

Excerpt from:

Flora of West Tropical Africa by J. Hutchinson and J. M. Dalziel
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78. MALPIGHIACEAE

Trees, shrubs or climbers, usually clothed with appressed medifixed hairs. Leaves opposite or rarely alternate, simple; a pair of glands often present at the base of the blade; stipules present or absent, sometimes connate. Flowers mostly hermaphrodite, actinomorphic. Sepals 5, imbricate or rarely valvate, often biglandular outside. Petals 5, clawed. Disk small. Stamens 10, hypogynous; filaments free or connate at the base; anthers 2-celled, opening lengthwise. Carpels usually 3, free or connate into a 3-celled ovary; cells 1-ovuled; styles usually separate and spreading. Fruiting carpels mostly winged or carpels connate into a fleshy or woody drupe. Seeds without endosperm and with straight, curved or uncinuate, rarely circinate embryo.

A distinct and mainly tropical family, most highly represented in tropical America; the medifixed hairs, glandular calyx-lobes and samaroid fruit are almost constant features of the few represented in our area.

Leaves alternate:

Samara more or less oblanceolate or obovate, the wing arising from the upper part of the fruit body 1. *Acridocarpus*
Samara elliptic-suborbicular, the wing surrounding the outer side of the fruit body 2. *Rhinopterys*

Leaves opposite:

Sepals closed over the petals in bud 3. *Flabellaria*
Sepals open in bud, the petals conspicuous:
Wing of samara very small, the latter nut-like 4. *Stigmaphyllon*
Wing of samara large:
Samara broadly elliptic; calycine glands large and fleshy 5. *Heteropteris*
Samara shield-like, orbicular; calycine glands absent 6. *Triaspis*

Besides the above indigenous genera, *Thryallis glauca* (Cav.) O. Ktze. (syn. *Galphimia glauca* Cav.), a native of Central America, is commonly cultivated as a hedge plant. Species of *Malpighia* Linn. are also cultivated in our area.

1. *ACRIDOCARPUS* Guill. & Perr.—F.T.A. 1: 277.

*Bracts and bracteoles erect, usually small and subulate (rarely short and ovate), up to 3 mm. long; inflorescence not or only a little branched; mature leaves glabrous beneath, or the midrib sometimes shortly pubescent:

Bracts and bracteoles subulate, without glands:

Leaves more or less oblong, rounded or very often obtuse at base, distinctly acuminate; samara at least 2.5 cm. long:

Flowers racemose, numerous, floriferous part of axis at least 5 cm. long; calyx with a single large gland below the lobes and opposite the outer petal; leaves more or less oblong, 12–27 cm. long, 7–12 cm. broad, lateral nerves looped and very prominent beneath, coarsely reticulate; samara 3–5 cm. long, 1.2–2 cm. broad 1. *longifolius*

Flowers subcorymbose, few, floriferous part of axis up to 5 cm. long; calyx with 2 glands; leaves narrowly oblong, 8–12 cm. long, 3.5–5 cm. broad, rather finely reticulate beneath; samara up to 3.5 cm. long and 1.5 cm. broad 2. *alternifolius*

Leaves oblanceolate, or oblong-oblanceolate, cuneate at base, rounded and sometimes very shortly cuspidate at apex, 8–13 cm. long, 2–5 cm. broad; flowers in long racemes; calyx with 2–3 glands; samara up to 2.8 cm. long 3. *chevalieri*

