

# Typification and check-list of *Musa* L. names (Musaceae) with nomenclatural notes

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## ABSTRACT

The published *Musa* L. names are listed and typifications are considerably supplemented. Typification of the names belonging to other genera of Musaceae is beyond the scope of the present study. All the synonyms discovered are also given. Altogether, 439 names were found. Of those, 110 are illegitimate and 134 are obvious “cultivars” or dubious names presented in seven publications describing mainly “variants” of cultivated bananas, viz. *M. ×paradisiaca*, *M. sapidisíaca* and *M. sapientum*. Of the 170 dubious names, Blanco (1837) described 17, Hubert (1907) five (all illegitimate), Gillet (1909) 28 (all illegitimate), Teodoro (1915) 10, Quisumbing (1919) 17 and Jacob (1952) 64 names. The names (24) by De Wildeman (1920) and de Briey, in the same book, are lectotypified through illustrations. Those names represent cultivars. Of the remaining *Musa* names 32 represent *Ensete*, *Musella* and one *Heliconia*. Altogether, 26 names, *Ensete* excluded, could not be typified due to the lack of original material. These names remain obscure, as the descriptions do not allow identification. Fifteen iso- or homonyms were detected. The number of “proper” *Musa* names is about 140. In this article 69 *Musa* names are lectotypified and three are neotyped. Sixty-four names have a holotype, and 28 have been typified earlier. Further, three epitypes are designated here and two new combinations proposed, and three *Ensete* typified, as their generic placement has not been treated in the literature.

## KEY WORDS

Musaceae,  
*Ensete*,  
*Musa*,  
*Musella*,  
typification,  
new combinations.

## RÉSUMÉ

*Typification et liste des noms de Musa L. (Musaceae) et notes nomenclaturales.*

Les noms de *Musa* L. publiés sont listés et les typifications sont considérablement augmentées. La typification des noms appartenant à d'autres genres de Musaceae dépasse le cadre de ce travail. Tous les synonymes connus sont recensés. Au total, 442 noms ont été trouvés, parmi lesquels 110 sont illégitimes et 134 sont de toute évidence des « cultivars » ou des noms douteux présentés dans sept publications décrivant essentiellement des « variétés » de bananiers cultivés, soit *M. ×paradisiaca*, *M. sapidisiciaca* et *M. sapientum*. Parmi les 170 noms douteux, Blanco (1837) en a décrit 17, Hubert (1907) cinq (tous illégitimes), Gillet (1909) 28 (tous illégitimes), Teodoro (1915) 10, Quisumbing (1919) 17 et Jacob (1952) 64. Les noms (24) de De Wildeman (1920) et de Briey dans le même ouvrage sont lectotypifiés par des illustrations. Ces noms représentent des cultivars. Parmi les autres nom de *Musa*, 32 représentent *Ensete*, *Musella* et un *Heliconia*. Au total, 26 noms, *Ensete* exclu, n'ont pu être typifiés faute de matériel original. Ces noms demeurent obscurs, car les descriptions ne permettent pas d'identification. Quinze iso- ou homonymes ont été détectés. Le nombre de noms « corrects » de *Musa* est estimé à 140. Dans cet article, 69 noms de *Musa* sont lectotypifiés et trois sont néotypifiés. Soixante-quatre noms possèdent un holotype, et 28 avaient déjà été typifiés. De plus, trois épitypes sont désignés ici et deux combinaisons nouvelles sont proposées, et trois *Ensete* sont typifiés, leur placement générique n'ayant pas été traité dans la littérature.

## MOTS CLÉS

Musaceae,  
*Ensete*,  
*Musa*,  
*Musella*,  
typification,  
combinaisons nouvelles.

## INTRODUCTION

*Musa* taxonomy is still very obscure today just as it has been throughout its history despite several attempts of clarification (Baker 1893; Cheesman 1931, 1948a, b, 1949a, b, 1950a, b; Simmonds 1957, 1960; Champion 1967; Nasution 1991). Some earlier typifications seem to have failed. As a consequence, usage of *Musa* names is very confusing. The first author has studied *Musa* for over a decade with 11 extensive field expeditions to Southeast Asia and numerous visits to botanical gardens and herbaria all over the world. The second author is a specialist in nomenclatural and typification questions. Two earlier papers treat the identity of *M. laterita* and *M. rubra* (Häkkinen 2003a), *M. rosea* and *M. angcorensis* (Häkkinen 2006b). Three additional typification papers have been prepared, which treat the following misapplied names: *M. aurantiaca* (Häkkinen & Väre 2008a),

*M. assamica*, *M. dasycarpa* and *M. velutina* (Häkkinen & Väre 2008b), *M. manii*, *M. sanguinea* and *M. ×kewensis* (Häkkinen & Väre unpubl. data). The current paper is more comprehensive, aimed to list all *Musa* names described and to typify as many names as possible in order to clarify the nomenclature of *Musa*. A considerable quantity of herbarium materials including types was studied.

## MATERIAL AND METHODS

*Musa* names were gathered from various sources, especially from IPNI (The International Plant Names Index), and from less known literature. All original descriptions were studied and compared with type specimens found. The following herbaria were studied or consulted: B, BM, BO, BR, BRI, BORH, C, CAL, E, FI, FT, G, H, HITBC, HUMS, IBSC, K, KEP, KYO, L, LE, LINN, LIV,

MA, MANCH, MEL, MEXU, MO, NY, P, PAS, PH, SAR, SBC, SING, SNP, TAI, TI, TO, TOM, U, WELT, WRSL.

The “Code” refers to the *International Code of Botanical Nomenclature* (McNeill *et al.* 2006).

#### VALIDLY PUBLISHED NAMES

##### 1. *Musa acuminata* Colla subsp. *acuminata* var. *acuminata*

*Memorie della Accademia delle Scienze di Torino* 25: 394 (1820). — Type: Rumphius (1747), *Herbarium Amboinense* 5: t. 61 fig. 1, *M. simiarum* Pissang Jacki (lecto-, here designated).

HOMONYM. — *Musa acuminata* Zoll., *Systematisches Verzeichniss der im indischen Archipel in den Jahren 1842-1848 gesammelten sowie der aus Japan empfangenen Pflanzen*: 74 (1854).

#### REMARKS

Colla (1820) based his species on Rumphius (1747: 138) “*M. Pissang F[J]acki*”. Herbarium and types of Colla are at TO (Stafleu & Cowan 1976), but the corresponding specimen does not exist.

##### 2. *Musa acuminata* Colla subsp. *burmannica* N.W.Simmonds

*Kew Bulletin* 11: 468 (1957, “1956”). — Type: Trinidad, IICTA Introduction 187, clone Long Tavoy, [Cheesman] (lecto-, K!, here designated).

#### REMARKS

The seeds were received from lower Burma [Myanmar], Tavoy District, Tenasserim (Simmonds 1957). The lectotype is preserved in a liquid collection.

##### 3. *Musa acuminata* Colla subsp. *burmannicoides* E.De Langhe

*Bulletin du Jardin botanique de Bruxelles* 30: 377 (1960). — Type: Congo, Yangambi, jardin de collection de bananiers, *De Langhe* 1 (holo-, BR; iso-, YBI).

#### REMARKS

The seeds originated from Burma [Myanmar], and represent the same material that Simmonds (1957:

469) mentioned, i.e. ICTA introduction 124 (as *M. acuminata* subsp. *burmannica*).

##### 4. *Musa acuminata* Colla subsp. *siamea* N.W.Simmonds

*Kew Bulletin* 11 (3): 466 (1957, “1956”). — Type: Trinidad, IICTA introduction no. 403, Simmonds 18834 (holo-, K!).

#### REMARKS

The seeds probably originated from Thailand. In the label of the holotype is given the collection number 64 of the Banana Expedition 1954-1955. In the label the collection locality is indicated to be Malaya, contrary to Simmonds (1957: 467). However, there is some uncertainty in the information Simmonds gave concerning the holotype: “locality unspecified, intro 403, now maintained as the clone Siam”. The holotype is not marked as the type by Simmonds, unlike the cases concerning other taxa he described in 1956. In the database at K it is ICTA 403, as given in Simmonds.

##### 5. *Musa acuminata* Colla var. *alasensis* Nasution

*Memoirs of the Tokyo University of Agriculture* 32: 48, fig. 19 (1991). — Type: Indonesia, Aceh, Ketambe, Kotacane, XII.1982, Rusdy 1638 (holo-, BO).

##### 6. *Musa acuminata* Colla var. *bantamensis* Nasution

*Memoirs of the Tokyo University of Agriculture* 32: 65, fig. 25 (1991). — Type: Indonesia, Banten, Ranca Danu, 23.I.1989, Rusdy 1634 (holo-, BO).

##### 7. *Musa acuminata* Colla var. *breviformis* Nasution

*Memoirs of the Tokyo University of Agriculture* 32: 71, fig. 27 (1991). — Type: Indonesia, Bogor, Botanic Garden XXIII. A. 77-77a, 18.III.1989, Rusdy 1632 (holo-, BO).

##### 8. *Musa acuminata* Colla var. *chinensis* Häkkinen & H.Wang

*Novon* 17: 442, fig. 3A, B (2007). — Type: China, Yunnan, Simao Distr., Jiangcheng Co., Lixian Jang

River, close to Vietnam border, 7.XII.2005, Wang Hong 8369 (holo- HITBC!; iso-, H 1735115!, IBSC!, MO!, PE!, QGG!).

9. *Musa acuminata* Colla  
var. *longipetiolata* Nasution

*Memoirs of the Tokyo University of Agriculture* 32: 63, fig. 2 (1991). — Type: Indonesia, Palembang, Musirawas, VI.1982, Rusdy 1630 (holo-, BO).

10. *Musa acuminata* Colla var. *nakaii* Nasution

*Memoirs of the Tokyo University of Agriculture* 32: 58, fig. 23 (1991). — Type: Indonesia, Bogor, Cipayung, 7.II.1984, Rusdy 1636 (holo-, BO).

11. *Musa acuminata* Colla var. *violacea* Kurz

*Journal of Agricultural and Horticultural Society of India* 14: 297 (1867).

REMARKS

Herbarium and types of Kurz are at CAL, Indonesian at L, BO, U, and duplicates at IH, K and L (Stafleu & Cowan 1979). Such a specimen could not be located. Cheesman (1948b: 22) included var. *violacea* to *M. acuminata* rankless, which is agreed here.

12. *Musa acutibracteata* M.Hotta

*Acta Phytotaxonomica et Geobotanica* 21: 4 (1964). — Type: Tonga, Tongatapu Isl., near Mu'a village, eastern part of island, 29.IX.1960, M. Hotta no. 5652 (holo-, KYO!).

REMARKS

This is a seedless banana, as the author himself (Hotta 1964) described. Therefore, the name represents a cultivated banana.

13. *Musa agbarkarii* Chakravorti

*Journal of the Indian Botanical Society* 27: 93 (1948).

REMARKS

Basionym for *Ensete agbarkarii* (Chakravorti) D.K.Hore, B.D.Sharma & G.Pandey (1992: 450).

14. *Musa alinsanaya* R.V.Valmayor

in Valmayor *et al.*, *The Philippine Agriculture Scientist* 87: 117 (2004). — Type: Philippines, Leyte State University, Bambay, Musa Germplasm Bank, 10.VII.2003, Lelita Gonzal VH 1280 (holo-, Leyte State University, Botanical Herbarium).

REMARKS

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).

15. *Musa amboinensis* Miq.

*Flora Indiae Batavae* 3: 588 (1855).

*Musa textilis* Née var. *amboinensis* (Miq.) Baker, *Annals of Botany* (Oxford) 7: 211 (1893).

REMARKS

The basionym is *M. sylvestris* [rankless] *amboinensis* Rumph. (Rumphius 1747: 139). The herbarium and types of Rumphius were almost completely destroyed in a fire (Stafleu & Cowan 1983), and since the name is not supported by an illustration and we were not able to interpret the diagnosis, the name remains dubious. Apparently it was not Miquel's intention to publish a new name, as he gave Rumphius as an author.

16. *Musa angcorensis* Gagnep.

*Bulletin de la Société botanique de France* 54 (4): 412 (1907). — Type: Cambodia, Angkor, dans les forêts et la ville, juin, Vietnam, Me-Kong expedition in 1866-1868, Thorel 2082 (lecto-, P!, designated by Häkkinen [2006b]).

REMARKS

The name is junior synonym of *M. rosea* Baker (Häkkinen 2006b).

17. *Musa angustigemma* N.W.Simmonds

*Kew Bulletin* 8: 573 (1954, "1953"). — Type: Trinidad, ICTA introduction 194, *Anonymous* (lecto-, K!, designated by Argent [1976]).

*Musa peekelii* Lauterb. subsp. *angustigemma* (N.W.Simmonds) Argent (1976: 106).

#### REMARKS

The seeds originated from Papua New Guinea, Madang District, Rai coast (Simmonds 1953). We consider that the rank of subspecies is appropriate.

### 18. *Musa arnoldiana* De Wild.

*Bulletin des Études coloniales* 8: 339 (1901).

#### REMARKS

Basionym for *Ensete arnoldianum* (De Wild.) Cheesman (1948a: 103).

### 19. *Musa assamica* Bull

*A Retail List of New, Beautiful and Rare Plants Offered by William Bull:* 6 (1871). — Type: [Britain, Kew], Hort[us] Kew[ensis] 170B/4/36, 3.XII.1884, Anonymous (neo-, K!, designated by Häkkinen & Väre [2008b]).

#### REMARKS

The neotype represents *M. sanguinea* Hook.f. For discussion see Häkkinen & Väre (2008b).

### 20. *Musa aurantiaca* Baker

*Annals of Botany* (Oxford) 7: 222 (1893). — Type: India, Assam, Mahuni Forest, Lakhimpur, IX.1890, Gustav Mann (lecto-, K 000308203!, designated by Häkkinen & Väre [2008a]).

### 21. *Musa azizii* Häkkinen

*Acta Phytotaxonomica et Geobotanica* 56: 29 (2005). — Type: Malaysia, Borneo, Sarawak, Kapit Division, Lumut range, 1507 ft. alt., 02°45.243'N, 112°45.220'E, 7.V.2004, M. Häkkinen & K. Meekiong 998 (holo-, SAR!; iso-, HUMS!).

### 22. *Musa bacoba* Rottb.

*Descriptiones Plantarum Rariorum:* 28 (1776).

ISONYM. — *M. bacoba* Rottb., *Acta Literaria Universitatis Hafniensis* 1: 302 (1778).

#### REMARKS

Herbarium and types of Rottbøll are at C, LINN, LIV, NY and PH (Stafleu & Cowan 1983), but this type specimen could not be located. The protologue is too poor to allow positive identification. The specimen, on which the diagnosis was based, was collected in Guiana. Thus the taxon is presumably a cultivated banana or an *Ensete*.

### 23. *Musa bagshawei* Rendle & Greves

*The Journal of Botany, British and Foreign* 48: 169, t. 506 (1910).

#### REMARKS

Basionym for *Ensete bagshawei* (Rendle & Greves) Cheesman (1948a: 103).

### 24. *Musa bakeri* Hook.f.

*Botanical Magazine* 124: t. 7627 (1898). — Type: Hooker (1898), *Botanical Magazine* 124: t. 7627 (lecto-, here designated).

#### REMARKS

Herbarium and types of Hooker are at K, MANCH and E (Stafleu & Cowan 1979), but this type could not be located. Cheesman (1948b) comments that this is of the same “affinity” as *M. rosacea* Jacq. It is closely related to *M. balbisiana* Colla, perhaps a variety of it. However, it must be studied more closely.

### 25. *Musa balbisiana* Colla var. *balbisiana*

*Memorie della Accademia delle Scienze di Torino* 25: 384 (1820). — Type: India orientalis, ex. H.Rip. 1820, Anonymous (lecto-, TO!, here designated; syn-, Rumphius [1747], *Herbarium Amboinense* 5: t. 60 fig. f. M. XI pisang batu, seu pissang bidii).

#### REMARKS

Colla (1820) based his description on illustration in Rumphius (1747), and on a specimen “*Habitat in India orientali*” (lectotype). The figure shows fruit and seeds (Rumphius 1747). *Musa balbisiana* is distributed from Sikkim to Papuasia, and is one of the few banana species with an extensive distribution. Although Colla gives *M. troglodytarum* L. var. *l* as

a synonym of his *M. balbisiana*, he uses Rumphius' "Musa XI pissang batu" element as his type and thus specifically rejects the "*M. uranoscopus*" element.

26. *Musa balbisiana* Colla  
var. *andamica* D.B.Singh, Sreek.,  
T.V.R.S.Sharma & A.K.Bandyop.

*Malayan Nature Journal* 52: 157 (1998). — Type: India, Andaman and Nicobar Islands, Garacharma, Central Agricultural Research Institute (CARI), Campus, 19.X.1996, D. B. Singh & P. V. Sreekumar 18425 (holo-, CAL; iso-, PBL).

REMARKS

The variety is distributed in Andaman & Nicobar Islands, and its varietal status has been confirmed (Uma *et al.* 2006).

27. *Musa banksii* F.Muell. var. *banksii*

*Fragmenta Phytographiae Australiae* 4: 132 (1864). — Type: Australia, Queensland, Mt. Elliot, *Elliot Fitzalan*, (lecto-, MEL 621531!, designated by Simmonds [1957: 464] "type"; iso-, BRI).

*Musa acuminata* Colla subsp. *banksii* (F.Muell.) N.W.Simmonds (1957: 463).

REMARKS

There are eight type sheets at MEL, all cross-labelled. Argent (1976) considered that it is "premature to assume a cline linking *M. banksii* with [Malaysian] forms of *M. acuminata*" and treated it as a species, supported by Shepherd (1990: 158) and Simmonds & Weatherup (1990), which is agreed here. Hotta (1989) considers that *M. banksii* is synonymous with *M. acuminata*.

28. *Musa banksii* F.Muell.  
var. *muelleriana* Domin

*Bibliotheca Botanica* 85: 536 (1914). — Type: Australia, Queensland, Daintree River, X.1875, *Elliot Fitzalan* (lecto-, MEL 621528!, 621529!, designated by Simmonds [1957: 464] "type"; iso-, BRI).

REMARKS

There are two type sheets at MEL, both bear a cross marking *Musa* N. 2 by Fitzalan. According

to Simmonds (1957) and Ross (1987) this name is synonymous to *M. banksii* [var. *banksii*]. Ross (1987) designated as a lectotype the same element (MEL 621528!, 621529!). Simmonds (1957: 464) commented the name as a worthless variety.

29. *Musa banksii* F.Muell.  
var. *samoensis* Cheesman

*Kew Bulletin* 2: 157 (1948b).

REMARKS

The seeds were collected at Western Samoa by H. C. Reed, and sent to Trinidad (ICTA no. 123). No original material could be found. Cheesman (1950a) stated that this variety hybridizes readily with *M. acuminata* Colla.

30. *Musa banksii* F.Muell.  
var. *singampatti* T.G.Nayar

*Journal of Horticulture* 9: 14 (1952). — Type: Nayar, *Journal of Horticulture* 9: fig. 1 (1952) [unnumbered] (lecto-, here designated).

REMARKS

Original material could not be located. The variation does certainly not represent an infraspecific taxon of *M. banksii*, or of *M. acuminata* Colla subsp. *burmannica*, as Simmonds (1957) suggested. It is either a distinct species, or perhaps a variety of *M. flaviflora* N.W.Simmonds, since there are seeds. Singh *et al.* (2001) and Uma *et al.* (2005) do not recognize this name.

31. *Musa barioensis* Häkkinen

*Acta Phytotaxonomica et Geobotanica* 571: 55 (2006). — Type: Malaysia, Borneo, Sarawak, Bario Kelabit highland, 1105 m alt., 03°45.466'N, 115°28.626'E, 9.V.2004, M. Häkkinen & K. Meekiong 999 (holo-, SAR!; iso-, HUMS!).

