

## Family 45. MUSACEAE

### Literature:

- Backer, CA & RC Bakhuizen van den Brink. 1968. Flora of Java 3: 35-38.  
Häkkinen, M & H Väre. 2008. *Typification and checklist of Musa L. names (Musaceae) with nomenclatural notes*. Adansonia, sér. 3, 30(1): 63-112.  
Teodoro, NG. 1915. *A preliminary study of Philippine bananas*. Philippine Journal of Science 10, section c (Botany): 379-419 + 18 pls.  
Quisumbing EA. 1919. *Studies of Philippine bananas*. Philippine Agricultural Review 12: 9-90.

### Ensete Horaninow

**Ensete edule** Bruce ex Horan., xxxxx; --Cheeseman, Kew Bull. 2 (1947, publ. 1948) 100.  
Musa ensete Gmel., Syst. Nat. 13(2) (1791) 567.

**Ensete glaucum** (Roxb.) Cheeseman, Kew Bull. 2 (1947, publ. 1948) 101; --Musa glauca Roxb., Pl. Coromandel. 3 (1819) t. 300; --Teodoro, PJS 10 c (1915) Bot. 387; --Merr., EPFP 1 (1922) 221.  
Musa troglodytarum L. var. dolioliformis Blanco, Fl. Filip. (1837) 855.

Myanmar, Pegu.

LUZON: Cavite, Laguna. Ravines, etc., at low and médium altitudes.

### Musa Linnaeus

**Musa alinsanaya** RV Valmayor in Valmayor et al., Philip. Agric. Scientist 87 (2004) 117. --Type: Lelita Gonzal VH 1280 (Leyte State University, Botanical Herbarium, holo). Leyte: Baybay, Leyte State University, Musa Germplasm Bank, 10 Jul 2003.

The name was published illegitimately twice (Valmayor 2001: 330; Valmayor *et al.* 2002: 240) (McNeill *et al.* 2006: Art. 37.7), since the holotype was not indicated. Valmayor's (2001) description is based upon a putative hybrid *M. banksii* × *textilis*, characterised by Brewbaker & Gorrez (1956:263). The plant was taken into the cultivation from Philippines (Valmayor 2001).

**Musa x paradisiaca** L., Sp. Pl. (1753) 1043; --Teodoro, PJS 10 c (1915) Bot. 412; --Merr., Fl. Manila (1912) 154; EPFP 1 (1922) 221.

**var. magna** Blanco, Fl. Filip. (1837) 244; Teodoro, PJS 10 c (1915) Bot. 413; --Quisumb., Philip. Agr. Rev. 12<sup>3</sup> (1919) 67, t. 12, Fig. 212, 213; --Merr., EPFP 1 (1922) 222.

Planted here and there for its fruit. Endemic?

**var. maxima** Blanco, Fl. Filip. (1837) 245; Teodoro, PJS 10 c (1915) Bot. 414; --Merr., EPFP 1 (1922) 222.

Planted here and there for its fruit. Endemic?

**var. subrubea** Blanco, Fl. Filip. (1837) 245; --Teodoro, PJS 10 c (1915) Bot. 414; --Merr., EPFP 1 (1922) 222.

Planted here and there. Endemic?

**Musa sapientum** L., Syst. ed. 10 (1759) 1303; --Teodoro, PJS 10 c (1915) Bot. 393; --Merr., EPFP 1 (1922) 222;

Musa x paradisiaca L. ssp. sapientum Kuntze, Rev. Gen. Pl. 1 (1892) 692.

**var. sapientum**

The familiar table bananas, usually distinguished from the plantains (*Musa paradisiaca* L.) in the consistency and character of the mature fruits.

*Musa sapientum* has been repeatedly shown to represent *Musa* cultivars (AB, AAB, ABB group). Therefore all infraspecific taxa described represent various cultivars, unless otherwise shown. According to Simmonds (1960b), Linnaeus originally applied the name *M. sapientum* to the "Silk fig" (AAB group).

