

## Family 175. MALVACEAE

### Revision:

Borssum Waalkes, J. van. 1966. *Malesian Malvaceae revised*. Blumea 14: 1-213, 21 fig.

### Abelmoschus Medikus

#### Literature:

Bates, DM. 1968. Notes on the Cultivated Malvaceae. 2. Abelmoschus. Baileya 16: 99-113; 3 fig.

**Abelmoschus crinitus** Wall., Pl. As. Rar. 1 (1830) 39, t. 44; --Borssum, Blumea 14 (1966) 103, Fig. 3.

India, Pakistan, Myanmar, Indochina, Hainan, S China and Malesia: E Java, Madura, and the Philippines. MINDORO.

**Abelmoschus esculentus** (L.) Moench., Meth. Pl. (1794) 617; --Merr., Fl. Manila (1912) 321; EPFP 3 (1923) 40; --Borssum, Blumea 14 (1966) 100.

**Abelmoschus manihot** (L.) Medik., Malv. (1787) 46.

**ssp. tetraphyllus** (Roxb. ex Hornem.) Borss., Blumea 14 (1966) 97.

#### var. tetraphyllus

Abelmoschus mindanaensis Warb. in Perkins' Fragm. Fl. Philip. (1904) 111; --Merr., EPFP 3 (1923) 40.  
Abelmoschus luzoniensis Merr., PJS 1 (1906) Suppl. 207; EPFP 3 (1923) 40.

**var. pungens** (Roxb.) Hochr., Candollea 2 (1924) 87; --Borssum, Blumea 14 (1966) 99.

Abelmoschus pungens Wall., Cat. (1829) No. 1924; --Merr., EPFP 3 (1923) 41.

Abelmoschus multilobatus Merr., PJS 1 (1906) Suppl. 208; EPFP 3 (1923) 41.

**Abelmoschus moschatus** Medic., Malv. (1787) 46; --Merr., Fl. Manila (1912) 321; EPFP 3 (1923) 40; --Borssum, Blumea 14 (1966) 91.

Abelmoschus moschatus var. haenkeanus (C Presl) Merr., EPFP 3 (1923) 40.

#### var. moschatus

**var. tuberosus** (Span.) Borss., Blumea 14 (1966) 93.

Abelmoschus sharpei Copel. ex Merr., Govt. Lab. Publ. (Philip.) 17 (1904) 29; --Merr., EPFP 3 (1923) 41.

### Abutilon Miller

**Abutilon auritum** (Wall.) Sweet, Hort. Brit. ed. 1 (1826) 53; --Merr., EPFP 3 (1923) 32; --Borssum, Blumea 14 (1966) 164.

**Abutilon hirtum** (Lam.) Sweet, Hort. Brit. ed. 1 (1826) 53; --Merr., EPFP 3 (1923) 32; --Borssum, Blumea 14 (1966) 168.

**Abutilon indicum** (L.) Sweet, Hort. Brit. ed. 1 (1826) 54; --Merr., Fl. Manila (1912) 318; EPFP 3 (1923) 32; --Borssum, Blumea 14 (1966) 170, Fig. 19-d

#### ssp. indicum

**ssp. albescens** (Miq.) Borss., Blumea 14 (1966) 173, Fig. 19-b.

#### var. albescens

**var. australiense** Hochr., Ann. Cons. Jard. Bot. Genève 6 (1902) 20; --Borssum, Blumea 14 (1966)

175, Fig. 19 a-b.

## Bombycidendron Zollinger =Hibiscus

### Gossypium Linnaeus

**Gossypium arboreum** L., Sp. Pl. (1753) 693; --Merr., EPFP 3 (1923) 43; --Borssum, Blumea 14 (1966) 121.

#### var. arboreum

**var. obtusifolium** (Roxb.) Roberty, Candollea 13 (1950) 38; --Borssum, Blumea 14 (1966) 122.  
Gossypium obtusifolium Roxb., Fl. Ind. ed. 2, 3 (1832) 183; --Merr., EPFP 3 (1923) 44.  
Gossypium nangking Meyen, Reise 2 (1836) 326; --Merr., EPFP 3 (1923) 44.

**Gossypium barbadense** L., Sp. Pl. (1753) 693; --Borssum, Blumea 14 (1966) 128.

Gossypium microcarpum Tod., Hort. Bot. Pan. 1 (1876) 63, t. 14; --Merr., EPFP 3 (1923) 44 'macrocarpum'.