32. *Musa basjoo* Inuma

*Sintei Somoku Dzusestsu* [Illustrated Flora of Japan], ed. 2: 3 (1874). — Type: Inuma, *Sintei Somoku Dzusestsu* [Illustrated Flora of Japan], ed. 2, pl. 1 (1874) (lecto-, here designated).

## REMARKS

Liu *et al.* (2002: 80) designated a neotype (as lectotype) based on an illustration in *Botanical Magazine* (Baker 1891: t. 7182). However, as original material exists, that designation must be superseded. Note: The work (Inuma 1874) was published in 20 volumes. The pagination is not like a European book. These volumes were bound as traditional Japanese books; the printed sheets were folded and the side edges were bound by strings.

**33. *Musa bauensis* Häkkinen & Meekiong**

*Systematics and Biodiversity* 2: 170 (2005a). — Type: Malaysia, Borneo, Sarawak, Gunung Doya, Seromah, Bau district, 35 m, 18.IX.2002, M. Häkkinen, B. H. Voon & S. J. Jossel SBC 8000 (holo-, SAR!; iso-, SBC!).

**34. *Musa beccarii* N.W.Simmonds var. *beccarii***

*Kew Bulletin* 14: 200 (1960). — Type: British North Borneo, Labuk road, Mile 18, 1956, G. H. S. Wood (holo-, K!).

## REMARKS

The holotype was received at Trinidad on 23 April 1956 as ICTA no. 503.

**35. *Musa beccarii* N.W.Simmonds  
var. *hottana* Häkkinen**

*Acta Phytotaxonomica et Geobotanica* 56: 138 (2005). — Type: Malaysia, Borneo, Sabah, Sandakan, Kinabatangan River, 74 ft. alt., 05°30.749'N, 118°17.361'E, 20.V.2004, M. Häkkinen & J. Gisil 12 (holo-, BORH!).

**36. *Musa berterii* Colla “*berterii*”**

*Memorie della Accademia delle Scienze di Torino* 25: 387 (1820). — Type: Rumphius, *Herbarium Amboinense* 5: t. 61 fig. 3 (1747) “*M. alphurica* sive *ceramica*: pissang alphur” (lecto-, here designated).

## REMARKS

The name is based on the same type as *M. alphurica* Miq., *M. berterii* Colla being the older synonym of that name. The illustration represents the only original element. The herbarium and types of

Rumphius were almost completely destroyed in a fire (Stafleu & Cowan 1983), and those of Colla are at TO (Stafleu & Cowan 1976), but the corresponding specimen does not exist. The illustration and diagnosis do not allow positive identification, and the name has not been generally used.

**37. *Musa bibai* L.**

*Species Plantarum*: 1043 (1753).

## REMARKS

The currently used name is *Heliconia bibai* (L.) L. (Jarvis 2007).

**38. *Musa boman* Argent**

*Notes from the Royal Botanic Garden Edinburgh* 35: 108 (1976). — Type: Papua New Guinea, West Sepik Distr., Aitape Subdistr., Yalingi River, near Lupai village, 24.XI.1972, Argent NGBF 1122 (holo-, LAE).

**39. *Musa borneensis* Becc. var. *borneensis***

*Nelle Foreste di Borneo*: 612 (1902). — Type: Sarawak, Borneo, Ragiato di Sarawak a Marop, fron les Batang Lumar, IV.1867, O. Beccari 3350 (lecto-, FI!, here designated).

ISONYM. — *Musa borneensis* Becc., *Webbia* 5: 546 (Martelli 1923) “sp. n.”.

## REMARKS

There is a sheet at FI, collected at the type locality, “Abita Sarawak a Marop, P. B[eccari] no. 3356”. We consider that no. 3356 probably represents a printing error. Beccari (1902: fig. 76, 80) provided two illustrations, which, as well as the diagnosis, fits the lectotype. The name is diagnosed also at page 622 where the type locality information is also given.

**40. *Musa borneensis* Becc. var. *alutacea*  
Häkkinen & Meekiong**

*Acta Phytotaxonomica et Geobotanica* 56: 220 (2005b). — Type: Malaysia, Borneo, Sarawak, Samarahan, UNIMAS new campus site, on road side, 33 m alt., 01°28.12'N, 110°26.43'E, 18.VIII.2004, K. Meekiong 1004 (holo-, SAR!; iso-, HUMS!).

41. *Musa borneensis* Becc.

var. *lutea* Häkkinen & Meekiong

*Acta Phytotaxonomica et Geobotanica* 56: 222 (2005b). — Type: Malaysia, Borneo, Sabah, Crocker Range, 28 m alt., 05°32.611'N, 115°59.123'E, 15.V.2004, *M. Häkkinen & J. Gisil* 14 (holo-, BORH!).

42. *Musa borneensis* Becc.

var. *phoenica* Häkkinen & Meekiong

*Acta Phytotaxonomica et Geobotanica* 56: 223 (2005). — Type: Malaysia, Borneo, Sarawak, Samarahan, Serian, Jalan Sungai Tahat, on road side, 39 m alt., 01°14.12'N, 110°30.55'E, 1.VIII.2004, *K. Meekiong* 1007 (holo-, SAR!; iso-, HUMS!).

43. *Musa borneensis* Becc.

var. *sarawakensis* Häkkinen & Meekiong

*Acta Phytotaxonomica et Geobotanica* 56: 223 (2005). — Type: Malaysia, Borneo, Sarawak, Sri Aman' on road side, 28 m alt., 01°28.03'N, 110°26.38'E, 21.VIII.2004, *K. Meekiong* 1005 (holo-, SAR!; iso-, HUMS!).

44. *Musa brachycarpa* Backer

*Flora van Java* Alf. 3: 135 (1924). — Type: Java, Djember, Res. Besoeki, det. Backer 1920, *Anonymous* (lecto-, K 000292214!, here designated).

REMARKS

Herbarium and types of Backer are at PAS and BO (Stafleu & Cowan 1976). The herbarium of PAS is on permanent loan at BO. The lectotype sheet at K has been received from "Hort. Bot. Bog[or]". There may exist more type material at BO, but there was no response to our inquiry.

According to Cheesman (1948b) the name is synonymous with *M. balbisiana* Colla, but we consider it should be treated as a variant of it. A new combination is proposed: *M. balbisiana* Colla var. *brachycarpa* (Backer) Häkkinen, comb. nov. Basionym: *Musa brachycarpa* Backer, *Flora van Java* Alf. 3: 135 (1924).

45. *Musa brieyi* De Wild.

*Mission de Briey Mayumbé*: 355 (1920). — Type: De Wildeman, *Mission de Briey Mayumbé*: pl. VII figs 6, 7 (1920) (lecto-, here designated).

REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless, and thus is must be treated as a banana cultivar.

46. *Musa buchanani* Baker

*Annals of Botany* (Oxford) 7: 207 (1893).

REMARKS

Basionym for *Ensete buchanani* (Baker) Cheesman (1948a: 102).

47. *Musa bukensis* Argent

*Notes from the Royal Botanic Garden Edinburgh* 35: 101 (1976). — Type: Papua New Guinea, Bougainville Distr., Loloho/Kieta road junction to Panguna on the N end of the Crown Prince Range, locally abundant, *Argent NGBF* 1127 (holo-, LAE).

48. *Musa campestris* Becc. var. *campestris*

(Fig. 1)

*Nelle Foreste di Borneo*: 622 (1902). — Type: Borneo, Ragiato di Sarawak, 186[6], *O. Beccari* 2722 (lecto-, FI!, here designated).

ISONYM. — *Musa campestris* Becc., *Webbia* 5: 546 (1923) "sp. n.".

REMARKS

There is a sheet at FI, collected at the type locality, "Sarawak, Abita nelle piantagioni di riso abbandonate rive dell'alto, *P. Beccari* no. 2722". Beccari (1902: fig. 79) included also an illustration with his diagnosis, which fits the lectotype.

49. *Musa campestris* Becc.

var. *lawasensis* Häkkinen

*The Philippine Agricultural Scientist* 86: 428 (2003). — Type: Malaysia, Borneo, Sarawak, Lawas, Trusan, Kg. Air, on roadside, 190 ft alt., 04°50.420'N, 115°21.815'E, *M. Häkkinen, H. Doyok & P. Padan*, *SBC* 8002 (holo-, SAR!; iso-, SBC!).

50. *Musa campestris* Becc.

var. *limbangensis* Häkkinen

*The Philippine Agricultural Scientist* 86: 430 (2003). — Type: Malaysia, Borneo, Sarawak, Limbang, on roadside,



FIG. 1. — Lectotype of *Musa campestris* Becc. var. *campestris* (O. Beccari 2722, Fl).

78 ft alt., 04°37.457'N, 114°53.319'E, *M. Häkkinen* ♂  
*J. Jadol* SBC 8001 (holo-, SAR!; iso-, SBC!).

51. *Musa campestris* Becc.  
var. *miriensis* Häkkinen

*The Philippine Agricultural Scientist* 86: 431 (2003). —  
Type: Malaysia, Borneo, Sarawak, Miri, on roadside,  
157 ft alt., 04°11.361'N, 114°02.170'E, *M. Häkkinen*  
*et al.*, SBC 8004 (holo-, SAR!; iso-, SBC!).

52. *Musa campestris* Becc.  
var. *sabahensis* Häkkinen

*The Philippine Agricultural Scientist* 86: 431 (2003). —  
Type: Malaysia, Borneo, Sabah, Crocer Range, Ulu Kiamsians, Kg. Wolit, on roadside, 1958 ft alt., 05°30.253'N,  
116°00.780'E, *M. Häkkinen*, *M. Suleiman*, *J. Gisil* &  
*S. Magupin* CRP 1 (holo-, BORH!; iso-, H 1722740!,  
1722741!, 1722742!).

53. *Musa campestris* Becc.  
var. *sarawakensis* Häkkinen

*The Philippine Agricultural Scientist* 86: 433 (2003). —  
Type: Malaysia, Borneo, Sarawak, Kuching, Penrisen, Kg. Jambu, on roadside, 138 ft alt., 01°16.155'N,  
110°20.322'E, *M. Häkkinen* ♂ *B. H. Voon* SBC 8003  
(holo-, SAR!; iso-, SBC!).

54. *Musa cavendishii* I.M.Lamb ex Paxton  
var. *cavendishii*

*Magazin für die Botanik* 3: 51 (1837). — Type: Paxton  
(1837), *Magazin für die Botanik* 3: fig. 1 (lecto-, here  
designated).

REMARKS  
*Musa cavendishii* is a banana cultivar.

55. *Musa cavendishii* I.M.Lamb ex Paxton  
var. *hawaiensis* N.G.Teodoro

*The Philippine Journal of Science* 10: 411 (1915). —  
Type: Teodoro, *The Philippine Journal of Science* 10: pl. 16  
figs 6-10 (1915) (lecto-, here designated).

REMARKS  
Herbarium and types of Teodoro are at PNH (Stafleu & Cowan 1986), but have not been located. *Musa cavendishii* var. *hawaiensis* is a banana cultivar.

56. *Musa celebica* Warb.

in Engler, *Das Pflanzenreich* IV.45: 22 (1900).

REMARKS

The herbarium and types of Warburg are at B (Stafleu & Cowan 1988), but type material was not found. There is a possibility that it was destroyed by fire in 1943. The diagnosis was based on plants seen at Indonesia, Nordcelebes, Bojong (Warburg 15742).

57. *Musa champa* Baker

in Hooker, *Flora of the British India* 6: 262 (1892). —  
Type: *Anonymous* (lecto-, K!, here designated).

*Musa sapientum* L. var. *champa* (Baker) Baker, *Annals of Botany* (Oxford) 7: 213 (1893); *Musa paradisiaca* L. subsp. *sapientum* (L.) Kuntze var. *champa* (Baker) K.Schum., in Engler, *Das Pflanzenreich* IV.45: 20 (1900).

REMARKS

Baker (1892) gave the author as "Hort.", referring to a botanical garden. The description "stem and midrib of the leaf red, fruit pale straw-coloured about 6 in. long" refer to some cultivated banana.

58. *Musa chapara* Perr.

*Mémoires de la Société linnéenne de Paris* 3: 131 (1825).

REMARKS

Herbarium and types of Perrottet are unknown (Stafleu & Cowan 1983). *Musa chapara* has been regarded to be a synonym of *M. sapientum* L. (Schumann 1900; Champion 1967). The material originated from the Philippines. The diagnosis is too poor to allow identification.

59. *Musa charlioii* W.Hill

*Report on the Brisbane Botanic Garden*: 7 (1874).

REMARKS

This taxon was found on the banks of the Johnstone River. There is no type in Australian herbaria and the description is dubious, as there is no useful diagnostic character given (Simmonds 1957: 476). According

to Ross (1987: 29) it is not possible to determine to which taxon this name refers as there are no specimens bearing this name in Australian herbaria and in Hill's brief description there is no description of the flowers. The name has not been used by botanists.

**60. *Musa cheesmanii* N.W.Simmonds  
“cheesmani”**

*Kew Bulletin* 11: 479 (1957, “1956”). — Type: India, Assam, on steep stony slopes by the Manipur road, 26 miles above Dimapur, 2500-3500 ft, 7.V.1955, *B[anana] E[xpedition]* 90 (lecto-, K 19008!, here designated).

REMARKS

The lectotype is preserved in a liquid collection. *B[anana] E[xpedition]* 90 is cited in the diagnosis also (Simmonds 1957).

**61. *Musa chevalieri* Gagnep. “chevalieri”**

*Mémoires de la Société botanique de France* 2: 87 (1908).

REMARKS

The currently used name is *Ensete schweinfurthii* (De Wild.) Cheesman (1948a: 103).

**62. *Musa chiliocarpa* Backer**

*Flora van Java* 3: 138 (1924).

REMARKS

Herbarium and types of Backer are at PAS and BO, duplicates of PAS are at L (Stafleu & Cowan 1976). PAS is today at BO. There was no response to our inquiry from BO. The type was collected from Java, where it occurred here and there (Backer 1924). According to Hotta (1989) *M. chiliocarpa* is synonymous to *M. acuminata* Colla, but merely represents a cultivated seedless AAB-banana (Simmonds 1960b). Its currently used cultivar name is “Thousand fingers”.

**63. *Musa coccinea* Andrews**

*Botanist's Repository* 1: 343 (1797). — Type: Andrews, *Botanist's Repository* 1: t. 47 (1797) (lecto-, designated by Argent [Argent & Kiew 2002: 105]).

REMARKS

*Musa coccinea* Andrews is consistently linked in the literature with *M. uranoscopos* Lour., although the relationships between the two have not been shown. Further, *M. uranoscopos* Lour. is an illegitimate name. *Musa coccinea* is extinct in nature, but it thrives in the botanical gardens and in horticulture as ornamental.

**64. *Musa corbieri* A.Chev.**

*Revue de Botanique appliquée et d'Agriculture tropicale* 14: 519 (1934). — Type: Cherbourg, cultivé dans les serres du Parc Liais, A. Chevalier (lecto-, P!, here designated).

REMARKS

The description is based on a living specimen, from a plant grown in a glasshouse in Cherbourg. The origin is unknown (Chevalier 1934: 520). The lectotype could not be identified by us. This name has not been used by botanists, and should be rejected.

**65. *Musa corniculata* Lour.**

*Flora Cochinchinensis*: 644 (1790).

*Musa simiarum* Rumph. var. *corniculata* (Lour.) Kurz, *Journal of Agricultural and Horticultural Society of India* 14: 297 (1867).

REMARKS

The name is based on a diagnosis in Rumphius (1747: 130) *Herbarium Amboinense* 5 “Pissang Tando”. The herbarium and types of Rumphius were almost completely destroyed in a fire (Stafleu & Cowan 1983), and since the name is not supported by an illustration and we were not able to interpret the diagnosis, the name remains dubious. The combination by Kurz is illegitimate, since *M. simiarum* Rumph. is a pre-Linnaean name.

**66. *Musa dacca* Horan.**

*Prodromus Monographiae Scitaminarum*: 41 (1862).

*Musa paradisiaca* L. subsp. *sapientum* (L.) Kuntze var. *dacca* (Horan.) K.Schum, in Engler, *Das Pflanzenreich* IV.45: 20 (1900).

#### REMARKS

The diagnosis was based on a specimen in Berlin Botanical Gardens. Herbarium and types of Paul Fedorowitsch Horaninov should be at LE (Stafleu & Cowan 1979). There was no response to our inquiry.

#### 67. *Musa dasycarpa* Kurz

*Journal of Agricultural and Horticultural Society of India* 14: 301 (1867). — Type: Illustration of *Musa dasycarpa* (lecto-, K!, designated by Häkkinen & Väre [2008b]).

#### REMARKS

As the original element has been lost (CAL), an illustration (K) representing the original material was chosen as a lectotype (Häkkinen & Väre 2008b).

#### 68. *Musa davyae* Stapf

*Bulletin of Miscellaneous Information* 3: 102 (1913).

#### REMARKS

Basionym for *Ensete davyae* (Stapf) Cheesman (1948a: 104).

#### 69. *Musa dechangensis* J.L.Liu & M.G.Liu

*Acta Botanica Yunnanica* 9: 163 (1987). — Type: China, Sichuan, Dechang, Xiaogao, alt. 1380 m, 2.XII.1984, J. L. Liu & J. Q. Xiao 179 (holo-, XIAS).

#### REMARKS

Wu & Kress (2000) considered *Musa dechangensis* as synonymous with *M. balbisiana* stating that “*M. dechangensis* is indistinguishable from *M. balbisiana* in almost all aspects of bracts, fruit, and seeds. The slight differences given by the authors can be observed within *M. balbisiana* and, therefore, do not support the recognition of this variant as an independent species”. Most recently, Liu *et al.* (2002) studied more herbarium material of *M. dechangensis* and considered it to be identical with *M. basjoo*, and that Wu’s analysis is flawed. The correct status of *M. dechangensis* needs to be re-evaluated.

#### 70. *Musa decrescens* de Briey var. *decrescens*

*in De Wildeman, Mission de Briey Mayumbé*: 319 (1920) “var. *pembuki*”. — Type: De Wildeman, *Mission de Briey Mayumbé*: pl. IX figs 3, 4 (1920) (lecto-, here designated).

#### REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless, and thus it must be treated as a banana cultivar. Seeds are not mentioned in the diagnosis either in the case concerning its varieties. Var. *decrescens* was not diagnosed nor drawn, so the illustration of var. *pembuki* is designated as a lectotype.

#### 71. *Musa decrescens* de Briey var. *pembuki* de Briey

*in De Wildeman, Mission de Briey Mayumbé*: 319 (1920). — Type: De Wildeman, *Mission de Briey Mayumbé*: pl. IX figs 3, 4 (1920) (lecto-, here designated).

#### REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless. Variety *pembuki* is here selected to represent *M. decrescens* de Briey.

#### 72. *Musa decrescens* de Briey var. *viridis* de Briey

*in De Wildeman, Mission de Briey Mayumbé*: 324 (1920). — Type: De Wildeman, *Mission de Briey Mayumbé*: fig. 12 (1920) (lecto-, here designated).

#### REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless. The floral characters (De Wildeman 1920: fig. 12) do not allow identification.

#### 73. *Musa decrescens* de Briey var. *rubromaculata* de Briey

*in De Wildeman, Mission de Briey Mayumbé*: 325 (1920). — Type: De Wildeman, *Mission de Briey Mayumbé*: pl. IX figs 1, 2 (1920) (lecto-, here designated).

## REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless.

**74. *Musa elephantorum***

K.Schum. & Warb.

*in* Engler, *Das Pflanzenreich* IV.45: 14 (1900).

## REMARKS

Basionym of currently used name *Ensete elephantorum* (K.Schum. & Warb.) Cheesman (1948a: 102).