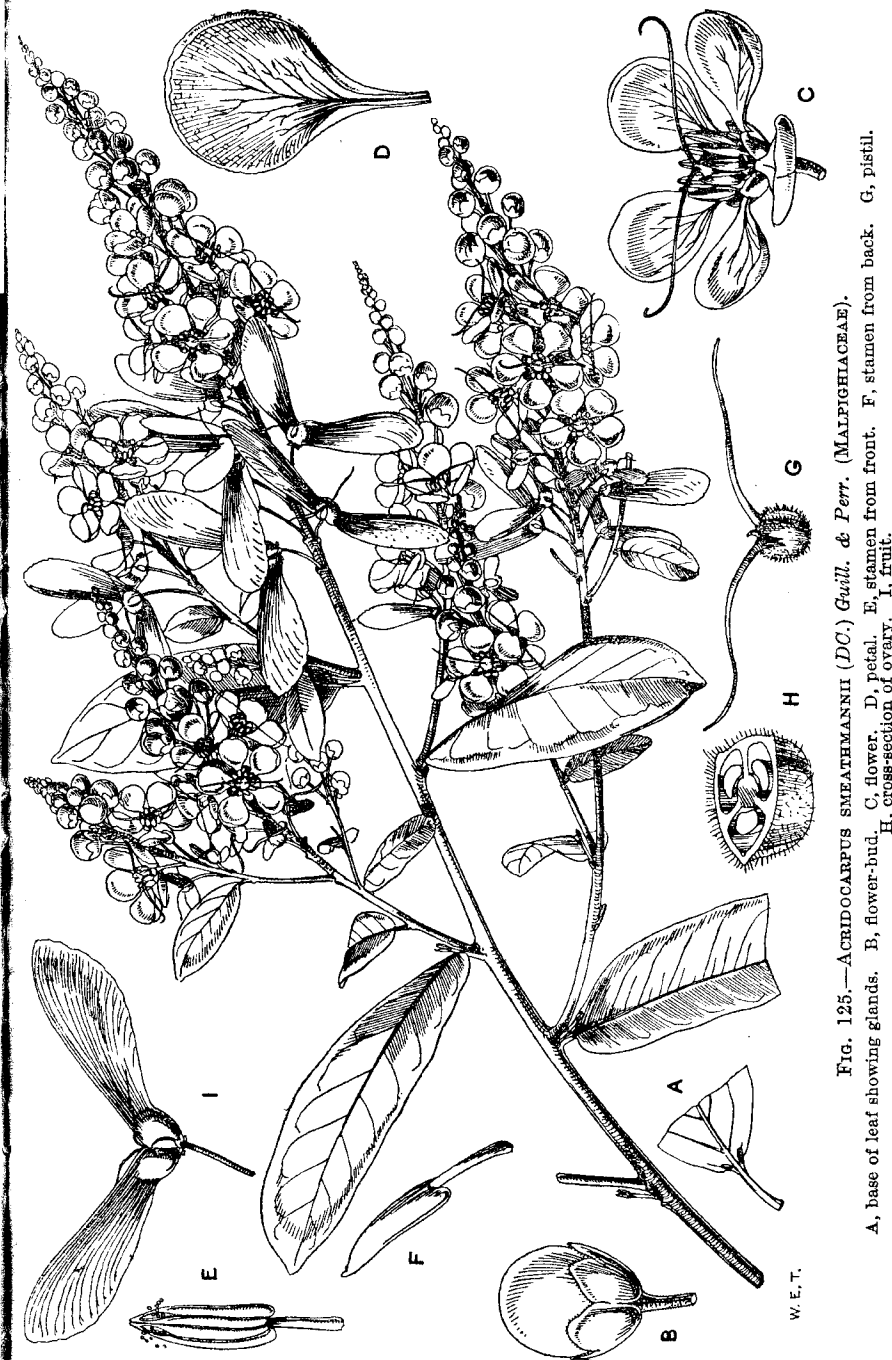


FIG. 125.—*ACRIDOCARPUS SMEATHMANNII* (DC.) Guill. & Perr. (MALPIGHIACEAE).
A, base of leaf showing glands. B, flower-bud. C, flower. D, petal. E, stamen from front. F, stamen from back. G, pistil. H, cross-section of ovary. I, fruit.