#### var. barbadense

**var. acuminatum** (Roxb.) Mast., Fl. Brit. Ind. 1 (1875) 347; --Borssum, Blumea 14 (1966) 129.

Gossypium brasiliense Macfadyen, Fl. Jam. 1 (1837) 72; --Merr., Fl. Manila (1912) 325; EPFP 3 (1923) 43.

**Gossypium hirsutum** L., Sp. Pl. ed. 2 (1763) 975; --Merr., Fl. Manila (1912) 324; EPFP 3 (1923) 43; --Borssum, Blumea 14 (1966) 124.

Gossypium punctatum Schumach., Kongl. Danske Vidensk. Selsk. Skr. 4 (1829) 83; --Merr., EPFP 3 (1923) 44.

Gossypium paniculatum Blanco, Fl. Filip. (1837) 539; --Merr., EPFP 3 (1923) 44.

Gossypium taitense Merr., EPFP 3 (1923) 44, non Parl. (1866).

#### var. hirsutum

### Hibiscus Linnaeus

#### Revision:

Borssum Waalkes, J van. 1956. Notes on Malaysian Malvaceae I. Reinwardtia 4: 41-68, Fig. 1-13.

**Hibiscus bicalyculatus** Merr., Govt. Lab. Publ. (Philip.) 35 (1905) 39; EPFP 3 (1923) 37; --Borssum, Blumea 14 (1966) 69, Fig. 10. --Type: FB 2450 Ahern's collector (iso: BO, K, NY, P, SING, US).  
Luzon: Rizal prov., Montalban.

LUZON: Ilocos Sur, Benguet, Rizal. Low and medium altitudes, in forested ravines along streams. Liane!

**Hibiscus campylopsiphon** Turcz., Bull. Soc. Imp. Nat. Mosc. 31, 1 (1858) 193; --Borssum, Blumea 14 (1966) 55.

Bombycidendron campylosiphon (Turcz.) Warb. in Perkins, Fragm. Fl. Philip. (1904) 110; --Merr., EPFP 3 (1923) 42.

#### var. campylopsiphon

LUZON: Cagayan, Rizal. Known only from two collections. Forests at low altitudes.

**var. glabrescens** (Warb. ex Perkins) Borss., Blumea 14 (1966) 56; --Hibiscus glabrescens (Warb. ex Perkins) Gruezo, Vasc. Fl. Mt Makiling & Vicinity 2 (2006) 389, Fig. 115; --Bombycidendron glabrescens Warb., in Perkins Fragm. Fl. Philip. (1904) 110; --Type: Warburg 2045 (B, holo, lost).  
Luzon: Cagayan prov., Alcala; --Neotype: Botanic Gardens, Bogor, no. IX.B. 14 (BO). This material was from a living tree in Bogor Botanic Garden, grown from seeds collected by Warburg (*sub no.* 2045).

Bombycidendron vidalianum (Naves) Merr. & Rolfe, PJS 3 c (1908) Bot. 112; --Merr., EPFP 3 (1923) 43; --

*Hibiscus vidalianus* Naves in Blanco, Fl. Filip. (1877-83) t. 333. --Type: Plate in Vidal, Sinopsis Atlas, t. 16, Fig. C.

LUZON (many provinces), MINDORO, CORON, PALAWAN. Some specimens from Sumatra and Peninsular Malaysia, all cultivated. Common in forested ravines and secondary forests at low to medium altitudes up to 1200m.

**Hibiscus decaspermus** Koord. & Valetton, Bijdr. Booms. Java 2 (1895) 115; --Borssum, Blumea 14 (1966) 51.

Tenasserim, S Thailand, W Java, Sumbawa, Timor, Sulawesi and the Philippines: BABUYAN, MINDORO. Lowland secondary vegetation, along or near the coast.

**Hibiscus diversifolius** Jacq., Coll. Bot. 2 (1789) 307; --Borssum, Blumea 14 (1966) 65.

*Hibiscus paludosus* Merr., PJS 3 c (1908) Bot. 151; --Merr., EPFP 3 (1923) 38. --Type: MS Clemens *sn* (iso: BO, G, L). Mindanao: Lanao del Sur prov., Lake Lanao.

Old World tropics, including Pacific islands and Australia.

MINDANAO: Lanao del Sur (Lanao Lake).

**Hibiscus macrophyllus** Roxb. [Hort. Beng. (1814) 51, *nom. nud.*] *ex* Hornem., Hort. Hafn. Suppl. (1819) 149; --Borssum, Blumea 14 (1966) 47.