**75. *Musa emasculata* de Briey var. *emasculata***

*in* De Wildeman, *Mission de Briey Mayumbé*: 306 (1920). — Type: De Wildeman, *Mission de Briey Mayumbé*: pl. VII fig. 5 “var. *lomba*” (1920) (lecto-, here designated).

## REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless. Seeds are not mentioned in the diagnosis in any case concerning *M. emasculata* and its varieties. Variety *emasculata* was not drawn or diagnosed, so we propose that var. *lomba* represents the type variant.

**76. *Musa emasculata* de Briey var. *kiala* de Briey**

*in* De Wildeman, *Mission de Briey Mayumbé*: 309 (1920). — Type: De Wildeman, *Mission de Briey Mayumbé*: pl. VI fig. 5 (1920) (lecto-, here designated).

## REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless.

**77. *Musa emasculata* de Briey  
var. *kimbende* de Briey**

*in* De Wildeman, *Mission de Briey Mayumbé*: 311 (1920). — Type: De Wildeman, *Mission de Briey Mayumbé*: 313 fig. 4 (1920) (lecto-, here designated).

## REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless.

**78. *Musa emasculata* de Briey  
var. *lomba* de Briey**

*in* De Wildeman, *Mission de Briey Mayumbé*: 306 (1920). — Type: De Wildeman, *Mission de Briey Mayumbé*: pl. VII fig. 5 (1920) (lecto-, here designated).

## REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless. If accepted as a good taxon, it would represent the var. *emasculata*.

**79. *Musa emasculata* de Briey  
var. *zengani* de Briey**

*in* De Wildeman, *Mission de Briey Mayumbé*: 314 (1920). — Type: De Wildeman (1920), *Mission de Briey Mayumbé* 315: fig. 5 (lecto-, here designated).

## REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless.

**80. *Musa ensete* J.F.Gmel. var. *ensete***

*Systema Naturae* 13, 2: 567 (1791).

## REMARKS

The currently used name is *Ensete edule* Bruce ex Horan. (Cheesman 1948a: 100).

**81. *Musa ensete* J.F.Gmel.  
var. *montbeliardii* Bois**

*Bulletin du Muséum national d'Histoire naturelle*, sér. 2, 2: 688 (1930).

## REMARKS

*Musa ensete* is currently included in *Ensete edule* Bruce ex Horan. (Cheesman 1948a: 100).

**82. *Musa erecta* N.W.Simmonds**

*Kew Bulletin* 8: 571 (1954, “1953”). — Type: Trinidad, IICTA no. 200, *Anonymous* (lecto-, K!, here designated; epi-, a photograph sheet at K!, here designated).

*Musa maclayi* F.Muell. ex Mikl.-Maclay subsp. *maclayi* var. *erecta* (N.W.Simmonds) Argent (1976: 97).

#### REMARKS

The seeds were received from Buka Island, Bougainville in the Solomon Islands. Argent (1976: 97) indicated that the type was collected here. In total three seed sets (200, 201, 203) were received in 1938 (Simmonds 1953). The first two survived, of which no. 200 is preserved in a liquid collection according to Argent (1976). The lectotype label does not reveal which one of the collections is in question. The description is supported by good photographs on one sheet, which is selected here as an epitype to remove any potential ambiguity.

#### 83. *Musa errans* (Blanco) N.G.Teodoro var. *botoan* N.G.Teodoro

*Flora de Philippinas* 10: 391 (1915). — Type: Teodoro (1915), *Flora de Philippinas* 10: pl. 7 figs 5-10 (lecto-, here designated).

#### REMARKS

Herbarium and types of Teodoro are at PNH (Stafleu & Cowan 1986), but this type was not found. *Musa errans* var. *botoan* is a cultivated banana, and the meaning of *Musa errans* (Blanco) N.G.Teodoro is unknown.

#### 84. *Musa exotica* R.V.Valmayor

in Valmayor et al., *The Philippine Agriculture Scientist* 87: 117 (2004). — Type: Vietnam, Ninh Binh province, Cuc Phuong Forest reservation, 17.II.1995, R. Valmayor 67098 (holo-, CAHUP).

#### REMARKS

The name was published twice (Valmayor 2001: 326; Valmayor et al. 2002: 239) both illegitimately (McNeill et al. 2006: Art. 37.7), since the holotype was not indicated.

#### 85. *Musa fecunda* Stapf

*Journal of the Linnean Society, Botany* 37: 528 (1906).

#### REMARKS

Basionym for *Ensete fecundum* (Stapf) Cheesman (1948a: 103).

#### 86. *Musa fehi* Bertero

in Vieillard, *Annales des Sciences naturelles*, sér. 4, 16: 45 (1862).

#### REMARKS

The type was recorded from New Caledonia. Herbarium and types of Carlo Giuseppe Bertero are at FI (Stafleu & Cowan 1976), but no type specimen exists, as stated already by MacDaniels (1947: 15). MacDaniels (1947: 20) considers that *M. fehi* is synonymous to *M. troglodytarum* L. According to Cheesman (1950a: 446) this taxon is a cultivated banana. It seems possible that there are sexually inbreeding populations as well as parthenogenesis cultivars of *M. fehi*. The interpretation of true *M. fehi* still awaits clarification.

#### 87. *Musa fitzalanii* F.Muell. “*fitzalani*”

*Fragmenta Phytographiae Australiae* 9: 188 (1875). — Type: Australia, left hand branch of Daintree River, X.1875, E. Fitzalan (lecto-, MEL 657778-782!, designated by Ross [1987] “holotype”; isolecto-, BRI).

#### REMARKS

There are five type sheets of the lectotype at MEL, all bearing a cross mark “*Musa* N. 3” by Fitzalan.

#### 88. *Musa flava* Ridl. (Fig. 2)

*Transactions of the Linnean Society of London, Botany* ser. 2, 3: 385 (1893). — Type: Malaysia, Pulau Tijau [Pahang River], VIII.1891, H[enry] R[idley] (lecto-, SING 0058710!, here designated; syn., SING 0058709!, [Malaysia], Pulau Tijau [Pahang River], 189[1], H[enry] R[idley]).

*Musa acuminata* Colla var. *flava* (Ridl.) Nasution, *Memoirs of the Tokyo University of Agriculture* 32: 58 (1991).

#### REMARKS

There are two syntype sheets of *M. flava* at SING, but it is not possible to judge if they represent the same collection. These were not pointed separately when Nasution (1991) designated the type. The lectotype sheet, here designated bears handwritten notes on the sheet and the collection year and month is given. In the syntype sheet that informa-

tion is lacking. According to de Wildeman (1912: 338) *M. flava* is synonymous to *M. acuminata* subsp. *malaccensis*, and according to Simmonds (1957: 466) it is merely a yellow-bracted mutant of *M. acuminata* subsp. *malaccensis* (Ridl.) N.W. Simmonds. Varietal treatment (Nasution 1991) is accepted here.

### 89. *Musa flava* M.Hotta

*Journal of Japanese Botany* 42: 348 (1967). — Type: [Brunei], Brunei Temburong, along Sungai Lacquan, a branch of Sungai Batu Apoi, alt. c. 50 m, river-side open place, mixed with *M. campestris* and *M. tuberculata*, 31.I.1964, *M. Hotta* 13876 (holo-, KYO!; iso-, K!).

*Musa borneensis* Becc. var. *flavida* (M.Hotta) Häkkinen, *Acta Phytotaxonomica et Geobotanica* 56: 218 (2005b).

#### REMARKS

In our opinion the rank of variety is appropriate.

### 90. *Musa flaviflora* N.W.Simmonds

*Kew Bulletin* 11: 471 (1957, "1956"). — Type: Trinidad, IICTA introduction no. 209, 1956, *Anonymous* (lecto-, K!, here designated).

#### REMARKS

The seeds were collected in India, Assam, Mariani hills, and the plant grew at the Trinidad banana research station. The lectotype consists of three liquid samples, which all bear the label "ICTA Intro. 209". We consider that *M. flaviflora* is synonymous to *M. thomsonii* (Baker) A.M.Cowan & Cowan (1929).

### 91. *Musa gigantea* Kuntze

*Revisio generum plantarum vascularium omnium atque cellularium multarum secundum leges nomenclaturae internationales cum enumeratione plantarum exoticarum in itinere mundi collectarum:* 691 (1891). — Type: Indonesia, Sumatra, Halle's garten, Parakan, Salak, VI.1875, O. Kuntze (lecto-, NY 00320139!, here designated).

#### REMARKS

Basionym for *Ensete gigantea* (Kuntze) Nakai (1948: 12). Cheesman (1948a: 104) and Moore (1957)

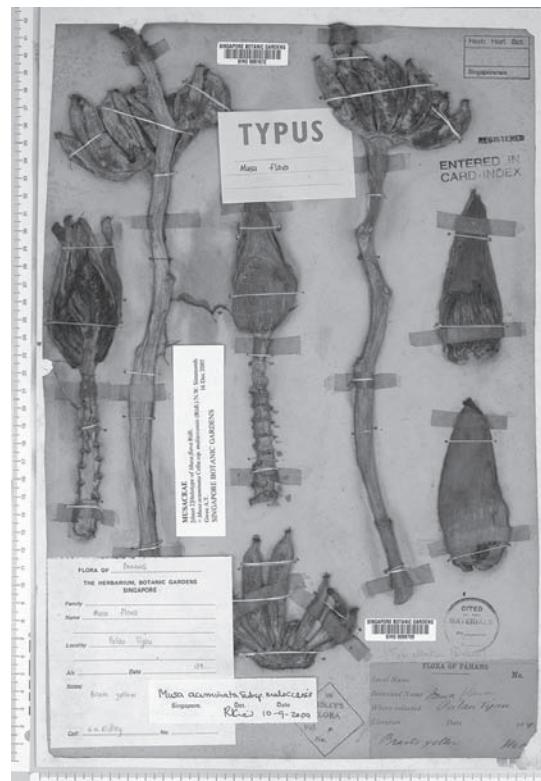


FIG. 2. — Lectotype of *Musa flava* Ridl. (HR s.n., SING).

consider that the name is dubious. We were not able to identify the lectotype sheet, but the specimen is a *Musa*.

### 92. *Musa gilletii* De Wild.

*Revue des Cultures coloniales*, Paris, 8: 102 (1901).

#### REMARKS

Basionym for the currently used name *Ensete gilletii* (De Wild.) Cheesman (1948a: 103).

### 93. *Musa glauca* Roxb.

*Plants of the Coast of Coromandel* 3: 96 (1820).

#### REMARKS

Basionym for the currently used name *Ensete glaucum* (Roxb.) Cheesman (1948a: 101).

94. *Musa gracilis* Holttum

in Cheesman, *Kew Bulletin* 5: 154 (1950b). — Type: Malaya, Kemaman, Ulu Bendong, Kajang, Kemaman, 500 ft, in hillside forest by streams, 30.X.1935, E. J. H. Corner 30056 (lecto-, SING 06288!, 06289!, here designated).

REMARKS

There are two sheets at SING, taken from the same plant at the type locality.

95. *Musa griersonii* Noltie

*Edinburgh Journal of Botany* 51: 171 (1994). — Type: Bhutan, Sarbhang District, above Jhongi Dhanra, 11 km above Sarbhang on Chirang road, 740 m, 8.III.1982, Grierson & Long 3566 (holo-, E!).

96. *Musa halabanensis* Meijer

*Acta Botanica Neerlandica* 10: 250 (1961). — Type: Indonesia, North Sumatra, Pematang Sinntar, 9.III.1958, W. Meijer 7264 (holo-, L).

*Musa acuminata* Colla subsp. *halabanensis* (Meijer) M. Hotta, *Occasional Papers, Kagoshima University Research Center for the South Pacific* 16: 68 (1989); *Musa acuminata* var. *halabanensis* (Meijer) Nasution, *Memoirs of the Tokyo University of Agriculture* 32: 46 (1991).

REMARKS

We consider that the subspecific rank is appropriate.

97. *Musa hillii* F. Muell.

*Fragmenta Phytographiae Australiae* 9: 190 (1875). — Type: Australia, Queensland], Daintree River, X.1875, [Elliot] Fitzalan (lecto-, MEL 657788!, 657789!, designated by Ross [1987: 18]; iso-, BRI).

REMARKS

There are two type sheets at MEL, both bear a cross marking “*Musa* N. 1” by Fitzalan. According to Baker (1893: 217), Simmonds (1957: 486) and Ross (1987) this name is synonymous to *M. jackeyi* described by Hill (1874). There is no known type of that name (Ross 1987: 18). *Musa jackeyi* is neotyped here (see name no. 109) with the same type as has been designated for *M. hillii*.

98. *Musa hirta* Becc.

(Fig. 3)

*Nelle foreste di Borneo*: 612 (1902). — Type: Borneo, Sarawak a Marop, IV.1867, O. Beccari 3349 (lecto-, FI!, here designated).

ISONYM. — *Musa hirta* Becc., *Webbia* 5: 549 (Martelli 1923), “sp. n.”.

REMARKS

There is a sheet at FI, collected at the type locality, “Borneo, Sarawak a Marop. *P. Beccari* no. 3349”. Beccari (1902: fig. 78) included an illustration to his diagnosis, which fits the lectotype. *Beccari* 3350 (*M. hirta*, FI!) was also collected at Marop. The name is diagnosed also at page 624, where the type locality information is also given.

This is a clearly distinguishable species, due to the erect inflorescence and densely hairy fruits; when isolated, fruits are about 5 cm long and 20-22 mm deep; however 2 or 3 and sometimes all of the fruits subtended by a bract are joined together along the side, almost up to the top (Häkkinen 2004).

99. *Musa holstii* K. Schum.

in Engler, *Botanische Jahrbücher* 34: 121 (1905).

REMARKS

Basionym for *Ensete holstii* (K. Schum.) Cheesman (1948a: 103).

100. *Musa homblei* Bequaert

in De Wild., *Annales du Musée colonial de Marseille*, 2<sup>e</sup> sér., 10: 332 (1912).

REMARKS

Basionym for *Ensete homblei* (Bequaert ex De Wild.) Cheesman (1948a: 103).

101. *Musa ingens* N.W. Simmonds

*Kew Bulletin* 14: 198 (1960). — Type: [Papua-] New Guinea, Morobe Distr., Skindewai, 1620 m, 6.I.1956, Womersley & Miller, NGF 8368 (holo-, K!; iso-, LAE; epi-, [Simmonds], photograph sheet at K!, here designated).



FIG. 3. — Lectotype of *Musa hirta* Becc. (O. Beccari 3349, Fl).

#### REMARKS

The lectotype is preserved in a liquid collection. There are two photographs at K! of the plants at the collection site. The description is supported by good photographs on one sheet, which is selected here as an epitype to remove any potential ambiguity.

#### 102. *Musa insularimontana* Hayata

*Icones plantarum formosanarum nec non et contributiones ad floram formosanam* 3: 194 (1913). — Type: Taiwan, Kotosho, in montibus, VIII.1912, Y. Tashiro (lecto-, TI!, here designated).

#### REMARKS

The label written in Japanese includes only the species name. Therefore the details above are based on Hayata (1913: 195).

#### 103. *Musa itinerans* Cheesman var. *itinerans*

*Kew Bulletin* 4: 23 (1949b). — Type: Trinidad, Cult. Imp. Coll. Trop. Agric. Trinidad, 23.VI.1949, prof. R. E. D. Baker (lecto-, K.H.1171/1949!, here designated; epi-, K!, [Myanmar] Burma, Myitkyina, Tagwin, alt. 400 ft, evergreen forests, C. E. Parkinson 1761, designated by Liu *et al.* [2002: 79] "lectotype").

#### REMARKS

*Musa itinerans* was lectotypified by Liu *et al.* (2002). However, as original material exists, that designation must be superseded. Cheesman (1949b: 24) explicitly wrote that *M. itinerans* was described from plants in cultivation at the Imperial College of Tropical Agriculture, Trinidad, B.W.I. The corresponding sheet at K consists of a leaf only. Therefore the sheet *C. E. Parkinson 1761* is interpreted as an epitype to remove any potential ambiguity. According to Cheesman (1949b: 23) in his diagnosis, *Parkinson 1761* (K) is doubtless the same species as the one he described. Cheesman (1949: pl. 1) presented an illustration also.

#### 104. *Musa itinerans* Cheesman subsp. *annamica* R.V.Valmayor, L.D.Danh & Häkkinen

*The Philippine Agriculture Scientist* 88: 241 (2005). — Type: Vietnam, Anh Son district, Nghe An province, 4.IX.1994, Le Dinh Danh VN1-026 (holo-, PHH No. 005!).

*Musa itinerans* var. *annamica* (R.V.Valmayor, L.D.Danh & Häkkinen) Häkkinen, *Novon* 18 (1): 51 (2008).

#### 105. *Musa itinerans* var. *chinensis* Häkkinen

*Novon* 18 (1): 51 (2008). — Type: China, Guangdong, Conghua, Daling, Mtn., 500 m, 2.IV.2006, M. Häkkinen 514 (holo-, IBSC!; iso-, H 1740857!, HITBC!, MO!).

#### 106. *Musa itinerans*

var. *guangdongensis* Häkkinen

*Novon* 18 (1): 54 (2008). — Type: China, Guangdong, Conghua, Daling Mtn., 282 m, 2.IV.2006, M. Häkkinen 515 (holo-, IBSC!; iso-, H 1740858!, HITBC!, MO!).

#### 107. *Musa itinerans* var. *lechangensis* Häkkinen

*Novon* 18 (1): 56 (2008). — Type: China, Guangdong, Lechang Co., Beixiang, 343 m, 1.V.2006, M. Häkkinen 516 (holo-, IBSC!; iso-, H 1740859!, HITBC!, MO!).

#### 108. *Musa itinerans*

var. *xishuangbannaensis* Häkkinen

*Novon* 18 (1): 57 (2008). — Type: China, Yunnan, Xishuangbanna, Jinhong Co., 1154 m, 20.VII.2005, M. Häkkinen 510 (holo-, HITBC!; iso-, H 1740860!, IBSC!, MO!, QBG!).

#### 109. *Musa jackeyi* W.Hill

*Report on the Brisbane Botanic Garden*: 7 (1874). — Type: Australia, Queensland, Daintree River, X.1875, [Elliot] Fitzalan, (neo-, MEL 657788!, 657789, here designated).

#### REMARKS

According to Baker (1893: 217), Simmonds (1957: 486) and Ross (1987) *M. hillii* F.Muell. and *M. jackeyi* are synonymous. However, there is no known type of *M. jackeyi* (Ross 1987: 18). Therefore *M. jackeyi* is neotypified here, with the lectotype material of *M. hillii*. As a consequence, *M. hillii* will become a younger synonym of *M. jackeyi*.

#### 110. *Musa johnsii* Argent

*Garden's Bulletin Singapore* 53: 1 (2001). — Type: Indonesia, Papua, Freeport mining concession above Timika, 1.XI.2000, Argent *et al.* 00562 (holo-, BO; iso-, K!, E!).

## REMARKS

*Musa johnsii* is one of only four bananas currently known in which the fruit splits (or dehisces or is schizocarpic) on maturity, the others are *M. dasycarpa* from north-east India, *M. schizocarpa* and *M. lolodensis* from Papua New Guinea.

111. *Musa kaguna* Chiov.

*Raccolte Botaniche fatte dai Missionari della consolata nel Kenya:* 119 (1935).

## REMARKS

The taxon was described from Kenya, “Mt. Kenya e Aberdare, commune ovunque nel Kikuyu e nel Meru (Balbo)”. It is probably an *Ensete*. The collection of “Missioini della Consolata” is at TOM. The specimen is probably lost.

112. *Musa kattuvazhana* K.Jacob.