Bracts and bracteoles glandular; leaves more or less cuneate at base; flowers in long racemes or subpaniculate; samara oblong-ovate about 5 cm. long and 1.5 cm. broad; leaves oblong or narrowly obovate-oblong, 6-12 cm. long, 3-5 cm. broad, lateral nerves about 6 pairs, much branched; pedicels up to about 1.5 cm. long

Leaves broadly obovate, about 18 cm. long and 8 cm. broad, with about 9 pairs of strong lateral nerves and few tertiary nerves; pedicels up to about 8 mm. long

- *Bracts and bracteoles soon becoming reflexed, spatulate-oblong, to broadly lanceolate or ovate, 4-6 mm. long, persistent; inflorescence much-branched, with curved spreading branches; leaves more or less obovate to oblong-ovate, cuneate, rounded or subcordate at base, rounded and often apiculate at apex; sepals 3-3.5 mm. long; anthers acute at apex, not 2-horned; samara obliquely oblong-ovate, up to 7 cm. long and 2 cm. broad; leaves 8-30 cm. long, 4-14 cm. broad, glabrous or pubescent beneath
- Sepals 6-6.5 mm. long; anthers with two divergent sterile horns at the apex; samara up to 6 cm. long and 2-2 cm. broad; leaves 10-30 cm. long, 5-17 cm. broad, more or less pilose beneath

