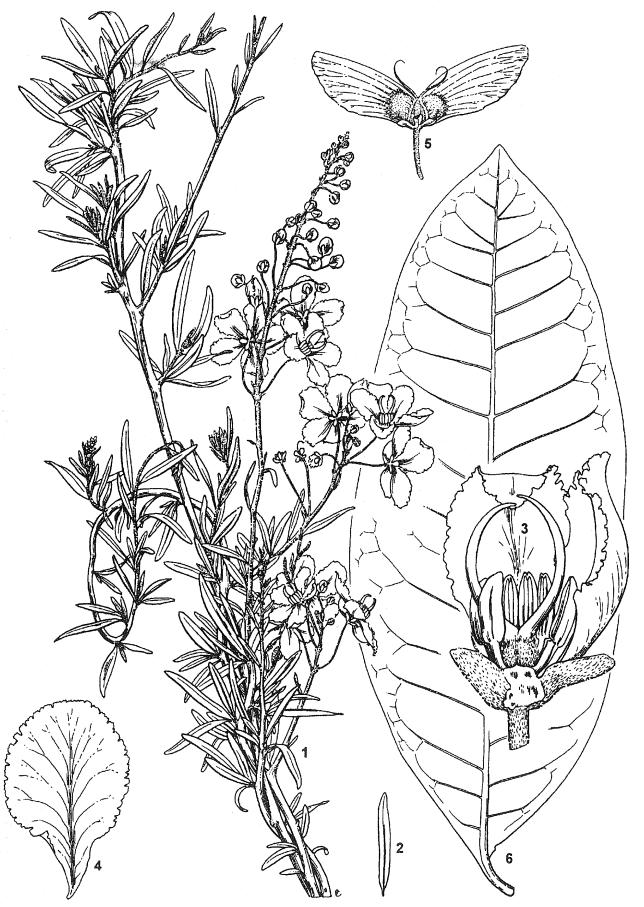


Figure 83.1 ACRIDOCARPUS GLAUCESCENS var. FERRUGINEUS: 1 – flowering branch x ¾, 2 – leaf x ¾, 3 – half flower x 5, 4 – petal x 3½; 5 – fruit x 1½. A.UGANDENSIS: 6 – leaf x ¾. 1–4 from Ellis 345; 5 from Gilbert & Thulin 1312; 6 from Friis et al. 2575. Drawn by Eleanor Catherine.

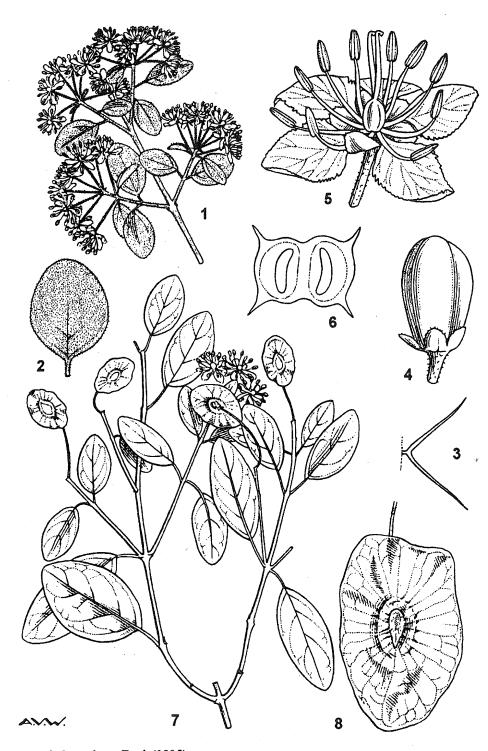


Figure 83.2 TRIASPIS NIEDENZUIANA: 1 – flowering branch x 1; 2 – leaf x 1; 3 – hair x 40; 4 – bud x 8; 5 – flower x 6; 6 – ovary in transverse section x 20. T. ERLANGERI: 7 – fertile branch x 1; 8 – fruit x 2. 1–3, 5 & 6 from Gillett 12711; 4 from Dummer 5018; 7 from Napier 1036; 8 from Corradi 6975. Drawn by Ann Webster. (Reproduced with permission from Fl. Trop. E. Afr. Malpighiaceae: fig. 4.)