*Madras bananas:* 130 (1952). — Type: Jacob, *Madras bananas:* fig. 72 “Kaattu Vazha” (1952) (lecto-, here designated).

## REMARKS

This species was described based on a plant growing in India, N Malabar, Kalpatta, Suryampat. The type should be at MH (formerly MADRAS herbarium, Coimbatore, Madras Herbarium No. 88134), but there was no response to our inquiry. The lectotype is very closely related to *M. laterita* but cannot be identified with certainty.

113. *Musa ×kewensis* Baker

*Gardeners' Chronicle* 18: 516 (1895). — Type: Illustration at K!, *Musa kewensis* [*M. manii* × *rosacea* (*M. ornata*)], Hort. Kew., 13.VI.[18]95 (syntype).

114. *Musa lanceolata* Warb.

in Engler, *Das Pflanzenreich* IV.45: 19 (1900). — Type: Indonesia, Nord Celebes, Minahassa, 1888, *Warburg* 16173 (lecto-, B, here designated).

## REMARKS

The type material at B is preserved in liquid.

115. *Musa lasiocarpa* Franch.

in Morot, *Journal de Botanique* 3: 329 (1889). — Type: Franchet, *Journal de Botanique* 3: fig. 1 (1889) (lecto-, here designated).

*Ensete lasiocarpum* (Franch.) Cheesman, *Kew Bulletin* 2: 102 (1948, “1947”); *Musella lasiocarpa* (Franch.) H.W.Li, *Acta Phytotaxonomica Sinica* 16: 57 (1978); *Musella lasiocarpa* (Franch.) C.Y.Wu, nom. illeg., *Flora Yunnanica*, ed. 2: 727 (1979).

## REMARKS

This taxon belongs to the third genus of Musaceae, viz. *Musella* which is considered to be distinct from *Ensete*. The chromosome number is the same for both genera (2n = 18). *Musella splendida* Valmayor (2002) is synonymous with *Ensete lasiocarpum* (Franch.) H.W.Li.

116. *Musa laterita* Cheesman

*Kew Bulletin* 4: 265 (1949). — Type: Cheesman, *Kew Bulletin* 4: fig. 2 (1949) (lecto-, here designated).

## REMARKS

This taxon was described from living specimens cultivated at Trinidad (Cheesman 1949b: 267). There is a sheet at K! corresponding to the collection information (ICTA no. 225) given (Cheesman 1949b: 266), but it consists of a leaf only, therefore an illustration was designated as a lectotype. The seeds were from India and Burma [Myanmar]. According to Simmonds (1962) *M. rubra* might be identical with *M. laterita*. In our opinion they are related, and *M. laterita* might be a variety of *M. rubra*, but this requires further studies.

117. *Musa laurentii* De Wild.

*Mission Émile Laurent* 1: 371 (1907).

## REMARKS

Basionym for *Ensete laurentii* (De Wild.) Cheesman (1948a: 103).

118. *Musa lawitensis* Nasution & Supard.  
var. *lawitensis*

*Bulletin Kebun Raya Indonesia* 8: 128 (1998). — Type: Indonesia, Borneo, Kalimantan, 11.I.1997, *Supardiyo* JN-TNBK (holo-, BO).

119. *Musa lawitiensis* Nasution & Supard.  
var. *kapitensis* Häkkinen

*Adansonia*, sér. 3, 28 (1): 61 (2006). — Type: Malaysia, Borneo, Sarawak, Kapit Division, 242 m alt., 01°50.960'N, 113°02.759'E, 4.V.2004, Häkkinen M. et al. 997 (holo-, SAR!; iso-, HUMS!).

120. *Musa lawitiensis* Nasution & Supard.  
var. *sarawakensis* Häkkinen

*Adansonia*, sér. 3, 28 (1): 63 (2006). — Type: Malaysia, Sarawak, Kapit Division, 712 m alt., 01°42.012'N, 113°05.451'E, 4.V.2004, Häkkinen M. et al. 997-1 (holo-, SAR!; iso-, HUMS!).

121. *Musa livingstoniana* J.Kirk

*Journal of the Linnean Society* 9: 128 (1867).

REMARKS

Basionym for *Ensete livingstonianum* (J.Kirk) Cheeseman (1948a: 101).

122. *Musa lokok* Geri & Ng

*Garden's Bulletin Singapore* 57: 279 (2005). — Type: Malaysia, Borneo, Sarawak, Marudi District, Bario, Pa'Lungan, 16.VIII.2005, C. Geri & Pasen Paran TK1552 (holo-, SAR; iso-, KEP, E, SBC, SING!).

123. *Musa lolodensis* Cheesman

*Kew Bulletin* 5: 27 (1950b). — Type: Indonesia, N Halmahera, Loloda (Soasio) river, Fairchild & Currak 388 (lecto-, K!, designated by Argent [1976: 106]).

124. *Musa lushanensis* J.L.Liu

*Acta Botanica Yunnanica* 11: 171 (1989). — Type: China, Sichuan, Lushan Xian, Shuangshixiang, 700 m, 3.X.1987, J. L. Liu & Z. H. Tang 181 (holo-, XIAS).

REMARKS

Wu (1991) considered this name as a synonym of *M. balbisiana* stating that it was "indistinguishable from *M. balbisiana* in almost all aspects of bracts, fruit and seeds". The slight differences given by the author can be observed within *M. balbisiana* and, therefore, do not support the recognition of this variant as an independent species.

Most recently, Liu et al. (2002) studied herbarium material of *M. lushanensis* and considered it to be identical with *M. basjoo*. They consider Wu's analysis to be flawed.

According to the *Flora of China* (Wu & Kress 2000), *M. lushanensis*, and also *M. dechangensis*, *M. luteola* and *M. seminifera* are synonymous to *M. balbisiana*. *Musa seminifera* Lour. (1790) antedates *M. balbisiana* Colla (1820). The correct status of *M. lushanensis* needs to be re-evaluated.

125. *Musa luteola*  
R.V.Valmayor, L.D.Danh & Häkkinen

*The Philippine Agriculture Scientist* 87: 116 (2004). — Type: Vietnam, Van Chan district, Yen Bai province, 18.IX.1994, Le Dinh Danh VN1-049 (holo-, PHH no. 003!).

126. *Musa luteola* J.L.Liu

*Investigatio et Studium Naturae* 10: 41 (1990). — Type: China, Sichuan, Yaan, Lushan Xian, Shuangshixiang, 700 m, 3.X.1987, J. L. Liu & Z. H. Tang 180 (holo-, XIAS).

REMARKS

Wu (1991) considered that the name is synonymous with *M. balbisiana*. Most recently, Liu et al. (2002) studied herbarium material of *M. luteola* and now consider it to be identical with *M. basjoo*. They consider Wu's analysis to be flawed. According to the *Flora of China* (Wu & Kress 2000), *M. luteola* is synonymous to *M. balbisiana*. The status of the name *M. luteola* needs to be re-evaluated.

127. *Musa malaccensis* Ridl.

*Transactions of the Linnean Society of London, Botany* ser. II. 3: 385 (1893). — Type: [Malaya], Pahang, Tanjong Gajah Mati, 1891, H[enry] R[idley] (lecto-, SING 062891!, designated by Nasution [1991: 45] "Type"; syn., Ridley [Malaya], Malacca, Selangor, jungle, 18.IX.1881; Ridley, [Malaya], Malacca, Perak, jungle, Ridley).

*Musa acuminata* Colla subsp. *malaccensis* (Ridl.) N.W.Simmonds, *Kew Bulletin* 11: 466 (1957, "1956"); *Musa acuminata* Colla var. *malaccensis* (Ridl.) Nasution, *Memoirs of the Tokyo University of Agriculture* 32: 75 (1991).

## REMARKS

The collection number *Ridley 1894* is not given in the lectotype sheet, as written by Nasution (1991: 45). In our opinion subspecific rank is appropriate.

128. *Musa maclayi* F.Muell. subsp. *maclayi*  
var. *maclayi*

in Miklouho-Maclay, *Proceedings of the Linnean Society of New South Wales* 10: 348 (1885). — Type: Papua New Guinea, Morobe, Maclay coast (lecto-, MEL 588788!, designated by Argent [1976: 93]).

## REMARKS

The diagnosis was very brief: "Compared to cultivated varieties [*M. paradisiaca*], with a tall stem (nearly twice as tall), with narrow stiff leaves and small (not edible) fruits full of seeds." In the case of *M. calosperma* in the same article (Miklouho-Maclay 1885) this preliminary diagnosis is even more evident: "*Musa calosperma* is as yet only temporarily named."

129. *Musa maclayi* F.Muell.  
subsp. *ailuluai* Argent

*Notes from the Royal Botanic Garden Edinburgh* 35: 101 (1976). — Type: Papua New Guinea, Milne Bay Distr., Fergusson island, above Ailuluai, Argent NGBF 1137 (holo-, LAE).

130. *Musa maclayi* F.Muell. subsp. *maclayi*  
var. *namatani* Argent

*Notes from the Royal Botanic Garden Edinburgh* 35: 97 (1976). — Type: Papua New Guinea, New Ireland, Namatani, nr. Kalam village, Argent NGBF 1136 (holo-, LAE).

## REMARKS

This taxon is endemic to New Ireland.

131. *Musa maculata* Jacq.

*Plantarum rariorum Horti Caesari Schoenbrunnensis* 4: 23 (1804). — Type: Jacquin (1804), *Plantarum rariorum Horti Caesari Schoenbrunnensis* 4: t. 446 (lecto-, here designated).

## REMARKS

Baker (1893) commented that this species is known only from Bourbon (Réunion) and Mauritius, where it is cultivated as an ornamental. This taxon was also grown in Europe. This name represents a cultivar of unknown origin.

132. *Musa mannii* Baker

in Hooker, *Flora of the British India*: 263 (1892). — Type: Hooker, *Botanical Magazine*: t. 7311 (1893) (syntype).

## REMARKS

Herbarium and types of Baker are at K and WELT (Stafleu & Cowan 1976), but original material has not been found. The plant was described by Baker 1893 "from a specimen that flowered in the palm-house at Kew, March 1893". It is indigenous in Assam, India. This taxon is poorly known. It is perhaps extinct in nature, but has survived in certain botanical gardens (Häkkinen & Sharrock 2002; Häkkinen 2006a, 2007).

133. *Musa martinii* Van Geert "martini"

*Revue d'Horticulture belge et étrangère* 18: 107 (1892). — Type: Van Geert (1892), *Revue d'Horticulture belge et étrangère* 18: fig. 12 (lecto-, here designated).

## REMARKS

The diagnosis refers only to leaf characters. The plant was raised in Tenerife, most probably from seeds sent by M. J. Martin, who worked as director at Hanoi Botanical gardens, Vietnam. Based on the description and the figure 12 it is not possible with certainty to clarify the meaning of this name. There is a drawing at K with seeds, obviously from the original material. That suggests that *M. martinii* is most likely very close to *M. balbisiana*.

134. *Musa mexicana* Matuda

*Madroño* 10: 16 (1950). — Type: Brook side at about 100 m alt., in a wet sunny field near Colonia Hidalgo, Acacoyagua, Chiapas, 5.VI.1948, Matuda 18320 (holo-, MEXU).

#### REMARKS

The name is synonymous with *M. ornata* Roxb. a widely cultivated ornamental species. There are no indigenous *Musa* in Mexico.

#### 135. *Musa microcarpa* Becc. (Fig. 4)

*Nelle Foreste di Borneo* 612 (1902). — Type: [Malaysia], Borneo, Ragiato di Sarawak, 186[6], [O. Beccari] no. 3351 (lecto-, FI!, here designated).

ISONYM. — *Musa microcarpa* Becc., *Webbia* 5: 548. (Martelli 1923) "sp. n."

*Musa acuminata* Colla subsp. *microcarpa* (Becc.) N.W.Simmonds, *Kew Bulletin* 11: 467 (1957, "1956"); *Musa acuminata* var. *microcarpa* (Becc.) Nasution, *Memoirs of the Tokyo University of Agriculture* 32: 86 (1991).

#### REMARKS

There is a second sheet at FI, collected at the type locality, "Abita Sarawak a Marop, P. B[eccari] no. 2722". Beccari (1902: figs 77, 81) included also an illustration with his diagnosis, which fits the lectotype. The name is diagnosed also on page 623, where the type locality information is given.

#### 136. *Musa mindanensis* Miq.

*Flora Indiae Batavae* 3: 588 (1855).

#### REMARKS

The basionym is *M. sylvestris mindanensis* Rumph. (Rumphius 1747: 139). Hotta (1989) considered that the name is synonymous with *M. textilis* Née, but there are hardly any facts to make this assumption. The herbarium and types of Rumphius were almost completely destroyed in a fire (Stafleu & Cowan 1983). Since the name is not supported by an illustration, and we were not able to interpret the diagnosis, the name remains dubious for us. The name has not been used by botanists.

#### 137. *Musa monticola* Argent

*Garden's Bulletin Singapore* 52: 206 (2000). — Type: Malaysia, Borneo, Sabah, Ranau District, Kinabalu, Kinabalu Park Headquarters, 20.IX.1995, Argent 2195 (holo-, SAN; iso-, E!, SNP!).

#### 138. *Musa muluensis* M.Hotta

*Journal of Japanese Botany* 42: 345 (1967). — Type: Malaysia, Borneo, Sarawak, along Sungai, Payau, from Sungai Melinau Paku to Rubang Payau, G. Mulu, in riverside open place, alt. 50-100 m, 22.III.1964, M. Hotta 15260 (holo-, KYO!; iso-, K!).

#### 139. *Musa nagensium* Prain

*Journal of the Asiatic Society of Bengal* 73: 21 (1904). — Type: India, Calcutta, Royal Bot. Garden, 3.IX.[19]03, (lecto-, K!, designated by Liu, Li & Xi [2002: 80]; iso-, BM!, E!).

#### REMARKS

There are type sheets at K, BM and E, collected from the type locality mentioned by Prain (1904). At K there are also samples collected in April 1903 and some without dates. The material was sent to Calcutta Botanical Gardens by Abdul Hug, who did his collections at Assam, Nagaland, Joboca.

#### 140. *Musa nana* Lour.

*Flora Cochinchinensis*: 644 (1790).

#### REMARKS

The name is based on diagnosis in Rumphius' (1747: 132) "Pissang Bombor". The herbarium and types of Rumphius were almost completely destroyed in a fire (Stafleu & Cowan 1983). Since the name is not supported by an illustration, and we were not able to interpret the diagnosis, the name remains dubious. It has not been used by botanists.

#### 141. *Musa nepalensis* Wall.

*in Carey, Flora Indica* 2: 490 (1824).

#### REMARKS

Currently included in *Ensete glaucum* (Roxb.) Cheeseman (1948a: 101). The existence of this taxon has been questioned (Cheesman 1948a: 101; Moore 1957: 188).

#### 142. *Musa nigra* Perr.

*Mémoires de la Société linnéenne de Paris* 3: 131 (1825).

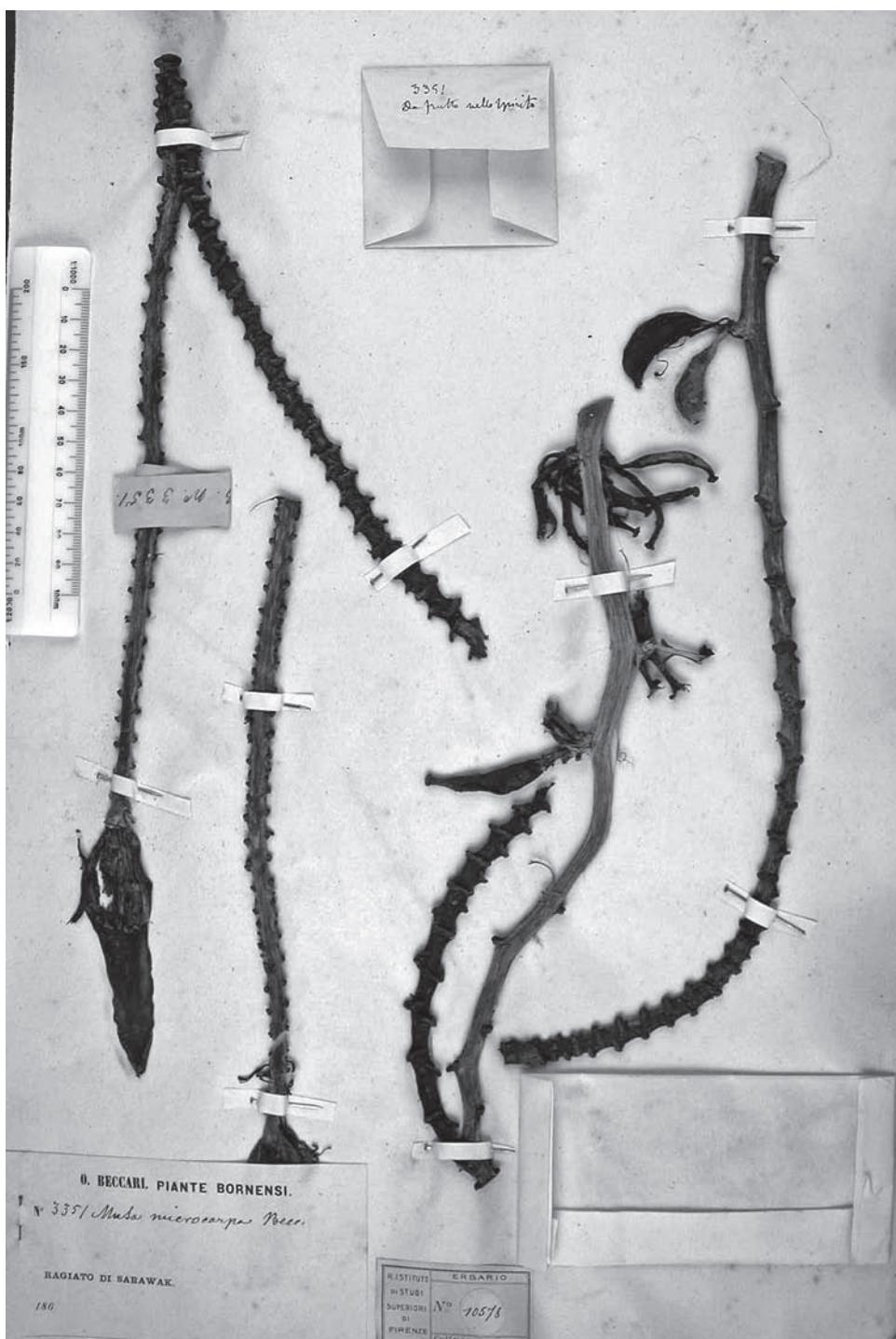


FIG. 4. — Lectotype of *Musa microcarpa* Becc. (O. Beccari 3351, Fl).

#### REMARKS

Herbarium and types of Perrottet are unknown (Stafleu & Cowan 1983). The protologue is too poor to allow positive identification. The name derives from the Philippines. It has not been used by botanists.

#### 143. *Musa ochracea* K.Sheph.

*Kew Bulletin* 17: 461 (1964). — Type: Jamaica, I.R. 578, (holo-, K 25060!; epi-, Shepherd, *Kew Bulletin* 17 (1): fig. 1 [1964], here designated).

#### REMARKS

The seeds were received by the Jamaica Banana Board Research Department from Poona Agricultural College, Bombay [Mumbai], India. The exact locality is not known, but Assam and Western Ghats are suggested (Shepherd 1964). The description is supported by a good illustration, which is selected here as an epitype to remove any potential ambiguity. The lectotype is preserved in liquid, and difficult to study essential characters.

#### 144. *Musa odorata* Lour.

*Flora Cochinchinensis*: 644 (1790).

*Musa sapientum* L. var. *odorata* (Lour.) Baker (1893: 212).

#### REMARKS

The name is based on *Musa cenorins* Clus. (Clusius 1605). It is probably a cultivated banana related to *M. sapientum*.