1. *A. longifolius* (G. Don) Hook. f. in Fl. Nigrit. 244 (1849); Niedenzu in Engl. Pflanzenr. Malpighiac. 271 (incl. vars.) *Anomalopteris longifolia* G. Don (1831). *Acridocarpus smeathmannii* var. *B.* Oliv. F.T.A. 1: 278. A glabrous scandent shrub; flowers yellow; fruits reddish; often growing near water. Lib.: Fishtown *Dinklage* 2040. Monrovia (June) *Baldwin* 58731 *Dinklage* 2218. Dime (fl. & fr. Apr.) *Barker* 12601 *S.Nig.*: Lagos (Feb., July) *Barker* 21961 *Milten* 1451 *Dalz.* 12621 Nun R. (fl. & fr. Aug.) *Mann* 4671 *Brass* *Barter* 37011 *Baker* *Talbot* 30961 *Br. Cam.*: Victoria *Winkler* 1228. F.Po: (Dec.) *T. Vogel* 1251 1951 Also in French Cameroons, Gabon, Angola, Principe and S. Tomé.
2. *A. alternifolius* (Schum. & Thonn.) Niedenzu in Arb. Bot. Inst. Ak. Braunschweig 6: 53 (1915); Engl. Pflanzenr. Malpighiac. 269. *Malpighia alternifolia* Schum. & Thonn. (1827). *Acridocarpus corymbosus* Hook. f.—F.T.A. 1: 278; Chev. Bot. 95. A glabrous scrambling shrub, like the preceding; sometimes on the sea coast. S.L.: *Azelius*. Freetown (June) *T. Vogel* 1771 Kumrabai (fr. Dec.) *Thomas* 70341 Njala (fl. Mar., fr. Apr.) *Deighton* 17091 18321 *Iv.C.*: Dabou (Feb.) *Chev.* 17219. G.C.: Kratté *Thonning*. Cape Coast (Sept.) *Brass*1 *T. Vogel* 121 Dixcove (Apr.) *Chipp* 1771 Abokobi (Oct.) *Vigne* FH42631 Aburi Scarp (Oct.) *Scholes* 3001 *N.Nig.*: Jebba (Dec.) *Barter*1 *Hagerup* 746 *Meikle* 8451 Nupe *Barter* 5071 Lokoja (Oct.) *Dalz.* 121
3. *A. chevalieri* Sprague in Journ. de Bot. 22: 24 (1909). *A. smeathmannii* of Niedenzu in Engl. Pflanzenr. Malpighiac. 274, partly. A climbing shrub with yellowish, or rusty, pubescent branchlets and inflorescence; flowers and fruits yellow. Fr.Sud.: Koulikoro (Oct.) *Chev.* 31441 G.C.: Aboma F.R., Ashanti (fl. & fr. Nov.) *Vigne* FH 34371
4. *A. smeathmannii* (DC.) Guill. & Perr.—F.T.A. 1: 277, partly (var. α); Niedenzu l.c. 274, partly (excl. syn. *A. chevalieri* Sprague; excl. var. *staudtii* Engl.). *Heteropteris smeathmannii* DC. (1824). Large scandent shrub with abundant yellow flowers and reddish fruits. Port.G.: Suzana to S. Domingos (fl. & fr. Mar.) *Esp. Santo* 22461 S.L.: *Smeathmann*! Freetown (Jan.) *Johnson* 481 *Dalz.* 80861 Kent *Smythe* 2471 Layah. Scarries (Jan.) *Se. Elliot* 46011 Kenema *Thomas* 75511 Musaisa (fl. & fr. Feb.) *Deighton* 42111 Lib.: Dobil Isl. St. Paul R. *Beguier* 261 Ganga (Dec.) *Baldwin* 105231 Páantah (Dec.) *Baldwin* 106141 G.C.: Koforidua (Dec.) *Johnson* 4971 Achimota (fl. & fr. Feb.) *Irvine* 1431 Sampa *Vigne* FH 34791 Togo: Lomé *Warncke* 4011 *N.Nig.*: Assinié *Dalz.* 1 *S.Nig.*: Lagos (Oct.) *Barter* 21371 22171 Rowland! *Dalz.* 12641 Ibadan (fl. & fr. Jan., Feb.) *Meikle* 9911 11531 Idanre (fl. & fr. Jan.) *Brenan* 86781 Newi (Jan.) *Kilson*! Also in French Cameroons. (See Appendix, p. 134.)
5. *A. staudtii* (Engl.) Engl. ex Hutch. & Dalz. F.W.T.A., ed. 1, 1: 271 (1928). *A. smeathmannii* var. *staudtii* Engl. Bot. Jahrb. 36: 251 (1905); Niedenzu l.c. 275. Br.Cam.: Johann-Albrechtshöhe, by the lake (fl. & fr. Dec.-Jan.) *Staudt* 4981
6. *A. plagiopertus* Guill. & Perr.—F.T.A. 1: 278; Chev. Bot. 95; Niedenzu l.c. 276. *A. hirundo* S. Moore in J. Bot. 1880: 1; F.W.T.A., ed. 1, 1: 273; Niedenzu l.c. 277. Scandent shrub, up to 20 ft. high, with rusty puberulous branchlets, yellow or orange flowers, and reddish fruits. Sen.: Perrottel 941 Port.G.: Canchungo (Apr.) *Esp. Santo* 12361 Bissau (fl. & fr. Feb.) *Esp. Santo* 17581 Fr.G.: Heudelot 7611 Labé (fr. Apr.) *Chev.* 123751 Timbo (Nov.) *Chev.* 147671 S.L.: Don! Leicester Peak (fl. & fr. Dec.) *Se. Elliot* 38701 Regent (fr. Jan.) *Dalz.* 80851 York Pass (Dec.) *Dave* 4141 Njala (Oct.) *Deighton* 49121 Lib.: Carder! Taniné (Sept.) *Linder* 8241 Vonjama (fl. & fr. Feb.) *Beguier* 841 Mt. Wolagwisa, 4,500 ft. (fr. Mar.) *Beguier* 1011 (See Appendix, p. 134.)
7. *A. macrocalyx* Engl. Bot. Jahrb. 36: 250 (1905); Niedenzu l.c. 277. A large forest liane. Togo: Kabo River F.R. (fl. Nov., fr. Dec.) *St. C. Thompson* FH 3672. S.Nig.: R. Jamieson, Sapoba (Sept.) *Kennedy* 17641 19631 Oban *Talbot*! Br.Cam.: Mamfe (Mar.) *Onochie* FH 30895! Also in French Cameroons.

Imperfectly known species.

- A. sp. Similar to *A. longifolius* but calyx with 3 glands instead of 1. More material required. S.Nig.: Utanga, Obudu Div. (fl. & fr. Dec.) *Keay & Savory* FH 25147!