Peninsular India, Bangladesh, Assam, Thailand, Indochina, Sumatra, Peninsular Malaysia, Java, SE Borneo. Introduced in Hawaii and the Philippines.

Cultivated as an ornamental in PALAWAN.

**Hibiscus mutabilis** L., Sp. Pl. (1753) 694; --Merr., Fl. Manila (1912) 322; EPFP 3 (1923) 38; --Borssum, Blumea 14 (1966) 66.

Native of S China and Taiwan. Widely cultivated.

**Hibiscus radiatus** Cav., Diss. 3 (1787) 150, t. 54, Fig. 2; --Fern.-Vill., Novis. App. (1880) 24; --Borssum, Blumea 14 (1966) 60.

*Hibiscus cannabinus* Merr., PJS 3 c (1908) Bot. 244; EPFP 3 (1923) 37, *non* L. (1759).

S & SE Asia. Widely grown as a vegetable or medicinal in Malesia and escaping cultivation.

LUZON: Mountain Province, Pangasinan, Manila.

**Hibiscus rosasinensis** L., Sp. Pl. (1753) 694; --Merr., Fl. Manila (1912) 323; EPFP 3 (1923) 38; --Borssum, Blumea 14 (1966) 72.

**var. rosa-sinensis**

Origin uncertain, but believed to be E Africa where a related species, *H schizopetalus* (Mast.) Hook.f. was first collected as a wild plant. Cultivated worldwide, particularly in the tropics and subtropics, as an ornamental plant or living fence.

**Hibiscus sabdariffa** L., Sp. Pl. (1753) 695; --Merr., Fl. Manila (1912) 322; EPFP 3 (1923) 38; --Borssum, Blumea 14 (1966) 64.

Origin not known. Cultivated in all tropical regions, mostly as vegetable and for fiber.

**Hibiscus schizopetalus** (Mast.) Hook.f. in Curtis, Bot. Mag. iii, 36 (1880) t. 6524; --Merr., Fl. Manila (1912) 323; EPFP 3 (1923) 38; --Borssum, Blumea 14 (1966) 73.

Native to E Africa (Tanzania and Kenya). Elsewhere cultivated as an ornamental or used for living fences.

**Hibiscus surattensis** L., Sp. Pl. (1753) 696; --Merr., EPFP 3 (1923) 38; --Borssum, Blumea 14 (1966) 57. --Type from India.

Widespread in the Old World tropics. Common throughout Malesia except for New

Guinea where the species has never been collected.  
Early secondary growths and waste places near human settlements in the lowlands.

**Hibiscus syriacus** L., Sp. Pl. (1753) 695; --Merr., EPFP 3 (1923) 39; --Borssum, Blumea 14 (1966) 75.  
China and Taiwan. Cultivated elsewhere in the temperate, subtropical, and rarely

**Hibiscus tiliaceus** L., Sp. Pl. (1753) 694; --Merr., Fl. Manila (1912) 323; EPFP 3 (1923) 39; --Borssum, Blumea 14 (1966) 29.

**ssp. tiliaceus**

World tropics and subtropics.

Throughout the Philippines, particularly along seashores and tidal streams. Sometimes further inland following riverbanks, or intentionally planted as hedge or ornamental. Seeds capable of long-distance dispersal by oceanic currents.

**ssp. crestaensis** Borss., Blumea 14 (1966) 36, Fig. 6b. --Type: BS 76992 Ramos (K, holo; iso: NY\*, SING). Luzon: Isabela prov., Mt Cresta, forest, low altitude, 3 Apr 1929.

**Talipariti crestaense** (Borss.) Fryxell.

LUZON: Isabela (Mt Cresta). Lowland forest. Known only from the type collection.

**Hibiscus vitifolius** L., Sp. Pl. (1753) 696; --Merr., EPFP 3 (1923) 39; --Borssum, Blumea 14 (1966) 79.

Doubtfully occurring in the Philippines:

**Hibiscus panduriformis** Burm.f., Fl. Ind. (1768) 151, t. 47, Fig. 2; --Borssum, Blumea 14 (1966) 82. Sole Philippine record is a Perrottet collection from 'Manila' (in L). Borssum doubts if this is correctly localized.

### **Kosteletzkya** C Presl

**Kosteletzkya batensis** (Blanco) Fern.-Villar, Novis. App. (1880) 24; --Merr., Fl. Manila (1912) 320; EPFP 3 (1923) 41; --Borssum, Blumea 14 (1966) 87, Fig. 12; --*Hibiscus batensis* Blanco, Fl.