**var. angao** Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 58, t. 5, Fig. 30; t. 7, Fig. 69; t. 9, Fig. 126; t. 11, Fig. 192, 193; t. 26, Fig. 2; --Merr., EPFP 1 (1922) 222.  
MINDANAO: Misamis. Cultivated at Los Baños.

**var. baca** Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 51, t. 5, Fig. 23; t. 7, Fig. 60; t. 9, Fig. 118; t. 11, Fig. 176, 177; --Merr., EPFP 1 (1922) 223.  
LUZON: Cavite. Cultivated at Los Baños.

**var. binutig** Teodoro, PJS 10 c (1915) Bot. 401, t. 10, Fig. 1-5; --Merr., EPFP 1 (1922) 223;  
*Musa sapientum* var. *grandis* Teodoro, Philip. Agr. Review 12<sup>3</sup> (1919) 35, t. 4, Fig. 7; t. 6, Fig. 45; t. 9, Fig. 102; t. 10, Fig. 144, 145; t. 10, Fig. 144, 145; --Merr., EPFP 1 (1922) 226.  
Apparently from Leyte. Cultivated at Los Baños.

**var. canara** Teodoro, PJS 10 c (1915) Bot. 406, t. 10, Fig. 6-10; --Merr., EPFP 1 (1922) 223;  
Cultivated at Los Baños. Origin unknown but probably Philippine, and very likely from Camarines province, where kanara is a well-known banana.

**var. canaya** Quisumb., Philip. Agric. Rev. 12 (1919) 44, t. 4, Fig. 18; --Merr., EPFP 1 (1922) 223.  
MINDANAO: Surigao. Cultivated at Los Baños.

**var. cinerea** (Blanco) Teodoro, PJS 10 c (1915) Bot. 397, t. 13, Fig. 1-5; --Merr., EPFP 1 (1922) 223;  
*Musa sapientum* L. var. *cinerea* (Blanco) Teodoro, PJS 10 c (1915) Bot. 397; --*Musa paradisiaca* L. var. *cinerea* Blanco, Fl. Filip. (1837) 250.  
One of the most common bananas in the Philippines. Latundan.

**var. compressa** (Blanco) Teodoro, PJS 10 c (1915) Bot. 408, t. 7, Fig. 1-5; --Merr., EPFP 1 (1922) 223; --*Musa paradisiaca* L. var. *compressa* Blanco, Fl. Filip. (1837) 240.  
A very common banana in most parts of the Philippines. Bisco, Obispo, or sabá.  
Probably

**var. daryao** Teodoro, PJS 10 c (1915) Bot. 403, t. 8, Fig. 1-5; --Merr., EPFP 1 (1922) 224.  
LEYTE. Cultivated at Los Baños.

**var. dinalaga** Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 55, t. 5, Fig. 31; t. 7, Fig. 66; t. 9, Fig. 122; t. 11, Fig. 184, 185; t. 26, Fig. 1; --Merr., EPFP 1 (1922) 223.  
LUZON: Quezon. Cultivated at Los Baños.

**var. dool** Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 35, t. 4, Fig. 6; t. 6, Fig. 44; t. 9, Fig. 101; t. 10, Fig. 142, 143; t. 15, Fig. 1; --Merr., EPFP 1 (1922) 223.  
MINDANAO: Bukidnon. Cultivated at Los Baños.

**var. eda** Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 37, t. 4, Fig. 9; t. 6, Fig. 47; t. 9, Fig. 104; t. 10, Fig. 148, 149; t. 15, Fig. 1; --Merr., EPFP 1 (1922) 223.  
MINDANAO: Surigao. Cultivated at Los Baños.

**var. flabellata** Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 66, t. 5, Fig. 35; t. 8, Fig. 78; t. 12, Fig. 208, 209; t. 29, Fig. 2; --Merr., EPFP 1 (1922) 224.

LUZON: Bulacan, Laguna. Cultivated at Los Baños.  
Perhaps better placed under *M paradisiaca* L.