2. RHINOPTERYX Niedenzu in E. & P. Pflanzenfam. 3, 4: 352 (1897); Engl. Pflanzenr. Malpighiac. 279.

Sepals obovate to oblong-ovate-obovate:

- Branchlets pubescent; leaves alternate, sessile, oblong-elliptic, or elliptic, rounded at base, rounded or very slightly acuminate at apex, 8-15 cm. long, 4-8 cm. broad, very coarsely reticulate and thinly pubescent beneath, with about 8-9 pairs of lateral nerves; racemes stout, about 30 cm. long, densely flowered; pedicels 2 cm. long, pubescent; petals nearly 1.5 cm. long; samara elliptic-orbicular, the wing all round the side of the fruit-body, slightly pubescent, 4 cm. long
- Branchlets nearly glabrous; leaves alternate, subsessile, narrowly oblong or oblong-oblong, subacute at base, triangular-acuminate, 10-17 cm. long, 2.5-4.5 cm. broad, coarsely reticulate and slightly pubescent beneath, with about 10 pairs of

much-branched lateral nerves; racemes about 20 cm. long, thinly pubescent; pedicels 2 cm. long, pubescent; samara orbicular-elliptic, the wing all round one side of the fruit body, slightly pubescent, about 6 cm. long

Sepals ovate; branchlets shortly pilose; leaves oblong, acute, 13 cm. long, 3-5.5 cm. broad, densely reticulate; racemes lax-flowered, densely pilose; petals 1.2 cm. long; samara semicordate, 6 cm. long and 3.5 cm. broad

1. *R. spectabilis* Niedenzu in E. & P. Pflanzenfam. 3, 4: 352 (1897); Engl. Pflanzenr. Malpighiac. 280. *Acridocarpus hemicyclopterus* Sprague (1906). Suffrutescent, or shrub. Gam.: Brown-Lester 471 501 Ozanne 51 Genieri (Feb.) Fox 411
2. *R. angustifolia* Sprague in Kew Bull. 1922: 194. *R. spectabilis* subsp. *angustifolia* (Sprague) Niedenzu l.c. 281. A small tree in savannah, with red-brown branchlets and white flowers. G.C.: Lawra, N.T. (fr. Feb.) *Macleod* 8151
3. *R. kerstingii* (Engl.) Niedenzu in Arb. Bot. Inst. Ak. Braunschweig 7: 20 (1921); Engl. Pflanzenr. Malpighiac. 280. *Acridocarpus kerstingii* Engl. Bot. Jahrb. 43: 383 (1900). Suffrutescent, in savannah. Fr.G.: Pobéguin 21431 Togo: Bangeli (fr. Mar.) *Kersting* 507.

Imperfectly known species.

- R. sp. A straggling plant in savannah. G.C.: Gambaga (fr. June) *Akpabla* 680.

More thorough field work is required to determine just how far the above species are really distinct.

3. FLABELLARIA Cav.—F.T.A. 1: 282.

Climbing shrub; branchlets appressed-pubescent; leaves opposite, ovate or ovate-oblong, obtuse or subacute, 10-14 cm. long, up to 10 cm. broad, glabrous above, appressed-silky-tomentose beneath; lateral nerves about 4-5 pairs; petiole 1.5-2 cm. long, tomentose; panicles terminal, lax, many-flowered; bracts oblong-ovate; pedicels 8-10 mm. long; sepals closed in bud, 4 mm. long; petals entire, glabrous; wings of fruit together suborbicular, about 3-6 cm. diam.