Filip. (1837) 544; ed. 2 (1845) 380; ed. 3, 2 (1879) 334. --Type: Not extant. Neotype: BS 41647 Ramos (US\*, designated by Blanchard, *in annot.*, 1980; isoneo: L\*, WU\*). Luzon: Pampanga prov., Apalit, Jan 1923.

LUZON: Ilocos Norte, Ilocos Sur, Nueva Ecija, Pampanga, Rizal. Waste places in the lowland, under seasonal climatic conditions, apparently of local occurrence.

Unfortunately, the neotype designated by Borssum (*Merrill Sp. Blancoanae* 877, US\*) for Blanco's basionym do not represent this taxon. It is *Modiola caroliniana* (L.) G Don.

### **Malachra** Linnaeus

**Malachra capitata** (L.) L., Syst. ed. 12 (1767) 458; --Merr., Fl. Manila (1912) 319; EPFP 3 (1923) 36; --Borssum, Blumea 14 (1966) 146.

**Malachra fasciata** Jacq., Coll. 2 (1789) 552; --Merr., Fl. Manila (1912) 319; EPFP 3 (1923) 36; --Borssum, Blumea 14 (1966) 147.

**var. fasciata**

## Malvastrum A Gray

- Malvastrum americanum** (L.) Torr., Rep. US Mex. Bound. Surv. 2 (1859) 38; --Borssum, Blumea 14 (1966) 154.  
Malvastrum spicatum (L.) A Gray, Mem. Amer. Acad. Sci. 2, 4 (Pl. Fendl.) (1849) 22; --Merr., EPFP 3 (1923) 33.
- Malvastrum coromandelinum** (L.) Garcke, Bonplandia 5 (1857) 297; --Merr., Fl. Manila (1912) 316; EPFP 3 (1923) 33; --Borssum, Blumea 14 (1966) 152.

## Malvaviscus Cavanilles

- Malvaviscus arboreus** Cav., Diss. 3 (1787) 131, t. 48, Fig. 1; --Borssum, Blumea 14 (1966) 132.  
Malvaviscus pilosus (Sw.) DC, Prodr. 1 (1824) 445; --Merr., Fl. Manila (1912) 320; EPFP 3 (1923) 37.
- var. arboreus**
- var. penduliflorus** (DC) Schery, Ann. Missouri Bot. Gard. 29 (1942) 223; --ML Steiner, Philip. Orn. Pl. (1960) 80, 173, with Fig.; --Borssum, Blumea 14 (1966) 133.

## Modiola Moench

- Modiola caroliniana** (L.) G Don, Gen. Syst. 1 (1831) 465; --Borssum, Blumea 14 (1966) 148.  
Native of N America, elsewhere cultivated and occasionally running wild. In Malasia: E Java (Mt Tengger) and LUZON: Manila (*Merrill Sp. Blancoanae 877*, US). According to Blouchard (in annot.) the US specimen was previously misidentified and unfortunately designated neotype of *Hibiscus batacensis* Blanco (= *Kosteletzkya batacensis*).

## Sida Linnaeus

- Sida acuta** Burm.f., Fl. Ind. (1768) 147; --Merr., Fl. Manila (1912) 318; EPFP 3 (1923) 33; --Borssum, Blumea 14 (1966) 186.
- ssp. acuta**
- ssp. carpinifolia** (L.f.) Borss., Blumea 14 (1966) 188.
- Sida ciliaris** L., Syst. ed. 10 (1759) 1145; --Borssum, Blumea 14 (1966) 179.  
Sida longistipula Merr., PJS 13 c (1918) Bot. 30; EPFP 3 (1923) 33.
- var. ciliaris**
- Sida cordata** (Burm.f.) Borss., Blumea 14 (1966) 182.  
Sida veronicifolia Lam., Encycl. 1 (1783) 5; --Merr., EPFP 3 (1923) 36 'veronicaefolia', excl. syn. S. supina L'Herit.
- Sida cordifolia** L., Sp. Pl. (1753) 684; --Merr., Fl. Manila (1912) 317; EPFP 3 (1923) 33; --Borssum, Blumea 14 (1966) 199.
- Sida insularis** Hatusima, J. Jap. Bot. 35 (1960) 351, Fig. 1; Mem. Fac. Agr. Kagoshima Univ. 5 (1966) 40.  
Ryukyus, Taiwan and the Philippines: BATAN. Wayside on littoral rocky cliff. *Hatusima 28568, 28737 and 28853*.