#### 145. *Musa ornata* Roxb. var. *ornata*

in Carey, *Flora Indica* 2: 488 (1824). — Type: illustration no. 1716 of *Icones Roxburghianae*, (neo-, K!, here designated).

#### REMARKS

The main herbarium and types of William Roxburgh are at K, and considerable sets at BM, BR, E, G and LIV (Stafleu & Cowan 1983). However, the type collection has not been found. The name appeared for the first time without diagnosis in

*Hortus Bengalensis* (Roxburgh 1814: 19). In the diagnosis (Carey 1824) no collection is mentioned. Most likely it was described from the Calcutta Botanical Gardens. According to Cheeseman (1931) there is a plate of *M. ornata* at Kew belonging to *Icones Roxburghianae*, representing the original description. That drawing was not included in the Indian flora (Carey 1832), as well as not in the later re-prints due to partially bad quality. That illustration at K was selected as a neotype, as it was probably drawn after the description was published. It bears a label "Icones Roxburghianae 1716".

*Musa ornata* is not nom. illeg. It was Wallich, who added the footnote that this name is probably *M. rosacea* Jacq. (Carey 1824).

#### 146. *Musa paracoccinea* A.Z.Liu & D.Z.Li

*Botanical Bulletin of Academia Sinica* 43: 77 (2002). — Type: China, Yunnan, Jinping Hsien, in valley or along stream, 5.X.1998, A. Z. Liu 98007 (holo-, KUN; iso-, PE).

#### 147. *Musa paradisiaca* L. var. *paradisiaca*

*Species Plantarum* 2: 1043 (1753). — Type: Linnaeus, *Musa cliffortiana*, [unnumbered plate] (1736) (lecto-, designated by Argent [1993: 68]).

#### REMARKS

*Musa paradisiaca* is also the type species of *Musa* L. (designated by Adanson [1763]: 525, 580). This name was extensively discussed by Cheeseman (1948b: 146) who, however, did not explicitly refer to any of the plates as type. Ghazanfar (1982) indicated "1207.1 (LINN)" as type but this was a post-1753 addition to the herbarium and not original material for the name (Jarvis 2007).

#### 148. *Musa ×paradisiaca* L. var. *bidigitalis* de Briey

in De Wildeman, *Mission de Briey Mayumbé*: 329 (1920). — Type: De Wildeman (1920), *Mission de Briey Mayumbé*: pl. VIII fig. 2 (lecto-, here designated).

*Musa bidigitalis* (de Briey) De Wild., *Mission de Briey Mayumbé*: 329 (1920).

## REMARKS

This banana is described from the Belgian Congo. According to the diagnosis and the figure it is seedless.

149. *Musa ×paradisiaca* L. var. *bende* de Briey

*in De Wildeman, Mission de Briey Mayumbé:* 334 (1920). — Type: De Wildeman (1920), *Mission de Briey Mayumbé*: pl. XI figs 1, 2 (lecto-, here designated).

## REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless. There are no indigenous banana taxa in Africa.

150. *Musa ×paradisiaca* L. var. *bilu* de Briey

*in De Wildeman, Mission de Briey Mayumbé:* 340 (1920). — Type: De Wildeman (1920), *Mission de Briey Mayumbé*: pl. XI figs 5, 6 (lecto-, here designated).

## REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless.

151. *Musa ×paradisiaca* L. var. *kitebbe* de Briey

*in De Wildeman, Mission de Briey Mayumbé:* 337 (1920). — Type: De Wildeman (1920), *Mission de Briey Mayumbé*: pl. X figs 4, 5 (lecto-, here designated).

## REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless.

152. *Musa ×paradisiaca* L. var. *viridis* de Briey,  
“*f. seluka*”

*in De Wildeman, Mission de Briey Mayumbé:* 342 (1920). — Type: De Wildeman (1920), *Mission de Briey Mayumbé*: pl. XI figs 3, 4 (lecto-, here designated).

## REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless. Forma *viridis* was not drawn nor diagnosed

separately, so we propose that *f. seluka* represents the type variant.

153. *Musa ×paradisiaca* L. var. *viridis* de Briey  
*f. funu-nua* de Briey

*in De Wildeman, Mission de Briey Mayumbé:* 345 (1920). — Type: De Wildeman, *Mission de Briey Mayumbé* 346: fig. 27 (1920) (lecto-, here designated).

## REMARKS

Figures 3 and 4 in pl. XI of De Wildeman (1920) show that the variety name refers to a seedless banana cultivar, described from Belgian Congo. The floral characters (De Wildeman 1920: fig. 27) do not allow identification.

154. *Musa ×paradisiaca* L. var. *viridis* de Briey  
*f. kilola* de Briey

*in De Wildeman, Mission de Briey Mayumbé:* 347 (1920). — Type: De Wildeman (1920), *Mission de Briey Mayumbé* 346: figs 28, 30 (lecto-, here designated).

## REMARKS

Figures 28 and 30 of De Wildeman (1920) show that the variety name refers to a seedless banana cultivar, described from Belgian Congo. The floral characters do not allow identification.

155. *Musa ×paradisiaca* L. var. *viridis* de Briey  
*f. seluka* de Briey

*in De Wildeman, Mission de Briey Mayumbé:* 342 (1920). — Type: De Wildeman (1920), *Mission de Briey Mayumbé*: pl. XI figs 3, 4 (lecto-, here designated).

## REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless.

156. *Musa decrescens* de Briey  
var. *viridis* de Briey

*in De Wildeman, Mission de Briey Mayumbé:* 324 (1920). — Type: De Wildeman, *Mission de Briey Mayumbé*: fig. 12 (1920) (lecto-, here designated).

#### REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless. The floral characters (De Wildeman 1920: fig. 12) do not allow identification.

156bis. *Musa ×paradisiaca* L. var. *viridis*  
de Briey f. *dongila* (De Wild.) de Briey

in De Wildeman, *Mission de Briey Mayumbé*: 350 (1920). — Type: De Wildeman, *Mission de Briey Mayumbé*: pl. X figs 6, 7 (1920) (lecto-, here designated).

#### REMARKS

This is a banana cultivar described from the Belgian Congo. According to the diagnosis and figure it is seedless.

157. *Musa ×paradisiaca* L. var. *viridis* de Briey  
f. *tuba* de Briey

in De Wildeman, *Mission de Briey Mayumbé*: 352 (1920). — Type: De Wildeman (1920), *Mission de Briey Mayumbé*: pl. X figs 2, 3 (lecto-, here designated).

#### REMARKS

The figures show that the name refers to a seedless banana cultivar, described from Belgian Congo.

158. *Musa ×paradisiaca* L. subsp. *seminifera*  
(Lour.) Baker var. *formosana* Warb.

in Engler, *Das Pflanzenreich* IV.45: 21 (1900). — Type: [Formosa], Uchiko, Yusuikyo, 17.IV.1916, B. Hayata (neo-, TI!, here designated).

*Musa formosana* (Warb.) Hayata, *Icones Plantarum Formosanarum* 6: 83 (1917); *Musa basjoo* Inuma var. *formosana* (Warb.) S.S.Ying, *Memoirs of the College of Agriculture, National Taiwan University* 25: 100 (1985).

#### REMARKS

The main herbarium and types of Warburg are at B (Stafleu & Cowan 1988). However, such a collection could not be found. In his combination, Ying (1985) wrongly assigned the authorship to Siebold. The neotype specimen represents *M. itinerans*. The diagnosis by Warburg: "Bracteae parvaea lanceolatae acutae tepalo libero acuto" fits it, like to most other *Musa*. The original label is written in Japanese.

159. *Musa peekelii* Lauterb.

*Botanische Jahrbücher für Systematik* 50: 306 (1914). — Type: Lauterbach, *Botanische Jahrbücher für Systematik* 50: fig. 1 (1914) (lecto-, here designated).

#### REMARKS

The plant was collected at Bismarck-Archipel, [Neu Mackleburg], Lahur bei Namatani, auf roten Lehmb., 9.III.1910, Peekel 390. Herbarium and types of Carl Adolf Georg Lauterbach are at WRSL (Stafleu & Cowan 1979). There was no response to our inquiry.

160. *Musa perrieri* Claverie

*Comptes Rendus de l'Académie des Sciences de Paris* 140: 1612 (1905).

#### REMARKS

Basionym for *Ensete perrieri* (Claverie) Cheesman (1948a: 103).

161. *Musa proboscidea* Oliv.

in Hook.f., *Icones Plantarum* 18: t. 1777 (1888).

#### REMARKS

Basionym for *Ensete proboscideum* (Oliv.) Cheesman (1948a: 102).

162. *Musa protractrorachis* de Briey

in De Wildeman, *Mission de Briey Mayumbé*: 316 (1920). — Type: De Wildeman, *Mission de Briey Mayumbé*: pl. VI figs 6, 7 (1920) (lecto-, here designated).

#### REMARKS

The figures show that the name refers to a seedless banana cultivar, described from Belgian Congo.

163. *Musa purpureo-tomentosa* de Briey

in De Wildeman, *Mission de Briey Mayumbé*: 326 (1920). — Type: De Wildeman, *Mission de Briey Mayumbé*: pl. VII figs 3, 4 (1920) (lecto-, here designated).

#### REMARKS

The figures show that the name refers to a seedless banana cultivar, described from Belgian Congo.

164. *Musa religiosa* J.Dyb.*Revue horticole* 72: 262 (1900).

## REMARKS

Basionym for *Ensete religiosum* (J.Dyb.) Cheesman (1948a: 103).

165. *Musa rosacea* Jacq.

*Plantarum rariorum Horti Caesari Schoenbrunnensis* 4: 23 (1804). — Type: Jacquin (1804), *Plantarum rariorum Horti Caesari Schoenbrunnensis* 4: t. 445 (lecto-, here designated).

## REMARKS

We consider that *M. rosacea* is a good species. It requires pollination to produce seeds. This name antedates the well-known *M. balbisiana* Colla 1820, which we consider as synonymous. *Musa balbisiana* has been generally used, while *M. rosacea* has been used only occasionally. Maintenance of the name *M. balbisiana* would require conservation.

166. *Musa rosea* Baker

*Annals of Botany* (Oxford) 7: 221 (1893). — Type: India, Calcutta, Botanical Garden, VII.1882, *Anonymous* (lecto-, CAL 469271!, designated by Häkkinen [2006b]).

## REMARKS

The lectotype specimen of *M. rosea* is very old. Unfortunately the label is distorted to the point that the date of collection as well as the name of the collector could not be read except for the words "Herb Hort Calcuttensis".

167. *Musa ruandensis* De Wild.

*Bulletin du Jardin botanique de l'État*, Bruxelles 8: 111 (1923).

## REMARKS

Basionym for *Ensete ruandense* (De Wild.) Cheesman (1948a: 104).

168. *Musa rubronervata* Kurz

*Journal of Agricultural and Horticultural Society of India* 14: 301 (1867). — Type: [Myanmar], Burma, Rangoon, M. Clelland (lecto-, K!, here designated).

## REMARKS

The lectotype has probably been collected by Clelland in Myanmar. He served in the Bengal Medical Service in 1830–1865. This specimen was incorporated to K herbarium in 1867, in the same year Kurz made the diagnosis. He perhaps received it via Wallich, to whom Kurz gave the credit of description (Kurz 1867: 301). Although Kurz gave Wallich as the author, Kurz made the diagnosis himself (Cheesman 1949b), therefore it should be credited to Kurz alone.

169. *Musa rubronervata* De Wild.

*Bulletin du Jardin botanique de l'État*, Bruxelles 8: 112 (1923).

## REMARKS

Basionym for *Ensete rubronervatum* (De Wild.) Cheesman (1948a: 104).

170. *Musa sakaiana* Meekiong, Ipor & Tawan

*Folia Malaysiana* 6: 131 (2005). — Type: Malaysia, Borneo, Sarawak, Lawas District, Ravenscourt Camp, KM25, 4.VII.2005, Meekiong K., Ipor I. B., Tawan C. S. & Hidir MK 1311 (holo-, SAR; iso-, HUMS).

171. *Musa sanguinea* Hook.f.

*Botanical Magazine* 98: t. 5975 (1872). — Type: Hooker (1872), *Botanical Magazine* 98: t. 5975 (syntype).

## REMARKS

*Musa sanguinea* Hook.f. was discovered in 1869 by Mann, in the Mahuni forests on the banks of the Booree Deling River in Upper Assam, India (Hooker 1872). Hooker (1872) diagnosed it from a flowering plant at Kew Garden in January 1872 and provided an illustration (lectotype). After the illustration was drawn, parts of inflorescence and fruits were preserved in a liquid (K 32103.000!). It includes a label which indicates that the seeds were collected in Assam. There is a specimen at K!, obviously taken from the same plant the description was based on, viz. "Hort. Kew 3.XII.1884". The label cites "Bot. Mag. 98: t. 5975". That sheet was erroneously designated as a lectotype by Liu et al. (2002: 79). However, the illustration represents original material.

### 172. *Musa sapientum* L. var. *sapientum*

*Systema Naturae*, ed. 10, 2: 1303 (1758). — Type: Trew, *Planta Selectae* 3: t. 22 “*Musa e fructu breviore spadix floriger in magnitudine naturali*” (1752) (lecto-, designated by Cheesman [1948b: 13]).

*Musa ×paradisiaca* L. subsp. *sapientum* (L.) Kuntze, *Revisio generum plantarum vascularium omnium atque cellularium multarum secundum leges nomeclaturae internationales cum enumeratione plantarum exoticarum in itinere mundi collectarum* 2: 692 (1891).

#### REMARKS

*Musa sapientum* has been repeatedly times 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).

### 173. *Musa sapientum* L. var. *fieleto* de Briey

in De Wildeman, *Mission de Briey Mayumbé*: 363 (1920). — Type: De Wildeman, *Mission de Briey Mayumbé*: pl. VII figs 1, 2 (1920) (lecto-, here designated).

#### REMARKS

The diagnosis and figures show that the name refers to a seedless banana cultivar, described from Belgian Congo.

### 174. *Musa sapientum* L. var. *satama* de Briey

in De Wildeman, *Mission de Briey Mayumbé*: 360 (1920). — Type: De Wildeman, *Mission de Briey Mayumbé*: pl. VII figs 1, 2 (1920) (lecto-, here designated).

#### REMARKS

The figures show that the name refers to a seedless banana cultivar, described from Belgian Congo.

### 175. *Musa sapientum* L. subsp. *seminifera* (Lour.) Baker f. *dubia* Baker

*Annals of Botany* (Oxford) 7: 214 (1893).

*Musa sapientum* var. *dubia* (Baker) A.M.Cowan & Cowan, *Trees of North Bengal*: 135 (1929).

#### REMARKS

There is no original material and the manuscript by King, to whom Baker (1893) refers, could not be found. Therefore the meaning of the name remains dubious. While making their combination, Cowan & Cowan (1929) did not indicate to which subspecies the name *dubia* belongs. As a forma or variety of *M. sapientum* the name should be interpreted as a cultivar.

### 176. *Musa sapientum* L. subsp. *seminifera* (Lour.) Baker f. *hookerii* Baker “*hookeri*”

*Annals of Botany* (Oxford) 7: 214 (1893). — Type: India, Sikkim, 5000 ft, VI.1875, G. King (lecto-, K!, here designated).

*Musa sapientum* L. subsp. *seminifera* (Lour.) Baker var. *hookeri* (Baker) K.Schum., in Engler, *Das Pflanzenreich* IV.45: 21 (1900); *Musa hookeri* (Baker) A.M.Cowan & Cowan, *Trees of North Bengal*: 135 (1929).

#### REMARKS

Baker (1893) refers in his diagnosis to the manuscript by King. However, it was Baker alone who wrote the diagnosis. There is also an excellent illustration at K, but it is not supported with a date. This taxon is synonymous with *M. sikkimensis* Kurz.

### 177. *Musa sapientum* L. subsp. *seminifera* (Lour.) Baker f. *pruinosa* Baker

*Annals of Botany* (Oxford) 7: 214 (1893). — Type: India, Sikkim, 1875, G. King (lecto-, K!, here designated).

*Musa pruinosa* (Baker) Burkill, *Records of the Botanical Survey of India* 2: 384 (1925); *Musa sapientum* var. *pruinosa* (Baker) A.M.Cowan & Cowan, *Trees of North Bengal*: 135 (1929).

#### REMARKS

There is a type sheet at K, taken from the type locality, viz. Sikkim (Baker 1893). Baker (1893) refers in his diagnosis to the manuscript by King. However, it was Baker alone who wrote the diagnosis. This taxon is closely related to *M. balbisiana*, probably as an infraspecific one. While making their combination, Cowan & Cowan (1929) did not indicate to which subspecies the name *pruinosa* belongs.

178. *Musa sapientum* L. subsp. *seminifera*  
(Lour.) Baker f. *thomsonii* Baker “*thomsonii*”

*Annals of Botany* (Oxford) 7: 213 (1893). — Type: India, Sikkim, 1877, G. King (lecto-, K!, here designated).

*Musa paradisiaca* L. subsp. *seminifera* (Lour.) Baker var. *thomsonii* (Baker) K.Schum, in Engler, *Das Pflanzenreich* IV.45: 21 (1900); *Musa thomsonii* (King ex Baker) A.M.Cowan & Cowan, *The Trees of Northern Bengal*: 135 (1929); *Musa flaviflora* N.W.Simmonds *Kew Bulletin* 11: 471 (1957, “1956”).

#### REMARKS

Baker (1893) based his diagnosis on the manuscript by King. However, it was Baker alone who wrote the diagnosis. We consider that *M. thomsonii* is a good species.

179. *Musa sapientum* L.  
var. *liukiuensis* Matsum.

*Botanical Magazine* (Tokyo) 9: 69 (1897). — Type: Loo-ohoo [Liu-ku], near Ogimi, V.1897, J. Matsumura (lecto-, TI!, here designated).

*Musa liukiuensis* (Matsum.) Makino, *Botanical Magazine* (Tokyo) 14: 141 (1900); *M. textilis* Née var. *liukiuensis* (Matsum.) Masam., *Memoirs of the Faculty of Science and Agriculture Taihoku Imperial University* 11 Bot. 4: 568 (1934).

#### REMARKS

According to Jarret (1986) this name is synonymous to *M. balbisiana* Colla, based on comparison of enzyme polymorphisms. In our opinion they are related, and the taxon of Matsumoto should be treated as a variety of *M. balbisiana*. We propose a new combination: *M. balbisiana* Colla var. *liukiuensis* (Matsum.) Häkkinen, comb. nov. Basionym: *Musa sapientum* L. var. *liukiuensis* Matsum., *Botanical Magazine* (Tokyo) 9: 69 (1897).

180. *Musa sapientum* L. var. *martabanica* Baker

*Annals of Botany* (Oxford) 7: 213 (1893).

*Musa ×paradisiaca* L. subsp. *sapientum* (L.) Kuntze var. *martabanica* (Baker) K.Schum., in Engler, *Das Pflanzenreich* IV.45: 20 (1900).

#### REMARKS

Herbarium and types of Baker are at K and WELT (Stafleu & Cowan 1976), but type material was not

found. The diagnosis is inadequate, but clearly refers to a cultivated banana “fruits as in Champa, but midrib of leaf not red; border of petiole red-brown”.

181. *Musa sapientum* L. var. *mensaria* Baker

*Annals of Botany* (Oxford) 7: 212 (1893).

#### REMARKS

The basionym is *M. mensaria* Rumph. in *Herbarium Amboinense* (Rumphius 1747: 131). The herbarium and types of Rumphius were almost completely destroyed in a fire (Stafleu & Cowan 1983). Since the name is not supported by an illustration, and we were not able to interpret the diagnosis, the name remains dubious. The name has not been used by botanists. As a variety of *M. sapientum* the name is considered to belong to a banana cultivar.