- F. paniculata* Cav.—F.T.A. 1: 282; Niedenzu in Engl. Pflanzenr. Malpighiac. 38, t. 10. A climbing shrub with grey-silky branchlets and leaves, and white to light pink flowers. Sen.: Messina *Berhaut* 1792. Port.G.: Formosa (Apr.) *Esp. Santo* 19641 Fr.G.: Rio Nunez *Heudelot* 8481 Kouroussa (fl. & fr. Mar.) *Podequin* 6721 Diaguissa to Timbo (Apr.) *Chev.* 13441 S.L.: *Azelius*! Erimakuna (Mar.) *Se. Elliot* 57281 Limba (fr. Apr.) *Se. Elliot* 56401 Kent (May) *Deighton* 55191 Musaisa (fr. Apr.) *Deighton* 54311 Lib.: Since *Whyte*! *Baldwin* 115581 Iv.C.: Abégo *Jolly* 2851 Mt. Goula, Danané (fr. Apr.) *Chev.* 212091 G.C.: Akropong (fl. & fr. Mar.) *Johnson* 9041 Achimota (fr. Dec.) *Irvine* 18681 Dodowah (Feb.) *Irvine* 19741 Togo: Kokedjandi *Kersting* 821. N.Nig.: Nupe *Barter* 13371 S.Nig.: Lagos *Foster* 621 631 Agbernia *Barter* 3421 Ibadan (Apr.) *Meikle* 14141 Degema *Talbot* 37221 Calabar *Thomson* 991 Ikwetete, Obudu (Dec.) *Keay & Savory* FH 251701 Br.Cam.: Mbo *Ledermann* 1521. F.Po: *T. Vogel* 991 Also in French Cameroons, Gabon, Belgian Congo, A.-E. Sudan, Uganda, Tanganyika and Angola. (See Appendix, p. 134.)

4. STIGMAPHYLLON A. Juss. in St.-Hil. Fl. Bras. Mer. 3: 48 (1832). *Brachypteryx* A. Juss. (1837)—F.W.T.A., ed. 1, 1: 273.

Branchlets finely appressed-pubescent; leaves opposite, lanceolate, obtusely pointed, shortly cuneate at base, about 7 cm. long and 2.5 cm. broad, minutely appressed-pubescent beneath; lateral nerves about 6 pairs, slender and inconspicuous; flowers few, at the ends of short lateral branchlets; pedicels about 2 cm. long, glabrous; sepals with 2 large contiguous glands in the lower part; petals with a long claw, suborbicular, about 1.5 cm. long, crenulate; stamens 10; styles 3, distinct; samaras 2-3 together, nut-like, with a very small wing

8. *ovatum* (Cav.) Niedenzu in Ind. lect. Lyc. Braunschweig, p. aest. 1900: 31 (1900); Engl. Pflanzenr. Malpighiac. 515. *Banisteria ovata* Cav. (1790). *Brachypteryx ovata* (Cav.) Small (1910)—F.W.T.A., ed. 1, 1: 273. A soft-wooded straggling climber in mangrove swamps and among rocks on sandy sea shores; flowers yellow. Fr.G.: Rio Nunez *Whitfield*! S.L.: Mahela (Nov., Dec.) *Se. Elliot* 40391 T. S. Jones 491 Rokupr (fl. & fr. July) *Jordan* 541 Tombo (May) *Deighton* 27681 Kent (fr. Nov.) *Tindall* 211 Bonthe Isl. (Nov.) *Deighton* 22731 Also in Central and East Tropical America.

5. HETEROPTERIS Kunth Nov. Gen. Sp. Pl. 5: 163 (1822).

Branchlets lenticellate; leaves opposite, oblong-elliptic, shortly acuminate, rounded at base, 12-20 cm. long, 5-8 cm. broad, thinly pubescent beneath, at length glabrous but densely papillose; lateral nerves about 10 pairs, much branched; petiole 1 cm. long, thicker at the base; panicles terminal, about 10 cm. long, rusty-tomentose; bracts ovate, 4 mm. long; calycine glands very large and fleshy; stamens 10; samaras 1-3, broadly obliquely elliptic, about 2.5 cm. long, tomentellous