2. T. niedenzuiana Engl. (1905) -type: Tanzania, Uhlig 863. Tristellateia cynanchoides Chiov. (1932).

A small attractive semi-erect or scandent shrub, sometimes the ends of branches twining, up to 3 m or more high; younger stems and inflorescences densely covered with somewhat stiff short hairs, older ones glabrescent. Leaf-blade ovate or broadly elliptic, rarely ovate-lanceolate, 1.5-2.5(-7) x 0.9-1.8(-3) cm, older ones densely pubescent (more so beneath); secondary nerves usually indistinct; apex obtuse or subacute; base usually rounded, rarely cuneate; petiole 2-4(-6) mm long, densely pubescent. Inflorescence loose, few-flowered corymbs terminating leafy

annual branches. Flowers 10-12.5 mm in diameter; bracts linear, 2-4 mm long. Sepals ovate, c2 mm long. Petals pure white, lilac or pinkish, oblong or oblong-ovate, spoonshaped, 3.5-4 mm long, shortly fimbriate at edges near base, clawed. Stamens with anthers 1-1.3 mm long; filaments 3-5 mm long. Samara elliptic or ovate-elliptic, $1.8-2 \times 0.9-1.1$ cm (in available material, but no fruits were fully developed); lateral wing distinctly retuse at apex; dorsal wing reduced. Fig. 83.2.1-6.

Acacia scrub and woodland, on red silty soil; 850–1350 m. SD BA; Tanzania, Kenya, and Somalia. Corradi 8568, Cufodontis 96, Thulin et al. 3542.



Figure 83.3

FLABELLARIA PANICULATA: 1

- flowering branch x 1; 2 - bud x 6; 3

- flower x 6; 4 - fruit x 1. 1-3 from

Gillman 463; 4 from Sillitoe 339.

Drawn by Ann Webster (Reproduced with permission from Fl. Trop. E. Afr.

Malpighiaceae: fig. 7.)

3. FLABELLARIA Cavan. (1790)

Woody climbers. Leaves opposite, petiolate, without stipules. Flowers regular, white or cream, in many-flowered terminal or axillary panicled racemes, pedicellate. Sepals 5, valvate, closed over petals in bud, without glands. Petals 5, not clawed, entire, glabrous, oblong-lanceolate to sometimes oblanceolate. Stamens 10, all bearing anthers; filaments free or somewhat united at the very base; anthers elliptic or oblong, basifixed. Ovary 3-locular, densely pilose; styles 3, much longer than the stamens. Samara with 2 lateral wings which are united at the base and distinct at the top.

A genus with 1 species confined to tropical Africa.

F. paniculata Cavan. (1790)

- type: Sierra Leone, *Smeathman* in *Herb. Thouin*. (BM).

A tall climber up to 15 m; stems up to 10 cm or slightly more in diameter, lenticellate, younger ones with a dense grey or yellowish silky indumentum. Leaf-blade broadly elliptic, ovate, ovate-subcircular, or rarely lanceolate, 5–15 x 4–10 cm, somewhat leathery, upper surface usually glabrous, lower surface appressed silky-tomentose; apex obtuse, subacute or apiculate; base rounded or subcordate; petiole 1–2.5 cm long, grooved, tomentose. Inflorescences up to 20 cm long, lax; bracts oblanceolate, 3–7 mm long, deciduous or persistent; bracteoles very small, elliptic,

persistent; pedicels up to 5 mm long. Flowers c 10 mm in diameter. Sepals oblong-lanceolate, 5–6.5 mm long, usually reflexed, tomentose outside. Petals oblanceolate, up to 7 mm long, entire, glabrous, rounded at the apex. Anthers elliptic to oblong-elliptic, 1.25–1.75 mm long; filaments 2–3 mm long, glabrous. Styles 3–4 mm long. Samara 3–4 cm in diameter, usually green. Fig. 83.3.

Rain-forest, often at edges, riverine forest, in thickets or secondary growth; 1150(–1650) m. KF; Uganda, Kenya, and Tanzania. *Friis* et. al. 4035.

The Ethiopian record is based on a single fallen fruit.

4. CAUCANTHUS Forssk. (1775) DIASPIS Niedenzu (1892).

Launert in Bol. Soc. Brot. ser. 2, 35: 48 (1961)

Woody climbers or upright semi-scandent shrubs; stems with younger parts usually densely appressed pubescent or silky. Leaves spirally arranged or opposite, with 2 glands on margin near base or without such glands; stipules very small, deciduous. Inflorescence racemose or corymbose-paniculate, axillary or terminal. Flowers regular. Sepals without glands. Petals clawed (sometimes very shortly), sometimes auriculate or hastate at base, glabrous, margins wholly or partially fimbriate. Stamens glabrous with dorsifixed anthers. Ovary densely silky; styles truncate, shorter than to slightly exceeding stamens. Fruit with a lateral wing completely surrounding the nut, circular or broadly elliptic; dorsal wing small, obliquely lanceolate or absent.