182. *Musa sapientum* L. var. *regia* Baker

*Annals of Botany* (Oxford) 7: 212 (1893).

#### REMARKS

The basionym is *M. regia* Rumph. in *Herbarium Amboinense* (Rumphius 1747: 131). The herbarium and types of Rumphius were almost completely destroyed in a fire (Stafleu & Cowan 1983). Since the name is not supported by an illustration, and we were not able to interpret the diagnosis, the name remains dubious. It has not been used by botanists. As a variety of *M. sapientum* the name is considered to belong to a banana cultivar.

183. *Musa sapientum* L. var. *rubra* Baker

*Annals of Botany* (Oxford) 7: 213 (1893).

*Musa ×paradisiaca* L. subsp. *sapientum* (L.) Kuntze var. *rubra* (Baker) K.Schum., in Engler, *Das Pflanzenreich* IV.45: 20 (1900).

#### REMARKS

Herbarium and types of Baker are at K and WELT (Stafleu & Cowan 1976), and some at CAL also. No original material was found, and there is no type information (Baker 1893). As a variety of *M. sapientum* the name should be interpreted as a cultivar. The brief

diagnosis also refers to a cultivated banana “stem, petiole, flowers and midrib of leaf dull red. Fruit about 7 in. long, at first dark red, ripening to yellowish red”. This name has not been used by botanists.

184. *Musa sapientum* L. var. *sanguinea* Baker

*Annals of Botany* (Oxford) 7: 212 (1893).

REMARKS

Herbarium and types of Baker are at K and WELT (Stafleu & Cowan 1976), but could not be found. No original material was found, and there is no type information (Baker 1893). Baker refers to Wallich. However, such a description appears not to exist. The inadequate diagnosis clearly refers to a cultivated edible banana “leaves and fruit strongly tinged with blood-red”. This name has not been used by botanists.

185. *Musa sapientum* L. var. *violacea* Baker

*Annals of Botany* (Oxford) 7: 212 (1893).

*Musa xparadisiaca* L. subsp. *sapientum* (L.) Kuntze var. *violacea* (Baker) K.Schum, in Engler, *Das Pflanzenreich* IV.45: 21 (1900).

REMARKS

Herbarium and types of Baker are at K and WELT (Stafleu & Cowan 1976), but could not be found. As a variety of *M. sapientum* the name probably represents a banana cultivar.

186. *Musa schizocarpa* N.W.Simmonds

*Kew Bulletin* 11: 474 (1957, “1956”). — Type: New Guinea, Dagua, Sepik District, 7.XII.1954, Simmonds B. E. 13 (holo-, K!).

REMARKS

The holotype is preserved in a liquid collection in two bottles, both bearing the Banana Expedition collection number 13.

187. *Musa schweinfurthii* K.Schum. & Warb.

in Engler, *Das Pflanzenreich* IV.45: 14 (1900).

REMARKS

Basionym of *Ensete schweinfurthii* (K.Schum. & Warb.) Cheesman (1948a: 103).

188. *Musa seminifera* Lour. subsp. *seminifera*  
var. *seminifera*

*Flora Cochinchinensis*: 644 (1790).

*Musa sapientum* L. subsp. *seminifera* (Lour.) Baker, *Annals of Botany* (Oxford) 7: 213 (1893); *Musa xparadisiaca* L. subsp. *seminifera* (Lour.) K.Schum, in Engler, *Das Pflanzenreich* IV.45: 22 (1900).

REMARKS

In the diagnosis Loureiro (1793) refers to *M. sylvestris* Rumph. (Rumphius 1747). There is no figure to be connected with Rumphius’ diagnosis, although Loureiro cites also t. 61. That table presents *M. simiarum* (t. 61 fig. 1), *M. uranoscopos* (t. 61 fig. 2) and *M. alphurica seu ceramica* (t. 61 fig. 3). Thus, the name *M. seminifera* is not supported by an illustration. Since herbarium and types of Rumphius were almost completely destroyed in a fire (Stafleu & Cowan 1983), the name remains dubious. The usage of the name *seminifera* has been most confusing. Wu (1991: 393) suggests that *M. seminifera* is synonymous to *M. balbisiana*, which is contrary to the principle of priority (McNeill *et al.* 2006).

189. *Musa siamensis* Häkkinen & R.Wallace

*Folia Malaysiana* 8 (2): 61-70 (2007). — Type: USA, Georgia, Richmond Hill, 2.VIII.2007, R. Wallace 001 (holo-, GA!; iso-, H!, MO!).

190. *Musa sikkimensis* Kurz

*Journal of Agricultural and Horticultural Society of India*, Nova Series Part 1, 5: 164 (1877). — Type: India, Darjeeling, [by the waterfall below, alt. 6000 ft., 21.IV.1955], B. E. 79, (neo-, K 19026!, designated by Simmonds [1957: 11] “type”).

REMARKS

There are two liquid collections at K representing the neotype designated by Simmonds (1957). There are also several photographs of the original material at K.

191. *Musa simiarum* Miq. var. *simiarum*

*Flora Indiae Batavae* 3: 589 (1855). — Type: Rumphius, *Herbarium Amboinense* 5: t. 61 fig. 1 (1747) (lecto-, here designated).

## REMARKS

Herbarium and types of Rumphius were almost completely destroyed in a fire (Stafleu & Cowan 1983). Therefore the illustration has to serve as a lectotype. It has been suspected that *M. simiarum* Miq. is synonymous with *M. acuminata* Colla (Hotta 1989), which we are not able to confirm. This name requires further field studies.

192. *Musa speciosa* Ten.

*Index Seminum et Plantarum Viventium, Quae in Horto Regio Neapolitano pro mutua commutatione offentur, vel venalia prostant:* 23 (1829). — Type: Tenore, *Index Seminum et Plantarum Viventium, Quae in Horto Regio Neapolitano pro mutua commutatione offentur, vel venalia prostant:* t. 2 (1829) (lecto-, here designated).

ISONYM. — *Musa speciosa* Ten., *Atti dell' Accademia Pontaniana* 1 (2): 32 (1832).

## REMARKS

This name has been regarded as synonymous with *M. ornata* Roxb. (Baker 1893: 219; Cheesman 1949b: 26), with what we agree.

193. *Musa splendida* A.Chev.

*Revue de Botanique appliquée et d'Agriculture tropicale* 14: 517 (1934).

## REMARKS

In his original description, Chevalier did not mention herbarium material and he described the species on living specimens from "Vietnam, Haut-Tonkin, Muong-Xen, à 700 m, sur la route de Laokay à Chapa, en fleur et fruits, 4.XII.1913". Herbarium and types of Auguste Jean Baptiste Chevalier are at P and PC (Stafleu & Cowan 1976), but the corresponding specimens could not be found. *Musa splendida* is very poorly known (with no known locality), and is perhaps not a good species (Simmonds 1960a: 204; Valmayor *et al.* 2004).

194. *Musa sumatrana* Becc.

*in André, L'Illustration horticole* 27: 37 (1880). — Type: [Indonesia], Sumatra, ad Ayer mancior, Provicia di Padang in Sumatra occid. (all'alt. di circa 360 metri sul. liv. del mare), VIII.1878, O. Beccari 489 (lecto-, K 000292216!, 000292218!, here designated).

*Musa acuminata* Colla var. *sumatrana* (Becc.) Nasution, *Memoirs of the Tokyo University of Agriculture* 32: 80 (1991).

HOMONYM. — *Musa sumatrana* Ridl., *Bulletin of Miscellaneous Information* Kew 1926: 90 (1926).

## REMARKS

There are two type sheets at K collected in the type locality, viz. Sumatra (Beccari 1880). In the diagnosis the year of collection is given as 1877. However, such a specimen could not be located. The lectotype sheets are cross labelled with a marking "Be 11/79", one consisting of fruits (000292216) and the other one of a leaf (000292218). In the first mentioned the label is lacking, but it bears the cross marking "Be 11/79, *Musa sumatrana* Becc.".

The illustration (Beccari 1880) shows a non-flowering plant. He refers to "*M. sumatrana* Becc., Catal. Hort. Florentini Corsi, no. 2, p. 4". In that publication there is the name only. In his *Nelle Foreste di Borneo*, Beccari (1902) refers to "*M. sumatrana* Becc.". The varietal rank (Nasution 1991) is appropriate.

195. *Musa superba* Roxb.

*in Carey, Flora Indica* 2: 489 (1824).

## REMARKS

Basionym for *Ensete superbum* (Roxb.) Cheesman (1948a: 100).

196. *Musa suratii* Argent

*Garden's Bulletin Singapore* 52: 203 (2000). — Type: Malaysia, Borneo, Sabah, Kallang, Tenom District, 8.IX.1989, Surat & A. Lamb 268/89 (holo-, SAN; iso-, E!).

*Musa lawitensis* Nasution & Supard. var. *suratii* (Argent) Häkkinen, *Adansonia*, sér. 3, 28 (1): 60 (2006).

## REMARKS

A rank of variety is considered appropriate.

197. *Musa sylvestris* Colla

*Memorie della Accademia delle Scienze di Torino* 25: 386 (1820).

HOMONYM. — *Musa sylvestris* Lamarie, in Brenier, *Bulletin économique de l'Indochine* 4: 217-226 (1901).

REMARKS

The diagnosis refers to Rumphius' (1747: 139) "Pissan utan", which is not supported by a figure. The herbarium and types of Rumphius were almost completely destroyed in a fire (Stafleu & Cowan 1983), and those of Luigi Aloysius Colla are at TO (Stafleu & Cowan 1976), but the corresponding specimen does not exist. Since the name is not supported by an illustration, and we were not able to interpret the diagnosis, the name remains dubious. It has not been generally accepted.

198. *Musa textilis* Née var. *textilis*

*Anales de Ciencias Naturales* 4: 123 (1801).

REMARKS

Herbarium and types of Luis Née are at MA, some at B, C, FI and NY (Stafleu & Cowan 1981), but related specimens have not been found. The diagnosis is very brief. However, Backer (1924) and Cheesman (1949b) consider that *M. textilis* is a good species. This commonly used name requires neotypification and a considerable amount of field study.

199. *Musa textilis* Née var. *tashiroi* Hayata

*Icones plantarum formosanarum* 3: 195 (1913). — Type: Taiwan, Kotosho, in montibus, VIII.1913, Y. Tashiro (lecto-, TI!, here designated).

REMARKS

The label written in Japanese includes only the species name. Therefore the details above are based on Hayata (1913: 195). The name is accepted by the present authors, with reservation considering typification of *M. textilis* Née.

200. *Musa tikap* Warb.

*Der Tropenpflanzen* 7: 36 (1903). — Type: Warburg (1903), *Der Tropenpflanzen* 7: fig. 1 (lecto-, here designated).

REMARKS

The plant is closely allied with *M. textilis* Née, with reservation pending typification of that name. There is original material at B, viz. "Carolinen [islands], Ponape, 1903", preserved in liquid.

201. *Musa tomentosa* Warb.

in Engler, *Das Pflanzenreich* IV.45: 22 (1900). — Type: [Indonesia], Nord-Celebes, Minahasa, 1888, *Warburg* 15741 (lecto-, B, designated by Nasution [1991: 82]).

*Musa acuminata* Colla var. *tomentosa* (Warb.) Nasution, *Memoirs of the Tokyo University of Agriculture* 32: 82 (1991).

REMARKS

The rank of variety is considered appropriate.

202. *Musa tonkinensis*

R.V.Valmayor, L.D.Danh & Häkkinen

*The Philippine Agriculture Scientist* 88: 240 (2005). — Type: Vietnam, Van Chan district, Yen Bai province, 30.XI.1994, *Le Dinh Danh VN1-054* (holo-, PHH No. 004!).

203. *Musa troglodytarum* L. var. *troglodytarum*

*Species Plantarum*, ed. 2, 2: 1478 (1763). — Type: Rumphius, *Herbarium Amboinense* 5: t. 61 fig. 2 (1747) (lecto-, designated by Merrill [1917: 150]; syn., Rumphius [1747] *Herbarium Amboinense* 5: t. 60f "M. XI Pissang batu").

*Musa sapientum* L. subsp. *troglodytarum* (L.) Baker, *Annals of Botany* (Oxford) 7: 214 (1893).

REMARKS

The syntype is the lectotype of *M. balbisiana* Colla.

204. *Musa troglodytarum* L.

var. *acutaebraeata* MacDan.

*Bernice P. Bishop Museum Bulletin* 190: 21 (1947). — Type: Society Islands, Tahiti, District of Oueu, V.1927, L. H. MacDaniels 30-27-9 (holo-, BISH).

205. *Musa troglodytarum* L.

var. *rubrifolia* Kuntze

*Revisio generum plantarum vascularium omnium atque cellularium multarum secundum leges nomenclaturae*

*internationales cum enumeratione plantarum exoticarum in itinere mundi collectarum*: 692 (1891). — Type: Indonesia, Java, Njalindung-Sagaranten, 23.VI.1875, Otto Kuntze (lecto-, NY 00320141!, here designated).

#### REMARKS

The lectotype consists of two sheets, flowers and a leaf separately, both bearing the collection number "5/38". The varietal name seems to refer to an ornamental banana of section *Rhodochlamys*.

#### 206. *Musa truncata* Ridl.

(Fig. 5)

*Journal of the Federated Malay States Museums* 4: 80 (1909). — Type: Malaya, Telom, Pahang, 1905, H[enry] R[idley] 13694 (lecto-, SING [sheets 1! and 2], designated by Nasution [1991: 45, "holo-"]; isolecto-, BM 000617251!).

*Musa acuminata* Colla subsp. *truncata* (Ridl.) Kiew, in Wong et al., *Annals of Botany* 88: 1025 (2001).

#### REMARKS

There are two type sheets at SING, both bearing the same collection number of Ridley (13694), both representing lectotype (McNeill 2006: Art. 8.3). When Nasution (1991) designated the "holotype", he erroneously gave the collection number as "3694". According to de Wildeman (1912: 338), Simmonds (1957: 468) and Hotta (1989) *M. truncata* Ridl. is a synonym of *M. acuminata* subsp. *malaccensis*. This view has been shown to be wrong (Wong et al. 2002), and the rank of subspecies is currently appropriate.

#### 207. *Musa tuberculata* M.Hotta

*Journal of Japanese Botany* 42: 347 (1967). — Type: Brunei Temburong, along Sungai Lacquan, a branch of Sungai Batu Apoi, in river-side open place, on rich and deep soil, standing mixed with *M. flava* and *M. campestris* [50-300 m], 31.I.1964, M. Hotta 13878 (holo-, KYO; iso-, Kl.).

#### 208. *Musa ulugurensis*

Warb. & O.Moritz ex Warb.

*Tropenpflanzer* 8: 116 (1904).



FIG. 5. — Lectotype of *Musa truncata* Ridl. (HR 13694, SING).

#### REMARKS

Basionym for *Ensete ulugurensis* (Warb. & O.Moritz) Cheesman (1948a: 103).

#### 209. *Musa velutina* H.Wendl. & Drude

*Gartenflora* 65: t. 823 (1875). — Type: Wendland & Drude (1875), *Gartenflora* 65: t. 823 (lecto-, designated by Häkkinen & Väre [2008b]).

#### REMARKS

*Musa velutina* is synonymous to *M. dasycarpa* Kurz (Häkkinen & Väre 2008b).

#### 210. *Musa ventricosa* Welw.

*Apontamentos Phytogeographicos*: 545 (1859).

#### REMARKS

Basionym for *Ensete ventricosum* (Welw.) Cheesman (1948a: 101).

#### 211. *Musa violascens* Ridl.

*Transactions of the Linnean Society of London*, Botany ser. 2, 3: 384 (1893). — Type: Malaya, Tahan River [Sungei Tahan], 1891, *Henry Ridley* 2394 (lecto-, SING 0068714!, designated by Simmonds [1957: 487, "type"]; syn-, SING 0068713!, 0068718!, 0068719!, [Malaya], Selangor, Kuala Lumpur 27.VII.1889, *Ridley*).

#### 212. *Musa viridis*

R.V.Valmayor, L.D.Danh & Häkkinen

*The Philippine Agriculture Scientist* 87: 115 (2004). — Type: Vietnam, Van Chan district, Yen Bai province, 29.XI.1994, *Le Dinh Danh* VN1-052 (holo-, PHH No.002!).

#### 213. *Musa vittata* Rodigas

in Van Houtte, *Flore des Serres* 15: 25 (1865) — Type: Rodigas, *Flore des Serres* 15: 25, fig. 285 (1865) (lecto-, here designated).

*Musa paradisiaca* L. subsp. *sapientum* (L.) Kuntze var. *vittata* (Rodigas) K.Schum, in Engler, *Das Pflanzenreich* IV.45: 21 (1900).

#### REMARKS

This name originates from bananas cultivated in San[o] Thomé, Africa. It is an AAB-cultivar. The leaves are characteristically white-green striated.

#### 214. *Musa voonii* Häkkinen

*Acta Phytotaxonomica et Geobotanica* 55: 80 (2004a). — Type: Malaysia, Borneo, Sarawak, Trusan road, Lawas, 119 ft alt., 04°49.375'N, 115°18.867'E, 23.X.2002, M. Häkkinen SBC 8006 (holo-, SAR!; iso-, SBC!).

#### 215. *Musa wilsonii* Tutcher

*Gardeners' Chronicle*, ser. 3, 32: 450 (1902).

#### REMARKS

Basionym for *Ensete wilsonii* (Tutcher) Cheesman (1948a: 103).

#### 216. *Musa yunnaensis* Häkkinen & Wang Hong

*Novon* 17: 441 (2007). — Type: China, Yunnan, Xishuangbanna, Jinghong Co., Longpa, 1150 m, 13.XI.2005, Wang Hong 8303 (holo-, HITBC; iso-, H 1735116!, IBSC!, MO!, PE!, QBC!).

#### 217. *Musa zebrina* Van Houtte ex Planch.

##### var. *zebrina* f. *zebrina*

in Van Houtte, *Flore des Serres* 10: 223 (1854) — Type: Planchon (1854), *Flore des Serres* 10: 223, t. 1061 (lecto-, here designated).

*Musa acuminata* var. *zebrina* (Van Houtte ex Planch.) Nasution, *Journal Biologi Indonesia* 1: 282 (1993).

#### REMARKS

The diagnosis of *M. zebrina* was based on a living specimen (Nasution 1991: 45), and herbarium and types of Louis Beroit Van Houtte are unknown (Stafleu & Cowan 1983). Cheesman (1948b: 19), Moore (1957: 176) and Hotta (1989: 67, 68) considered that *M. zebrina* is synonymous with *M. acuminata* Colla, and De Wildeman (1912: 338) considered that *M. zebrina* is a synonym of *M. acuminata* subsp. *malaccensis*. We consider that the rank of variety (Nasution 1993) is correct.

#### 218. *Musa zebrina* Van Houtte f. *cerifera* Backer

*Flora van Java* 3: 137 (1924). — Type: Java, Madjenang, Banjueomas, 30-80 m above sea level, Backer 18688 (lecto-, BO, designated by Nasution [1991: 61, "type"]).

*Musa cerifera* (Backer) Nakai, *Bulletin of the Tokyo Science Museum* 22: 14 (1948); *Musa acuminata* Colla var. *cerifera* (Backer) Nasution, *Memoirs of the Tokyo University of Agriculture* 32: 60 (1991).

#### REMARKS

In our opinion the rank of variety is appropriate.

#### 219. *Musa zebrina* Van Houtte f. *rutilipes* Backer

*Flora van Java* 3: 137 (1924). — Type: Java, Paseroean, Res. Paseroean, 4 m above sea level, Backer 24254 (lecto-, BO, designated by Nasution [1991: 68, "rutilipes"]).