**var. galatayan** Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 40, t. 4, Fig. 13; t. 6, Fig. 50; t. 9, Fig. 108; t. 10, Fig. 154, 155; t. 18, Fig. 1; --Merr., EPFP 1 (1922) 224.  
LUZON: Cavite. Cultivated at Los Baños.

**var. garangao** Teodoro, PJS 10 c (1915) Bot. 401, t. 10, Fig. 6-10; --Merr., EPFP 1 (1922) 224;  
LEYTE. Cultivated at Los Baños.

**var. glaberrima** (Blanco) Teodoro, PJS 10 c (1915) Bot. 399, t. 15, Fig. 1-5; --Merr., EPFP 1 (1922) 224; --Musa paradisiaca L. var. glaberrima Blanco, Fl. Filip. (1837) 245.  
LUZON: Rizal, Laguna. Cultivated at Los Baños.

**var. glauca** (Blanco) Teodoro, PJS 10 c (1915) Bot. 402, t. 11, Fig. 6-10; --Merr., EPFP 1 (1922) 224;  
--Musa paradisiaca L. var. glauca Blanco, Fl. Filip. (1837) 250.  
LUZON: Rizal, Laguna. Cultivated at Los Baños.

**var. grandis** Teodoro, PJS 10 c (1915) Bot. 410, t. 14, Fig. 1-3; --Merr., EPFP 1 (1922) 224;  
LUZON: Laguna. Cultivated at Los Baños.

**var. humilis** (Perr.) Merr., EPFP 1 (1922) 224; --Musa humilis Perr. Mém. Soc Linn. Paris 3 (1825) 131, non Aubl. [=Heliconia bihai (L.) L.]  
MINDANAO: Zamboanga, Cotabato. A peculiar form with small obovoid fruit.

**var. inarnibal** Teodoro, PJS 10 c (1915) Bot. 406, t. 9, Fig. 1-5; --Merr., EPFP 1 (1922) 225;  
LUZON: Laguna.

**var. kinamay** Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 57, t. 5, Fig. 32; t. 7, Fig. 67; t. 9, Fig. 125; t. 11, Fig. 190, 191; t. 23, Fig. 1; --Merr., EPFP 1 (1922) 224.  
LUZON: Bulacan. Cultivated at Los Baños.

**var. lacatan** (Blanco) Teodoro, PJS 10 c (1915) Bot. 405, t. 11, Fig. 1-5; --Merr., EPFP 1 (1922) 225;  
--Musa paradisiaca L. var. lacatan Blanco, Fl. Filip. (1837) 240.  
A widely cultivated banana and one of the most popular varieties in the Philippines.  
Lakatan.

**var. longa** (Blanco) Teodoro, PJS 10 c (1915) Bot. 407; --Merr., EPFP 1 (1922) 225; --Musa paradisiaca L. var. longa Blanco, Fl. Filip. (1837) 245.  
Known only from Blanco's description.

**var. padilat** Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 63, t. 5, Fig. 38; t. 7, Fig. 71; t. 8, Fig. 88; t. 12, Fig. 202, 203; t. 28, Fig. 1; --Merr., EPFP 1 (1922) 225.  
BABUYAN ISLS (DALUPIRI). Cultivated at Los Baños.

**var. pamotion** Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 49, t. 5, Fig. 21; t. 7, Fig. 59; t. 9, Fig. 116; t. 11, Fig. 172, 173; t. 22, Fig. 1; --Merr., EPFP 1 (1922) 225.  
MINDANAO: Surigao. Cultivated at Los Baños.

**var. pelipia** Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 42, t. 4, Fig. 14; t. 6, Fig. 51; t. 9, Fig. 109; t. 10, Fig. 158, 159; t. 18, Fig. 2; --Merr., EPFP 1 (1922) 225.  
MINDANAO: Surigao. Cultivated at Los Baños.

**var. principe** Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 50, t. 5, Fig. 22; t. 7, Fig. 61; t. 9, Fig. 117; t. 11, Fig. 174, 175; t. 22, Fig. 2; --Merr., EPFP 1 (1922) 225.  
Philippines, without locality. Cultivated at Los Baños.