**Sida javensis** Cav., Diss. 5 (1788) 10, t. 134, Fig. 2; --Merr., Fl. Manila (1912) 317; EPFP 3 (1923) 34, 'javanensis', excl. syn. *S. humilis* Cav.; --Borssum, Blumea 14 (1966) 184.

**ssp. javensis**

**ssp. expilosa** Borss., Blumea 14 (1966) 185.

**Sida mysorensis** Wight & Arn., Prodr. (1834) 59; --Merr., Fl. Manila (1912) 317; EPFP 3 (1923) 35; --Borssum, Blumea 14 (1966) 180.

**Sida rhombifolia** L., Sp. Pl. (1753) 684; --Merr., Fl. Manila (1912) 318; EPFP 3 (1923) 35; --Borssum, Blumea 14 (1966) 195, Fig. 21a-d.

**ssp. rhombifolia**

**ssp. retusa** (L.) Borss., Blumea 14 (1966) 195, Fig. 21e-h.

*Sida retusa* L., Sp. Pl. ed. 2 (1763) 961; --Merr., Fl. Manila (1912) 318; EPFP 3 (1923) 35.

**Sida spinosa** L., Sp. Pl. (1753) 683; --Borssum, Blumea 14 (1966) 191.

**Sida subcordata** Span., Linnaea 15 (1841) 172; Blumea 14 (1966) 201.

*Sida puberula* Merr., PJS 7 c (1912) Bot. 90; EPFP 3 (1923) 35.

*Sida corylifolia* Wall., Cat. (1829) No. 1805, *nom. nud.*; --Mast. in Hook.f., Fl. Brit. Ind. 1 (1874) 342; --Merr., EPFP 3 (1923) 34.

Talipariti Fryxell =Hibiscus

**Thespesia Solander ex Correa**

**Thespesia lampas** (Cav.) Dalz. & Gibs., Bombay Fl. (1861) 19; --Merr., Fl. Manila (1912) 324; EPFP 3 (1923) 41; --Borssum, Blumea 14 (1966) 116.

**var. lampas**

**Thespesia populnea** (L.) Soland. ex Correa, Ann. Mus. Paris 9 (1807) 290, t. 8; --Merr., Fl. Manila (1912) 324; EPFP 3 (1932) 42; --Borssum, Blumea 14 (1966) 106; --Fosb. & Sacht, Smithsonian Contr. Bot. No. 7 (1972) 8, Fig. 1, 2, 5.

Pantropical. Widespread throughout the Philippines along seashores. Occasionally found a few km inland, whether intentionally planted or not.

**Thespesia populneoides** (Roxb.) Kostel., Allg. Med. Pharm. Fl. 5 (1836) 1861; --Fosb. & Sacht, Smithsonian Contr. Bot. No. 7 (1972) 10; --Aragones et al., Bot. ident. Handb. Philip. Mangrove Trees (1998) 57, Fig. 24.

Indian Ocean coasts and islands, Indochina, Hainan, across Malesia to Australia.

Cultivated in some parts of the neotropics.

LUZON: Bulacan, Bataan (Lamao River, Mt Mariveles), Manila, Cavite, APO IS (in Mindoro Straits), MINDORO: Mindoro Occidental (vicinity of San Jose), PANAY: Iloilo.

**Urena Dillenius ex Linnaeus**

**Urena lobata** L., Sp. Pl. (1753) 692; --Merr., Fl. Manila (1912) 319; EPFP 3 (1932) 36; --Borssum, Blumea 14 (1966) 138.

**ssp. lobata**

**var. lobata**

**var. viminea** (Cav.) Gürke, Bot. Jahrb. 16 (1892) 375; --Borssum, Blumea 14 (1966) 141.  
Urena lobata var. scabriuscula A Gray, Bot. Wilkes US Explor. Exp. (1854) 169, non (DC) Mast.; --Merr., Fl. Manila (1912) 320.

**ssp. sinuata** (L.) Borss., Blumea 14 (1966) 142.  
Urena lobata var. sinuata (L.) Miq., Pl. Jungh. (1854) 283; --Merr., Fl. Manila (1912) 320.

**var. sinuata**

Non-naturalized:

**Althaea** Linnaeus

**Althaea rosea** Cav., Diss. 2 (1785) 91, t. 29, Fig. 3; --Merr., EPFP 3 (1923) 44; --Borssum, Blumea 14 (1966) 151.