*Musa acuminata* Colla var. *rutilipes* (Backer) Nasution, *Memoirs of the Tokyo University of Agriculture* 32: 68 (1991), “*rutilipes*”, which is the currently used name.

#### REMARKS

In the original diagnosis the collection place was given as “Djember en Djatiroto” (Backer 1924).

#### INVALIDLY PUBLISHED NAMES

##### 220. *Musa abaca* Perr.

*Mémoires de la Société linnéenne de Paris* 3: 130 (1825).

#### REMARKS

The name is illegitimate, since there is no proper description (McNeill *et al.* 2006: Art. 32.1): “Le fruit que donne ce bananier est le plus gros et le meilleur de tous ceux connus dans ce genre de plantes nombreuses.”

##### 221. *Musa acuminata* Colla subsp. *rubrobracteata* M.Hotta

*Occasional Papers, Kagoshima University Research Center for the South Pacific* 16: 70 (1989).

#### REMARKS

Since there is no description, the name is illegitimate (McNeill *et al.* 2006: Art. 32.1).

##### 222. *Musa acuminata* Colla var. *culta* Kurz

*Journal of Agricultural and Horticultural Society of India* 14: 297 (1867).

#### REMARKS

As the name refers to commercial use, it is illegitimate (McNeill *et al.* 2006: Art. 32.3).

##### 223. *Musa africana* Bull.

*A Retail List of New, Beautiful and Rare Plants Offered by William Bull*: 6 (1871).

#### REMARKS

Since there is no description, the name is illegitimate (McNeill *et al.* 2006: Art. 32.1).

The name is synonymous with *Ensete ventricosum* Welw. (Baker 1893; Baker & Simmonds 1953).

##### 224. *Musa alphurica* Miq.

*Flora Indiae Batavae* 3: 589 (1855). — Type: Rumphius (1747), *Herbarium Amboinense* 5: t. 61 fig. 3 (lecto-, here designated).

#### REMARKS

The illustration represents the only original element, as the herbarium and types of Rumphius were almost completely destroyed in a fire (Stafleu & Cowan 1983). This name has not been used by botanists. Superfluous for *M. berterii* Colla (1820), as these names share the same type.

##### 225. *Musa angulosa* Arrunda ex Almeida

*Diccionario de botanica brasileira*: 65 (1873).

#### REMARKS

The diagnosis merely refers to culinary values, and is thus invalid according to the *Code* (McNeill *et al.* 2006: Art. 32.3).

##### 226. *Musa aranakensis* Ripley ex Blechynden

*Journal of the Agricultural and Horticultural Society of India* 5: 53 (1857).

#### REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art. 32.1).

##### 227. *Musa argentea* Arrunda ex Almeida

*Diccionario de botanica brasileira*: 65 (1873).

#### REMARKS

The diagnosis merely refers to culinary values, and is thus invalid according to the *Code* (McNeill *et al.* 2006: Art. 32.3).

##### 228. *Musa banksiana* Kurz

*Journal of Agricultural and Horticultural Society of India, Nova Series V*: 164 (1877).

#### REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art. 32.1). It probably represents a misspelling of *M. banksii*.

229. *Musa basjoo* Siebold & Zucc.

*Verhandelingen van het Bataviaasch Genootschap* 12: 18 (1830).

REMARKS

The name is invalid according to the *Code* (McNeill *et al.* 2006: Art. 32.3). The “diagnosis” merely gives information on the usage: “Introduced from the Liukiu islands, scarcely survives the winter, linen are made of the leaves, mainly in Liukiu islands and in some other islands in the province of Satsuma.”

230. *Musa bicolor* Arrunda ex Almeida

*Diccionario de botanica brasileira*: 64 (1873).

REMARKS

The diagnosis merely refers to culinary values, and is thus invalid according to the *Code* (McNeill *et al.* 2006: Art. 32.3).

231. *Musa brownii* F.Muell.

*in Pucci, Bollettino della regia Società Toscana di Orticoltura*: 296 (1906).

REMARKS

The “diagnosis” is very poor, not intended to be introduced as a new taxon, as Pucci gives F.Muell. as an author as if the name had been described or used earlier. The diagnosis must be regarded as provisional, and thus illegitimate (McNeill *et al.* 2006: Art. 34.1).

232. *Musa calosperma* F.Muell.

*Proceedings of the Linnean Society of New South Wales* 10: 356 (1885). — Type: Papua New Guinea, northern New Guinea, Moresby [Basilaki] Island, N. Miklouho-Maclay (lecto-, MEL 588768!, here designated).

REMARKS

This name must be considered as merely a proposal for future acceptance (McNeill *et al.* 2006: Art 34.1), as von Mueller wrote: “*Musa calosperma* is as yet only temporarily named.”

Basionym for *Ensete calospermum* (F.Muell.) Cheeseman (1948a: 102).

233. *Musa caroliniae* Sterler

*Hortus Nympheburgensis seu Enumeration Plantarum in Horto Regio Nympheburgensi cultarum*, ed. 2: 109 (1826).

REMARKS

Since there is no description, the name is illegitimate (McNeill *et al.* 2006: Art. 32.1).

234. *Musa chinensis* Sweet

*Sweet's Hortus Britannicus*, ed. 2: 596 (1830).

REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art. 32.1).

235. *Musa cinerea* Gentil

*Liste des plantes cultivées dans les serres chaudes et coloniales du Jardin botanique de l'État à Bruxelles*: 125 (1907).

REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art. 32.1).

236. *Musa cliffortiana* L.

*Musa cliffortiana*: 22 (1736).

REMARKS

As a pre-1753 name it is illegitimate according to the *Code* (McNeill *et al.* 2006: Art. 13.1). The name is synonymous with *M. sapientum* L.

237. *Musa consociata* Nakai

*Bulletin of the Tokyo Science Museum* 22: 16 (1948).

REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art. 36.1).

238. *Musa corneri* Holttum

Unpublished manuscript at RBG Kew (1974).

REMARKS

Since there is no description, the name is illegitimate (McNeill *et al.* 2006: Art. 32.1).

239. *Musa discolor* Horan.*Prodromus Monographiae Scitaminarum*: 41 (1862).

## REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art. 32.1).

240. *Musa discolor* Vieill.*Annales des Sciences naturelles*, série 4, 16: 46 (1862).

## REMARKS

Vieillard (1862) treats usage of vascular plants in New Caledonia, without intention of describing new taxa. Thus the name must be considered as illegitimate (McNeill *et al.* 2006: Art 32.3.). There is no information on seeds, and this name has been suspected to represent AAB-cultivar subgroup (Simmonds 1960b). It was described from New Caledonia, and it is a common ornamental plant in Hawaii.

241. *Musa dulcissima* Nakai*Bulletin of the Tokyo Science Museum* 22: 13 (1948).

## REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art 36.1).

242. *Musa dybowskii* De Wild.*Annales du Musée colonial Marseille*, sér. 2, 7: 245 (1909).

## REMARKS

Since there is no description, the name is illegitimate (McNeill *et al.* 2006: Art 32.1).

243. *Musa elata* Nakai*Bulletin of the Tokyo Science Museum* 22: 14 (1948).

## REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art 36.1).

244. *Musa humilis* Aubl.

*Histoire des Plantes de la Guiane françois*: 931 (1775). — Type: French Guiana, Aublet (BM) (lecto-, designated by Andersson [1981: 524]).

## REMARKS

The name is rejected, and the accepted one is *Heliconia bihai* (L.) L. (McNeill *et al.* 2006).

245. *Musa humilis* Perr.*Mémoires de la Société linnéenne de Paris* 3: 131 (1825).

*Musa sapientum* L. var. *humilis* (Perr.) Merr., *An Enumeration of Philippine Flowering Plants* 1 (2): 224 (1922).

## REMARKS

The name *M. humilis* Perr. is illegitimate, as it is a later homonym of a sanctioned name according to the *Code* (McNeill *et al.* 2006: Art. 53.2). Andersson (1984) proposed the rejection of *Musa humilis* Aubl. in order to conserve *Heliconia bihai* (L.) L., which has been accepted (McNeill *et al.* 2006: 266).

246. *Musa hybrida* J.Gillet*L'Agronomie tropicale* 1: 29 (1909).

## REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art 36.1). The name was considered to represent a hybrid *M. arnoldiana* × *gilletii*.

247. *Musa imperialis* J.Gillet*L'Agronomie tropicale* 1: 29 (1909).

## REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art. 32.1). The diagnosis merely refers to ornamental value, and is thus also invalid according to the *Code* (McNeill *et al.* 2006: Art. 32.3.).

248. *Musa ingrata* Nakai*Bulletin of the Tokyo Science Museum* 22: 13 (1948).

#### REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art 36.1).

#### 249. *Musa jaheri* Nakai

*Bulletin of the Tokyo Science Museum* 22: 18 (1948).

#### REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art 36.1).

#### 250. *Musa japonica* C.Thiébaut & J.B.Keteleer

*Revue horticole* 60: 491 (1889).

#### REMARKS

The diagnosis is poor: "les bourgeons, gros et robustes, forment des tiges courtes et grosses munies de feuilles relativement large", meaning "the thick and hardy buds develop in short and stout twigs provided with rather broad leaves", otherwise the text only treats the horticultural properties, and should be treated as nomen invalid according to the *Code* (McNeill *et al.* 2006: Art. 32.3). There is no native banana in Japan, and it is suspected that the description refers to *M. basjoo* (Watson 1890; Argent 1984; Huxley *et al.* 1992).

#### 251. *Musa javanica* Nakai

*Bulletin of the Tokyo Science Museum* 22: 15 (1948).

#### REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art 36.1).

#### 252. *Musa karang* Kurz

*Journal of Agricultural and Horticultural Society of India*, Nova Series V: 164 (1877).

#### REMARKS

Since there is no description, the name is illegitimate (McNeill *et al.* 2006: Art 32.1). The name appears in a key without additional diagnostic information.

#### 253. *Musa lacatan* Gentil

*Liste des plantes cultivées dans les serres chaudes et coloniales du Jardin botanique de l'État à Bruxelles*: 125 (1907).

#### REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art. 32.1).

#### 254. *Musa martinii* de Noter "martini"

*Revue horticole* 67: 290 (1895).

#### REMARKS

This is a later homonym of *M. martinii* Van Geert. Based on the diagnosis, it is obvious that these taxa have the same origin. Raphaël de Noter described his plant grown from seeds collected from Mt. Tay-Ninh about a 100 km from Saigon, in Indochina, and forwarded to him by M. J. Martin. Herbarium and types of de Noter are unknown (Stafleu & Cowan 1981). This name has not been used by botanists.

#### 255. *Musa martretiana* A.Chev.

*Exploration botanique de l'Afrique occidentale française* 1: 632 (1920). — Type: Guinea, spontané à Boulivel, Fouta Djallon, X.1907, A. J. B. Chevalier (lecto-, P00439282!, here designated; syn- P00439280!, Guinea, Entre Timbo et faranna, IV.1905, A. J. B. Chevalier; P00439279!, Guinea, Route de Timbo au Niger, IV.1905, A. J. B. Chevalier).

#### REMARKS

Since there is no description, the name is invalid (McNeill *et al.* 2006: Art 32.1).

#### 256. *Musa massoni* Baker

*Annals of Botany* (Oxford) 7: 209 (1893).

#### REMARKS

Since there is no description, the name is invalid (McNeill *et al.* 2006: Art. 32.1).

#### 257. *Musa* var. *maurelii* Bois

*Bulletin du Muséum national d'Histoire naturelle*, sér. 2: 690 (1930)

## REMARKS

Bois (1930) did not indicate to which species his variety belongs. The description is based on ornamental foliage characters only, the name is invalid (McNeill *et al.* 2006: Art. 33).

258. *Musa megalocarpa* Nakai

*Bulletin of the Tokyo Science Museum* 22: 17 (1948).

## REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art. 36.1).

259. *Musa ×mensaria* Moench

*Methodus:* 647 (1794).

## REMARKS

The basionym is *M. mensaria* Rumph. (*Rumphius* 1747: 131). *Musa ×paradisiaca* L. is given as a synonym. According to the *Code* (McNeill *et al.* 2006: Art. 7.5) such a superfluous illegitimate name is automatically typified by the type of the name which ought to have been adopted under the *Code*.

260. *Musa minor* Nakai

*Bulletin of the Tokyo Science Museum* 22: 18 (1948).

## REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art. 36.1).

261. *Musa mirabilis* Nakai

*Bulletin of the Tokyo Science Museum* 22: 17 (1948).

## REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art. 36.1).

262. *Musa monticola* M.Hotta

*Occasional Papers, Kagoshima University Research Center for the South Pacific* 16: 73 (1989).

## REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art. 36.1).

263. *Musa oleracea* Vieill.

*Annales des Sciences naturelles*, sér. 4, 16: 46 (1862).

*Musa sapientum* L. var. *oleracea* (Vieill.) Baker, *Annals of Botany* (Oxford) 7: 212 (1893); *Musa ×paradisiaca* L. subsp. *sapientum* (L.) Kuntze var. *oleracea* (Vieill.) K.Schum., in Engler, *Das Pflanzenreich* IV.45: 20 (1900).

## REMARKS

No type was indicated in the “diagnosis”. The article (Vieillard 1862) treats usage of vascular plants in New Caledonia, without the intention of describing new taxa. The name should be considered as illegitimate (McNeill *et al.* 2006: Art 32.3.). The name has not been used by botanists.

264. *Musa orientum* B. Lady-Finger

in Gillet, *L'Agronomie tropicale* 1: 29 (1909).

## REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art. 32.1). The diagnosis merely refers to ornamental value, and is thus also invalid according to the *Code* (McNeill *et al.* 2006: Art. 32.3). Gillet (1909) further mentions that there are two varieties, but he did not give Latin nor Latinized names.

265. *Musa ornata-rosea* J.Gillet

*L'Agronomie tropicale* 1: 29 (1909).

## REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art. 32.1). The diagnosis merely refers to ornamental value, and is thus also invalid according to the *Code* (McNeill *et al.* 2006: Art. 32.3.).

266. *Musa ornata* Roxb. var. *normalis* Kuntze

*Revisio generum plantarum vascularium omnium atque cellularium multarum secundum leges nomenclaturae internationales cum enumeratione plantarum exoticarum in itinere mundi collectarum* 2: 692 (1891).

## REMARKS

According to the *Code* (McNeill *et al.* 2006: Art. 24.3) names with final epithets are invalid.

267. *Musa pallida* Nakai

*Bulletin of the Tokyo Science Museum* 22: 14 (1948).

REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art 36.1).

268. *Musa ×paradisiaca* L.  
subsp. *normalis* Kuntze

*Revisio generum plantarum vascularium omnium atque cellularium multarum secundum leges nomenclaturae internationales cum enumeratione plantarum exoticarum in itinere mundi collectarum* 2: 692 (1891).

REMARKS

According to the *Code* (McNeill *et al.* 2006: Art. 24.3), names such names with final epithets are illegitimate.

269. *Musa pigmaea* M.Hotta

*Occasional Papers, Kagoshima University Research Center for the South Pacific* 16: 73 (1989).

REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art 36.1).

270. *Musa polycarpa* Nakai

*Bulletin of the Tokyo Science Museum* 22: 13 (1948).

REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art 36.1).

271. *Musa prematura* Nakai

*Bulletin of the Tokyo Science Museum* 22: 16 (1948).

REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art 36.1).

272. *Musa rectispica* Nakai

*Bulletin of the Tokyo Science Museum* 22: 9 (1948).

REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art 36.1).

273. *Musa rhinozerotis* Kurz

*Journal of Agricultural and Horticultural Society of India, Nova Series V:* 164 (1877).

REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art. 32.1). The name is merely presented in a key without proper diagnosis.

274. *Musa rhodoclamys* Gentil

*Liste des plantes cultivées dans les serres chaudes et coloniales du Jardin botanique de l'État à Bruxelles:* 125 (1907).

REMARKS

Since there is no description, the name is illegitimate (McNeill *et al.* 2006: Art. 32.1).

275. *Musa riperti* A.Chev.

*Exploration botanique de l'Afrique occidentale française* 1: 632 (1920). — Type: Côte d'Ivoire, haut Sassandra, pays des Dyolos, Sommet du Mont Zan, près Zagoué, 18.V.1909, A. J. B. Chevalier 21567 (lecto-, P00439274!, P00439275!, P00439276!, here designated).

REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art. 32.1).

276. *Musa rubra* Steud.

*Nomenclator Botanicus*, ed. 2, 2: 167 (1841).

REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art. 32.1).

277. *Musa rumphiana* Kurz

*Journal of Agricultural and Horticultural Society of India, Nova Series V:* 164 (1877).

REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art. 32.1).

278. *Musa salaccensis* Zoll.

*Systematisches Verzeichniss der im indischen Archipel in den Jahren 1842-1848:* 74 (1854).

## REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art. 32.1). The type sheet should be at BO, but it has disappeared (Nasution 1994: 32). It was collected at "Indonesia, Sumatra/Java, Mt. Salak, Tschau Sole [Sunda], H. Zollinger" (Nasution 1993: 17).

279. *Musa salaccensis* Nasution

*InfoMusa* 2: 17 (1993).

## REMARKS

The name is illegitimate, since there is no Latin description (McNeill *et al.* 2006: Art. 36.1).

280. *Musa salaccensis* Nasution

*Journal Biologi Indonesia* 1: 32 (1994).

## REMARKS

The name is illegitimate, since there is no Latin description (McNeill *et al.* 2006: Art. 36.1). A Sumatran and Javan taxon would appear to exist (Nasution 1993, 1994), but has not been properly described.

281. *Musa sapidisiciaca* K.C.Jacob

*Madras Bananas. A Monograph:* 11 (1952).

## REMARKS

This is a nomen superfluous (McNeill *et al.* 2006: Art. 7.5), as it combines two names, *M. paradisiaca* L. and *M. sapientum* L., a hybrid and a cultivar, in one entity.

282. *Musa sapientum* L. var. *gambicola* A.Chev.

*Exploration botanique de l'Afrique occidentale française* 1: 632 (1920). — Type: Guinea, Sources de la Gambie, IV.1905, A. J. B. Chevalier (lecto-, P00439277!, here designated).

## REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art. 32.1).

283. *Musa seemanii* F.Muell., nom. illeg. superfl.

*Fragmenta Phytographiae Australiae* 9: 190 (1875).

## REMARKS

The name is homotypic with *M. uranoscopos* Seem., which is an earlier synonym of *M. uranoscopos* Lour. Von Mueller (1875) invented a new name for *M. uranoscopos* Seem., which is illegitimate (McNeill *et al.* 2006: Art. 52), as he was aware of *M. uranoscopos* Rumph., which is, albeit a pre-Linnean name, an available name. There is a sheet at K!, with an annotation "*M. seemanii* sp. n.". The collection originated from Fiji.

284. *Musa simiarum* Rumph. var. *culta* Kurz

*Journal of Agricultural and Horticultural Society of India* 14: 298 (1867).

## REMARKS

The name merely refers to economic value, and is thus invalid according to the *Code* (McNeill *et al.* 2006: Art. 32.1), and is described as a variety of a pre-Linnean name (McNeill *et al.* 2006: Art. 7.7).

285. *Musa simiarum* Rumph. var. *sylvestris* Kurz

*Journal of Agricultural and Horticultural Society of India* 14: 298 (1867).

## REMARKS

The name is described as a variety of a pre-Linnean name, which is illegitimate (McNeill *et al.* 2006: Art. 7.7).

286. *Musa simiarum* Rumph. var. *violacea* Kurz

*Journal of Agricultural and Horticultural Society of India* 14: 297 (1867).

## REMARKS

The name is described as a variety of a pre-Linnean name, which is illegitimate (McNeill *et al.* 2006: Art. 7.7).

287. *Musa sinensis* Sagot ex Baker

*Annals of Botany* (Oxford) 7: 209 (1893).