A genus of 3 species confined to Yemen and eastern Africa south to Mozambique and Malawi.

- Leaves opposite; blade large 6-12 x 4-9.5 cm; petals auriculate near the base.
 C. auriculatus
- Leaves spirally arranged or rarely opposite; blade
 5-30 x 4-20 mm; petals entire or fimbriate but never auriculate.
- 2. Ovary 2-locular; styles 2; blade densely silky.

2. C. albidus

Ovary 3-locular; styles 3; blade sparsely pubescent.
 3. C. edulis

1. C. auriculatus (Radlk.) Niedenzu (1915);

Triaspis auriculata Radlk. (1883) – type: Kenya, Hildebrandt 2821 (M holo., BM K iso.).

C. argenteus Niedenzu (1904).

C. cinereus Niedenzu (1904).

Climber up to 5 m in length; younger stems densely covered with short soft white silky hairs, older stems very finely pubescent or glabrescent. Leaf-blade ovate-cordate, 6–12 x 4–9.5 cm, membranous, pubescent above, grey-tomentose beneath, with 2 large glands near base (usually concealed by the indumentum); apex acute to shortly acuminate; petiole 1–3 cm long, densely silky with usually 2 small glands above the middle. Inflorescence dense axillary and terminal corymbs; peduncles and rhachis silky; pedicels 1–1.5 cm long, silky; bracts ovate; bracteoles lanceolate or linear-subulate. Flowers 15 mm in diameter.

with unpleasant smell. Sepals broadly ovate from a narrowed base, 2–2.5 mm long, silky outside. Petals pale yellow, ovate, 6–7 mm long, shortly clawed, keeled, subhastate at the base, usually reflexed. Stamens with subversatile oblong anthers 2.3–2.5 mm long; filaments somewhat fleshy. Ovary densely silky; styles 2.5–3 mm long, fairly stout, silky. Lateral wing of samara oblong-elliptic or oblong-obovate, 1–2 cm in diameter, with entire margins; dorsal wing absent. Fig. 83.4.

Deciduous Acacia – Balanites – Zizyphus woodland, bushland and thicket, often riparian or in rocky places, also extending into upland dry evergreen forest and bushland; 1200–2000 m. WU SU AR GG SD BA HA; Mozambique, Malawi, Zimbabwe, Uganda, and Tanzania. Burger 2097; Mooney 7976; Thulin 1311.

2. C. albidus (Niedenzu) Niedenzu (1928);

Diaspis albida Niedenzu (1892) - type: Hilde-brandt 2585 (B holo. destr.).

D. albida var. fimbripetala Niedenz. in Verz. Vorl. Akad. Braunsberg S.-Sem. 1924: 2 (1924); C. albidus var. fimbripetalus (Niedenzu) Niedenzu, loc. cit.: 36 (1928) – types: HA, between Dagage and Gobelle river, Ellenbeck 1037 (B syn. destr.); Kenya, Scott-Elliot 6253 (BM K isosyn.).

D. albida var. fimbripetala forma trystyla Niedenzu in Verz. Vorl. Akad. Braunsberg S.-Sem. 1924: 2 (1924); C. albidus var. fimbripetalus forma trystylus (Niedenzu) Niedenzu, loc. cit.: 36 (1928) – type: Somalia, Ellenbeck 2146a (B holo. destr.).

C. argenteus Chiov. (1932), non Niedenzu (1904), nom illegit.; C. chiovendae Cufod., E.P.A.: 403 (1956) – type: Somalia, Senni 341(FI lecto.).