**var. pumila** (Blanco) Merr., EPFP 1 (1922) 225; --Musa cavendishii Lamb. var. pumila (Blanco) Teodoro, PJS 10 c (1915) Bot. 412; --Musa  $\times$ paradisiaca L. var. pumila Blanco, Fl. Filip. (1837) 244.  
Occasionally planted; perhaps a dwarfed form of bungulan.

**var. putian** Quisumb., Philip. Agric. Rev. 12 (1919) 36, t. 4, Fig. 8; --Merr., EPFP 1 (1922) 225.  
From the Visayan Islands. Cultivated at Los Baños.

**var. raines** Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 55, t. 5, Fig. 27; t. 7, Fig. 65; t. 9, Fig. 124; t. 11, Fig. 186, 187; t. 25, Fig. 1; --Merr., EPFP 1 (1922) 226.  
POLILLO. Cultivated at Los Baños.

**var. sarocsoc** Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 39, t. 4, Fig. 11; t. 6, Fig. 49; t. 9, Fig. 104; t. 10, Fig. 152, 153; t. 17, Fig. 1; --Merr., EPFP 1 (1922) 226.  
LUZON: Camarines. Cultivated at Los Baños.

**var. sision** Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 35, t. 4, Fig. 7; t. 6, Fig. 45; t. 9, Fig. 102; t. 10, Fig. 144, 145; t. 10, Fig. 144, 145; --Merr., EPFP 1 (1922) 226.  
PANAY: Capiz. Cultivated at Los Baños.

**var. suaveolens** (Blanco) Teodoro, PJS 10 c (1915) Bot. 400, t. 14, Fig. 6-10; --Merr., EPFP 1 (1922) 226; --Musa paradisiaca L. var. suaveolens Blanco, Fl. Filip. (1837) 244.  
One of the most popular bananas in the Philippines. Bungulan.

**var. ternatensis** (Blanco) Teodoro, PJS 10 c (1915) Bot. 404, t. 7, Fig. 1-5; --Merr., EPFP 1 (1922) 226; --Musa  $\times$ paradisiaca L. var. ternatensis Blanco, Fl. Filip. (1837) 243.  
Occasionally cultivated. Gloria; ternate

**var. tombak** (Blanco) Teodoro, PJS 10 c (1915) Bot. 407; --Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 33, t. 4, Fig. 4; t. 6, Fig. 42; t. 9, Fig. 99; t. 10, Fig. 138, 139; t. 14, Fig. 2; --Merr., EPFP 1 (1922) 226; --Musa paradisiaca L. var. tombak Blanco, Fl. Filip. (1837) 246.  
Cultivated here and there. Goyoran, tinumbaga, tombak.

**var. tuldoc** Teodoro, PJS 10 c (1915) Bot. 407, t. 10, Fig. 1-5; --Merr., EPFP 1 (1922) 226;  
LUZON: Rizal. Cultivated at Los Baños.

**var. tudlong** Teodoro, PJS 10 c (1915) Bot. 402, t. 11, Fig. 6-10; --Merr., EPFP 1 (1922) 226;  
LEYTE. Cultivated at Los Baños.

**var. violacea** (Blanco) Teodoro, PJS 10 c (1915) Bot. 398, t. 5, Fig. 6-10; --Merr., EPFP 1 (1922) 226; --Musa paradisiaca L. var. violacea Blanco, Fl. Filip. (1837) 245.  
Cultivated here and there. Morado.

**Musa rosacea** Jacq., Pl. Rar. Horti Caesari Schoenbrunnensis 4 (1804) 23. --Type: Plate 445 in Jacquin, op. cit. (lecto-, designated by Hakkinen & Vare, 2008).

Musa balbisiana Colla, Mem. Accad. Sci. Torino 25 (1820) 384.

Musa acuminata Colla ssp. errans (Blanco) RV Valmayor, Philip. Agric. Scientist 84 (2001) 328; --Musa errans (Blanco) Teodoro, PJS 10 c (1915) Bot. 390, t. 17, Fig. 6-8; --Merr., EPFP 1 (1922) 221; --Musa  $\times$ paradisiaca L. var. errans Blanco, Fl. Filip. (1837) 247.