- H. leona* (Cav.) Ezell Cat. S. Tomé 123 (1944). *Banisteria leona* Cav. (1790), partly—F.W.T.A., ed. 1, 1: 274. *Heteropteris africana* A. Juss. (1843)—F.T.A. 1: 276; Chev. Bot. 95; Niedenzu in Engl. Pflanzenr. Malpighiac. 375, incl. vars. A climbing shrub with coriaceous leaves, yellow flowers and red-winged fruits; chiefly in coastal districts. Port.G.: Catió (fl. & fr. July) *Esp. Santo* 21381 Fr.G.: Rio Nunez *Heudelot* 8921 S.L.: *Azelius*! Don! *T. Vogel* 621 Kent *Smythe* 2451 Goderich (Apr.) *Deighton* 47521 Njala (fl. May-July, fr. Aug.-Sept.) *Dave* 5641 *Deighton* 17531 Lib.: Grand Bassa (fr. July) *T. Vogel* 1171 Monrovia (fl. & fr. Apr.) *Barker* 12821 Since *Whyte*! *Baldwin* 115561 Iv.C.: Assinié *Chev.* 17863. Blérion (fl. & fr. Mar.) *Chev.* 19893; 19918. G.C.: Princes, W. Prov. (Jan.) *Akpabla* 7981 S.Nig.: Lagos (Aug., Sept.) *Dalz.* 9271 12631 Akilla (Apr.) *Jones & Onochie* FH 174131 Nun R. (fl. & fr. Aug., Sept.) *Mann* 4621 Brass *Barter* 291 Oban *Talbot* 12711 Br.Cam.: Victoria *Preuss* 13321 Tiko (fl. & fr. Apr.) *Maitland* 11481 Barombi *Preuss* 2821 Mamfe *Mansfeld* 19. Also in French Cameroons, Gabon, Belgian Congo, Angola, Principe and S. Tomé. (See Appendix, p. 134.)

6. TRIASPIS Burchell—F.T.A. 1: 280.

Stipules persistent, foliaceous, reniform, 1-1.5 cm. long, silky below; leaves opposite, ovate to ovate-lanceolate, acuminate, rounded at base, 8-15 cm. long, 5-9 cm. broad, thinly long-appressed-pilose beneath; petiole about 1 cm. long; panicles rather lax-flowered, with large leafy bracts; pedicels about 1.5 cm. long; sepals elliptic, pubescent, 3 mm. long; petals glabrous; wings of fruit together orbicular, about 5-6 cm. diam., glabrous 1. *stipulata*

Stipules small and deciduous; leaves ovate-elliptic, very shortly acuminate, cordate at base, 7-8 cm. long, 4.5-5.5 cm. broad, densely appressed-villous beneath; petiole 1.5 cm. long, tomentose; panicles rather small and densely flowered; pedicels about 1 cm. long, tomentose; sepals oblong, tomentose; petals glabrous; wings of fruit together suborbicular, cordate at base, about 2.5 cm. diam., glabrous 2. *odorata*

1. *T. stipulata* Oliv. F.T.A. 1: 281 (1868); Niedenzu in Engl. Pflanzenr. Malpighiac. 49. A woody climber with brownish-pilose branchlets and inflorescence; flowers in abundant panicles; calyx pinkish brown, petals white to yellow, and pink.
Togo: Misahöhe (Nov.) Mildbr. 7323! S.Nig.: Lagos Rowland! Millen 71! Abeokuta Irving 99! Usonigbe F.R. (Nov.) Keay FH 25583! Awgu (Nov.) Keay FH 21532! Br.Cam.: Victoria (fl. & fr. Dec.-Feb.) Mailland 911! Dalz. 8173! Also in French Cameroons.
2. *T. odorata* (Willd.) A. Juss.—F.T.A. 1: 280; Niedenzu l.c. 45. *Hiraea odorata* Willd. (1799). *T. aurea* Niedenzu (1915)—l.c. 45. A climbing shrub with rusty-tomentose branchlets and pink or reddish flowers.
S.L.: Afzelius. G.C.: Isert. Ada Thonning. Cape Coast Brass! Shai Plains (fl. & fr. Jan.) Johnson 575! Akropong (Oct.) Johnson 800! Mansu Cummins 9! Kumasi (fl. & fr. Dec.) Vigne FH 1778! Aboma F.R. (Nov.) Vigne FH 3436! Togo: Lome (fl. & fr. Nov.) Warnecke 251! Mildbr. 7511! Kpandu Baumann 328.