An upright or semi-scandent many-branched shrub; younger stems densely covered by a silvery or whitish silky indumentum, older stems less hairy or glabrescent. Leafblade ovate, ovate-lanceolate or nearly circular, 5-30 x 4-20 mm, papery, densely silky on both surfaces, sometimes glabrescent on upper surface when older, usually without glands; apex somewhat acute or usually finely cuspidate, sometimes emarginate; base usually rounded; petiole 1-6 mm long, silky. Inflorescences many-flowered, dense, raceme-like; peduncles densely silky; pedicels 5-10 mm long, appressed silky; bracts and bracteoles subulate, usually provided with 2 small glands at the very base, deciduous. Flowers 10 mm in diameter, whitish or creamcoloured, sweetly scented. Sepals ovate, c 1 mm long, silky. Petals ovate, 3.5-5 mm long, somewhat keeled and hooded at the top, shortly clawed, entire or fimbriate (usually only along one side), usually reflexed. Anthers elliptic or oblong, 1–1.3 mm long; filaments filiform, 2.5–3.2 mm long. Ovary densely hairy; styles usually 2, 1.5-2 mm long, thick, pubescent. Lateral wing of samara circular, 1-1.5 cm in diameter, often with margins crenulate; dorsal crest semi-lanceolate, c 6 x 1.5-2 mm.

Acacia – Commiphora and Acacia – Jatropha – Boswellia woodland and bushland, on sandy soil, also with marble and gypsum; 400–1200 m. SU SD HA; Kenya, Somalia. Friis et al. 2827; Gilbert et al. 7576; Thulin et al. 3549.

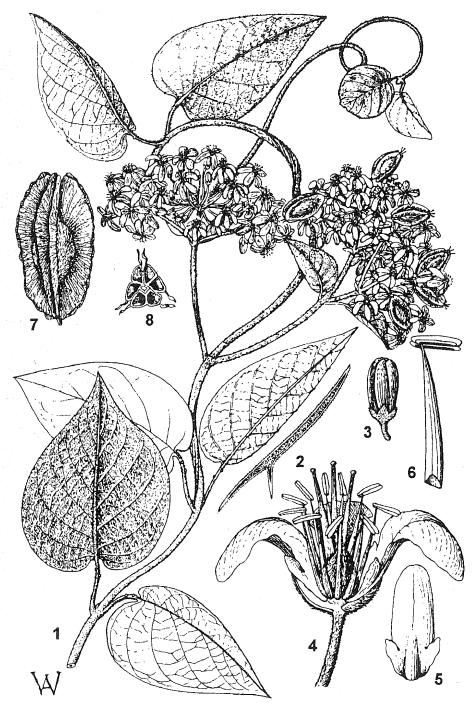


Figure 83.4

CAUCANTHUS AURICULATUS:

1 – branch with flowers and fruits x

24; 2 – hair (taken from leaf) x 30; 3

– flower bud x 2; 4 – flower, with sepals partly removed to show stamens and pistil x 4; 5 – petal showing basal auricles x 3; 6 – stamen x 6; 7

– fruit x 24; 8 – fruit in transverse section x 24.1 from Barbosa & Carvalho 3108; 2–6 from Anderson 345; 7 & 8 from Dale in F. D. 3854. Drawn by Ann Webester. (Reproduced with permission from Fl. Zamb. Malpighiaceae: Tab. 16.)

3. **C. edulis** *Forssk.* (1775).

- types: Yemen, Forsskål 477 & 1068 (C syn.) Tristellateia somalensis Chiov. (1916); T. africana var. somalensis (Chiov.) (1956).

An upright or semi-scandent, much-branched shrub, younger stems bearing a sparse whitish indumentum, older stems glabrous. Leaf-blade circular to lanceolate, 1.7 x 0. 9 mm, sparsely pubescent on both surfaces, usually glabrescent when older, usually without glands; apex acute, sometimes mucronate, emarginate; base usually rounded; petiole 2.5–7 mm long, pubescent. Inflorescence an umbel; peduncles minutely pubescent; pedicels 1–1.5 cm long, bracts and bracteoles subulate, without glands. Flowers whitish

cream-coloured, 15 mm in diameter, strongly sweet-scented. Sepals ovate, 2 mm long, petals ovate 7–8.5 mm long, somewhat keeled and hooded at the top, shortly clawed, entire or fimbriate (usually just along one side), usually reflexed. Anthers elliptic or oblong 1–1.4 mm long; filaments filiform 3–4.4 mm long. Ovary densely hairy; styles usually 3, 2.5–3 mm long, thick, glabrous (or minutely pubescent). Lateral wing of samara circular, 2–3 cm in diameter, often with margins crenulate, dorsal crest lanceolate-circular 2 x 1.8–2 cm.

Dense bushland and semi-desert scrub; 350–1200 m. HA; Somalia. *Gillett* 4150; *Bally* 12995; *Ellis* 154.