Musa errans var. botoan Teodoro, PJS 10 c (1915) Bot. 391, t. 7, Fig. 50-10; --Merr., EPFP 1 (1922) 221.

Sikkim to Papuaia.

LUZON: Apayao, Bataan, Bulacan, Rizal, Laguna. Lo and medium altitude forests.

**Notes:**

Häkkinen & Väre (2008) regards *M. rosacea* as a good species as it produces seeds after pollination. This name antedates the well-known *M. balbisiana* Colla 1820, which they have effectively synonymized. While *M. balbisiana* is much more commonly used over *M. rosacea*, maintenance of the former name would require conservation.

**Musa textilis** Néés, Anal Cienc. Nat. 4 (1801) 123; --Teodoro, PJS 10 c (1915) Bot. 388, t. 18, Fig. 6-10; --Merr., EPFP 1 (1922) 227; --Type not found and requires neotypification.

*Musa mindanensis* Miq., Flora Indiae Batavae 3 (1855) 588; --*Musa sylvestris mindanensis* Rumph., Herb. Amboin. (1747) 139.

Endemic to the Philippines. Extensively cultivated in the wetter parts of the Philippines. Abaca or Manila hemp. The species is variable, and sundry forms have distinctive local names.

\***Musa uranoscopos** Lour., Fl. Cochinch. (1790) 645, excl. syn. Rumph., *non* Colla, 1820, which is = As explained by Loureiro's binomial is a later homonym of *M. uranoscopos* Colla (1820), a synonym of

**Musa coccinea** Andrews, Botanist's Repository 1 (1797) 343.

*Musa uranoscopos* Lour., Fl. Cochinch. (1790) 645, excl. syn. Rumph., *non* Colla, 1820.

Native of SE Asia. Introduced and occasionally planted on account of its very showy red bracts.

Dubious and excluded Taxa:

**Musa cavendishii** I.M.Lamb ex Paxton **var. hawaiiensis** Teodoro, PJS 10 c (1915) Bot. 411 (1915). —Type: Teodoro, PJS 10 c (1915) Bot. pl. 16 figs 6-10 (1915) (lecto-, designated by Häkkinen & Väre, 2008).

'...generally considered as a distinct species, but I believe it to be merely a variety of *Musa sapientum* L. Teodoro's descriptions were based on recently introduced and cultivated specimens' --Merrill (1922: 228).

**Musa chapara** Perr., Mém. Soc. Linn. Paris 3 (1825) 131.

Described from material of Philippine origin. Type unknown and diagnosis is too poor to allow identification.

*M. chapara* has been regarded as a synonym of *M. sapientum* L. (Schumann 1900; Champion 1967).

*Musa nigra* Perr., Mém. Soc. Linn. Paris 3 (1825) 131.

Type unknown and the protologue is too poor to allow positive identification.

*Musa sapientum* L. var. *americana* Teodoro, PJS 10 c (1915) Bot. 398, t. 7, Figs. 6-10.

Based on material of Cuban origin.

*Musa sapientum* L. var. *cubensis* Teodoro, PJS 10 c (1915) Bot. 397, t. 11, Figs. 6-10.

Based on material of Cuban origin.

Quisumbing, Philippi. Agr. Review 12 (1919) 1-73, t. 1-30, described and figured a number of varieties from extra-Philippine plants, cultivated at Los Baños, which has been excluded by Merrill in his 'Enumeration':

*Musa sapientum* L. var. *gladiata* Quisumb., Philip. Agr. Review 12<sup>3</sup> (1919) 30.  
Based on extra-Philippine plants of unknown origin cultivated in Los Baños

*Musa paradisiaca* L. var. *ulnaris* Blanco, Fl. Filip. (1837) 246.  
According to Merrill (1922) a purely imaginary variety, the description based on hearsay data, probably inspired by one of the *tundok* varieties.