#### REMARKS

The name is illegitimate, since there is no description (McNeill *et al.* 2006: Art. 32.1). Further, it is most obviously a typing error based on *M. chinensis* Sweet ex Sagot (nom. illeg.) (Sweet 1830: 596).

#### 288. *Musa sundaica* Nakai

*Bulletin of the Tokyo Science Museum* 22: 14 (1948).

#### REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art 36.1).

#### 289. *Musa swarnaphalya* Uma, Sathiamoorthy & Durai

*Banana. Indian Genetic Resources and Catalogue:* 24 (2005).

#### REMARKS

Since there is no description, the name is illegitimate (McNeill *et al.* 2006: Art. 32.1.).

#### 290. *Musa trichocarpa* Nakai

*Bulletin of the Tokyo Science Museum* 22: 13 (1948).

#### REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art 36.1).

#### 291. *Musa uranoscopos* Lour., nom. illeg. superfl.

*Flora Cochinchinensis:* 645 (1790).

#### REMARKS

In his diagnosis Loureiro (1790) wrote: “quae *Musa troglodytarum* Lin. sp. 3”, meaning “this is *Musa troglodytarum* of Linnaeus sp. 3”. Apparently Loureiro did not like the name *M. troglodytarum* L. (“banana of the cave-dwellers”), and rehabilitated *M. uranoscopos* Rumph. (*uranoscopos* “star-gazing”; Rumphius 1747: 137). According to the *Code* (McNeill *et al.* 2006: Art. 7.5) such a superfluous illegitimate name is automatically typified by the type of the name which ought to have been adopted

under the *Code*, as Loureiro did not designated his own specimen as a “type”. Liu *et al.* (2002) also stated, that the name *M. uranoscopos* Lour. is not valid. Their reasoning was wrong, however. They refer to the *Code* (McNeill *et al.* 2006: Art. 53.1) dealing with later homonyms. They claimed that according to Loureiro (1793) *M. uranoscopos* Rumph. (Rumphius 1747) is not different from *M. paradisiaca* L. and *M. sapientum* L. However, Loureiro wrote: “Differt. spec. Mus. [Differt speciebus *Musa*] racemo erecto: spathis partialibus sub-bifloris: fructu compresso, polyspermo”, meaning “differs from [other] *Musa* species by the erect raceme, by the partial [secondary?] mostly 2-flowered spathae and by the compressed, multi-seeded fruit”, and “At *M. paradisiaca* & *M. sapientum* inter se species non differunt, cum earum notae non verificantur, nec meliores invenio in tota *Musa cliffortiana*, quamvis amplissima”, meaning “but *M. paradisiaca* and *M. sapientum* does not differ from each others, as their distinguishing characters cannot be confirmed, I prefer to unite these as in a single broadly circumscribed species *M. cliffortiana*”. According to Stafleu & Cowan (1981) the second part of *Flora Cochinchinensis* was published in 1793.

#### 292. *Musa uranoscopos* Colla

*Memorie della Accademia delle Scienze di Torino* 25: 384 (1820). — Type: Rumphius (1747), *Herbarium Amboinense* 5: t. 61 fig. 2 (lecto-, here designated).

ISONYMS. — *Musa uranoscopos* Miq., *Flora Indiae Batavae* 3: 589 (1855); *Musa uranoscopos* Seem., *Flora Vitiensis* 290 (1868). All combinations are based on *M. uranoscopos* Rumph.

#### REMARKS

The diagnosis by Colla is based on Rumphius’ (1747: 137, t. 61 fig. 2). That is the lectotype of *M. troglodytarum* L. (1767) also, which name antedates *M. uranoscopos* Colla (1820).

#### 293. *Musa uranoscopos* Miq.

*Flora Indiae Batavae* 3: 589 (1855). — Type: Rumphius, *Herbarium Amboinense* 5: t. 61 fig. 2 (1747) (lecto-, here designated).

## REMARKS

The diagnosis by Colla is essentially based on Rumphius' (1747: 137, t. 61 fig. 2). That is the lectotype of *M. troglodytarum* L. (1767) also, which name antedates *M. uranoscopos* Miq. (1855).

294. *Musa uranoscopos* Seem.

*Flora Vitiensis*: 290 (1868). — Type: Rumphius, *Herbarium Amboinense* 5: t. 61 fig. 2 (1747) (lecto-, here designated).

## REMARKS

The diagnosis by Colla is essentially based on Rumphius' (1747: 137, t. 61 fig. 2). That is the lectotype of *M. troglodytarum* L. (1767) also, which name antedates *M. uranoscopos* Seem. (1868).

295. *Musa zebrina* Van Houtte f. *immaculata* Nakai

*Bulletin of the Tokyo Science Museum* 22: 15 (1948).

## REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art. 36.1).

296. *Musa zebrina* Van Houtte f. *typica* Backer

*Flora van Java* 3: 136 (1924).

## REMARKS

According to the *Code* (McNeill *et al.* 2006: Art. 24.3) the names with such final epithets are illegitimate.

297. *Musa zebrina* Van Houtte var. *culta* Nakai

*Bulletin of the Tokyo Science Museum* 22: 15 (1948).

## REMARKS

Since there is no Latin description, the name is illegitimate (McNeill *et al.* 2006: Art 36.1).

## NAMES PUBLISHED BY FRANCISCO MANUEL BLANCO IN 1837

Blanco (1837) provided 17 banana names as varieties of *Musa ×paradisiaca* L., which probably represent

"cultivars" with perhaps taxonomic significance considering banana cultivars. The names are only listed here with synonyms. Mostly nothing is known about the herbarium and types of Blanco, some specimens are at MA and FI (Stafleu & Cowan 1976). As there is no original material, the meaning of the names remains unresolved. As varieties of *M. ×paradisiaca* the names should be interpreted as cultivars.

*Musa ×paradisiaca* L. [var.] *cinerea* Blanco, *Flora de Filipinas*: 250 (1837).

*Musa sapientum* L. var. *cinerea* (Blanco) N.G. Teodoro, *The Philippine Journal of Science* 10: 397 (1915).

*Musa ×paradisiaca* L. [var.] *compressa* Blanco, *Flora de Filipinas*: 240 (1837).

*Musa sapientum* L. var. *compressa* (Blanco) N.G. Teodoro, *The Philippine Journal of Science* 10: 408 (1915).

*Musa ×paradisiaca* L. [var.] *errans* Blanco, *Flora de Filipinas*: 247 (1837).

*Musa errans* (Blanco) N.G. Teodoro, *The Philippine Journal of Science* 10: 390 (1915); *Musa acuminata* Colla subsp. *errans* (Blanco) R. V. Valmayor, *The Philippine Agriculture Scientist* 84: 328 (2001).

*Musa ×paradisiaca* L. [var.] *glaberrima* Blanco, *Flora de Filipinas*: 245 (1837).

*Musa sapientum* L. var. *glaberrima* (Blanco) N.G. Teodoro, *The Philippine Journal of Science* 10: 399 (1915).

*Musa ×paradisiaca* L. [var.] *glaucia* Blanco, *Flora de Filipinas*: 250 (1837).

*Musa sapientum* L. var. *glaucia* (Blanco) N.G. Teodoro, *The Philippine Journal of Science* 10: 243 (1915).

*Musa ×paradisiaca* L. [var.] *lacatan* Blanco, *Flora de Filipinas*: 240 (1837).

*Musa sapientum* L. var. *lacatan* (Blanco) N.G. Teodoro, *The Philippine Journal of Science* 10: 405 (1915).

*Musa ×paradisiaca* L. [var.] *longa* Blanco, *Flora de Filipinas*: 245 (1837).

*Musa sapientum* L. var. *longa* (Blanco) N.G. Teodoro, *The Philippine Journal of Science* 10: 407 (1915).

*Musa ×paradisiaca* L. [var.] *magna* Blanco, *Flora de Filipinas*: 244 (1837).

*Musa ×paradisiaca* L. [var.] *maxima* Blanco, *Flora de Filipinas*: 245 (1837).

*Musa ×paradisiaca* L. [var.] *subrubea* Blanco, *Flora de Filipinas*: 245 (1837).

*Musa ×paradisiaca* L. [var.] *pumila* Blanco, *Flora de Filipinas*: 244 (1837).

*Musa cavendishii* Lamb. var. *pumila* (Blanco) N.G. Teodoro, *The Philippine Journal of Science* 10: 412 (1915); *Musa sapientum* L. var. *pumila* (Blanco) Merr., *An Enumeration of Philippine Flowering Plants* 1 (2): 225 (1922).

*Musa ×paradisiaca* L. [var.] *suaveolens* Blanco, *Flora de Filipinas*: 244 (1837).

*Musa sapientum* L. var. *suaveolens* (Blanco) N.G. Teodoro,

- The Philippine Journal of Science* 10: 400 (1915).  
*Musa ×paradisiaca* L. [var.] *ternatensis* Blanco, *Flora de Philippinas*: 243 (1837).  
*Musa sapientum* L. var. *ternatensis* (Blanco) N.G. Teodoro, *The Philippine Journal of Science* 10: 404. 1915.  
*Musa ×paradisiaca* L. [var.] *tombak* Blanco, *Flora de Philippinas*: 246 (1837).  
*Musa sapientum* L. var. *tombak* (Blanco) N.G. Teodoro, *The Philippine Journal of Science* 10: 407 (1915).  
*Musa ×paradisiaca* L. [var.] *ulnaris* Blanco, *Flora de Philippinas*: 246 (1837).  
*Musa ×paradisiaca* L. [var.] *violacea* Blanco, *Flora de Philippinas*: 245 (1837).  
*Musa sapientum* L. var. *violacea* (Blanco) N.G. Teodoro, *The Philippine Journal of Science* 10: 398 (1915).  
*Musa troglodytarum* L. var. *dolioliformis* Blanco, *Flora de Philippinas*: 855: (1837).

#### NAMES PUBLISHED BY PAUL HUBERT IN 1907

The five names by Hubert (1907) concern cultivated bananas “bananiers à fruits comestibles”, and the descriptions are either lacking completely or are mostly poor. No collection information was given.

When there is no description, the names are invalid (McNeill *et al.* 2006: Art 36.1), as when the diagnosis refers to edibility (McNeill *et al.* 2006: Art. 32.3.). Thus the names are only listed.

- Musa aiori* Hubert, *Le Bananier*: 12 (1907).  
*Musa sariboe* Hubert, *Le Bananier*: 12 (1907). A banana cultivated at Java (Hubert 1907: 12).  
*Musa harmandii* Hubert, *Le Bananier*: 14 (1907). A banana cultivated at Tahiti (Hubert 1907: 33).  
*Musa pierrei* Hubert, *Le Bananier*: 14 (1907). A cultivated banana in eastern Polynesian islands (Hubert 1907: 32).  
*Musa raoulpii* Hubert, *Le Bananier*: 20 (1907). A banana with non-edible fruits of Ethiopia (*Ensete*) (Hubert 1907: 20).

#### VARIETAL NAMES PUBLISHED BY JUSTIN GILLET IN 1909

Gillet (1909) described 19 varieties of *Musa paradisiaca* L., seven varieties of *M. paradisiaca rumphiana* [rankless] Kurz, and two varieties of *M. sapientum* L., altogether 28 new names. These are only listed here, as the names are illegitimate, since there are no descriptions (McNeill *et al.* 2006: Art. 32.1). The diagnoses merely refer to ornamental value, and

are thus also invalid according to the *Code* (McNeill *et al.* 2006: Art. 32.3). De Wildeman (1909: 243) listed most of the varietal names of *M. ×paradisiaca* and *M. sapientum* by Gillet (1909), and repeated the information in his treatment of the cultivated plants in tropical Africa.

- Musa ×paradisiaca* var. *dongila*, *L'Agronomie tropicale* 1: 29 (1909).  
*Musa ×paradisiaca* var. *dombe*, *L'Agronomie tropicale* 1: 29 (1909).  
*Musa ×paradisiaca* var. *kanga mossi*, *L'Agronomie tropicale* 1: 29 (1909).  
*Musa ×paradisiaca* var. *kikubi*, *L'Agronomie tropicale* 1: 29 (1909).  
*Musa ×paradisiaca* var. *kiela moko*, *L'Agronomie tropicale* 1: 29 (1909).  
*Musa ×paradisiaca* var. *kimvunga*, *L'Agronomie tropicale* 1: 29 (1909).  
*Musa ×paradisiaca* var. *lembu tufia*, *L'Agronomie tropicale* 1: 29 (1909).  
*Musa ×paradisiaca* var. *maculata*, *L'Agronomie tropicale* 1: 29 (1909).  
*Musa ×paradisiaca* var. *makela*, *L'Agronomie tropicale* 1: 29 (1909).  
*Musa ×paradisiaca* var. *mazinga*, *L'Agronomie tropicale* 1: 29 (1909).  
*Musa ×paradisiaca* var. *myela-fuku*, *L'Agronomie tropicale* 1: 29 (1909).  
*Musa ×paradisiaca* var. *n'isi*, *L'Agronomie tropicale* 1: 30 (1909).  
*Musa ×paradisiaca* var. *n'zaó*, *L'Agronomie tropicale* 1: 30 (1909).  
*Musa ×paradisiaca* var. *pongo inene*, *L'Agronomie tropicale* 1: 30 (1909).  
*Musa ×paradisiaca* var. *pongo tia*, *L'Agronomie tropicale* 1: 30 (1909).  
*Musa ×paradisiaca* var. *sakala*, *L'Agronomie tropicale* 1: 30 (1909).  
*Musa ×paradisiaca* var. *twele-tafuta*, *L'Agronomie tropicale* 1: 31 (1909).  
*Musa ×paradisiaca* var. *vokolo*, *L'Agronomie tropicale* 1: 31 (1909).  
*Musa ×paradisiaca* var. *zingano*, *L'Agronomie tropicale* 1: 31 (1909).  
*Musa ×paradisiaca* [rankless] *rumphiana* var. *argentea*, *L'Agronomie tropicale* 1: 32 (1909).  
*Musa ×paradisiaca* var. *argentea* (J. Gillet) De Wild., *Annales du Musée colonial de Marseille* 7: 245 (1909).  
*Musa ×paradisiaca* [rankless] *rumphiana* var. *indica*, *L'Agronomie tropicale* 1: 32 (1909).  
*Musa ×paradisiaca* [rankless] *rumphiana* var. *palata*, *L'Agronomie tropicale* 1: 32 (1909).  
*Musa ×paradisiaca* var. *palata* (J. Gillet) De Wild., *Annales du Musée colonial de Marseille* 7: 245 (1909).  
*Musa ×paradisiaca* [rankless] *rumphiana* var. *palata saô*

- thome*, *L'Agronomie tropicale* 1: 32 (1909).  
*Musa ×paradisiaca* [rankless] *rumphiana* var. *pisang ambon*, *L'Agronomie tropicale* 1: 32 (1909).  
*Musa ×paradisiaca* [rankless] *rumphiana* var. *pisang radjah*, *L'Agronomie tropicale* 1: 32 (1909).  
*Musa ×paradisiaca* [rankless] *rumphiana* var. *pisang siam*, *L'Agronomie tropicale* 1: 32 (1909).  
*Musa sapientum* var. *matiba inene*, *L'Agronomie tropicale* 1: 32 (1909).  
*Musa sapientum* var. *matiba siduelo*, *L'Agronomie tropicale* 1: 32 (1909).

#### NAMES PUBLISHED BY NICANOR GONZALO TEODORO Y GREGORIO IN 1915

Teodoro (1915) provided 10 banana names as variants of *M. sapientum* L., thus having possible taxonomic significance considering banana cultivars. The names are only listed here.

- Musa sapientum* L. var. *americana* N.G.Teodoro, *The Philippine Journal of Science* 10: 398, t. 7, figs 6-10 (1915).  
*Musa sapientum* L. var. *binutig* N.G.Teodoro, *The Philippine Journal of Science* 10: 401, t. 10, figs 1-5 (1915).  
*Musa sapientum* L. var. *canara* N.G.Teodoro, *The Philippine Journal of Science* 10: 406, t. 10, figs 6-10 (1915).  
*Musa sapientum* L. var. *cubensis* N.G.Teodoro, *The Philippine Journal of Science* 10: 397, t. 11, figs 6-10 (1915).  
*Musa sapientum* L. var. *daryao* N.G.Teodoro, *The Philippine Journal of Science* 10: 403, t. 8, figs 1-5 (1915).  
*Musa sapientum* L. var. *garangao* N.G.Teodoro, *The Philippine Journal of Science* 10: 401, t. 10, figs 6-10 (1915).  
*Musa sapientum* L. var. *grandis* N.G.Teodoro, *The Philippine Journal of Science* 10: 410, t. 14, figs 1-3 (1915).  
*Musa sapientum* L. var. *inarnibal* N.G.Teodoro, *The Philippine Journal of Science* 10: 406, t. 9, figs 1-5 (1915).  
*Musa sapientum* L. var. *tuldog* N.G.Teodoro, *The Philippine Journal of Science* 10: 407, t. 10, figs 1-5 (1915).  
*Musa sapientum* L. var. *tudlong* N.G.Teodoro, *The Philippine Journal of Science* 10: 402, t. 11, figs 6-10 (1915).

#### THE NAMES PUBLISHED BY EDUARDO QUISUMBING Y ARGÜELLES IN 1919

Quisumbing (1919) provided 17 banana names as varieties of *M. sapientum* L., thus having possible taxonomic significance considering banana cultivars. The names are only listed here. Merrill (1922) refers to the names.

- Musa sapientum* L. var. *angao* Quis., *Philippine Agricultural Review* 12: 58, t. 5, fig. 30 (1919).  
*Musa sapientum* L. var. *baca* Quis., *Philippine Agricultural Review* 12: 51, t. 5, fig. 23 (1919).  
*Musa sapientum* L. var. *canaya* Quis., *Philippine Agricultural Review* 12: 44, t. 4, fig. 18 (1919).  
*Musa sapientum* L. var. *dinalaga* Quis., *Philippine Agricultural Review* 12: 55, t. 5, fig. 31 (1919).  
*Musa sapientum* L. var. *dool* Quis., *Philippine Agricultural Review* 12: 35, t. 4, fig. 6 (1919).  
*Musa sapientum* L. var. *eda* Quis., *Philippine Agricultural Review* 12: 37, t. 4, fig. 9 (1919).  
*Musa sapientum* L. var. *flabellata* Quis., *Philippine Agricultural Review* 12: 66, t. 5, fig. 35 (1919).  
*Musa sapientum* L. var. *galatayan* Quis., *Philippine Agricultural Review* 12: 40, t. 4, fig. 13 (1919).  
*Musa sapientum* L. var. *kinamay* Quis., *Philippine Agricultural Review* 12: 57, t. 5, fig. 32 (1919).  
*Musa sapientum* L. var. *padilat* Quis., *Philippine Agricultural Review* 12: 63, t. 5, fig. 38 (1919).  
*Musa sapientum* L. var. *pamotion* Quis., *Philippine Agricultural Review* 12: 49, t. 5, fig. 21 (1919).  
*Musa sapientum* L. var. *pelipia* Quis., *Philippine Agricultural Review* 12: 42, t. 4, fig. 14 (1919).  
*Musa sapientum* L. var. *principe* Quis., *Philippine Agricultural Review* 12: 50, t. 5, fig. 22 (1919).  
*Musa sapientum* L. var. *putian* Quis., *Philippine Agricultural Review* 12: 36, t. 4, fig. 8 (1919).  
*Musa sapientum* L. var. *raines* Quis., *Philippine Agricultural Review* 12: 55, t. 5, fig. 27 (1919).  
*Musa sapientum* L. var. *sarocsoc* Quis., *Philippine Agricultural Review* 12: 39, t. 4, fig. 11 (1919).  
*Musa sapientum* L. var. *sision* Quis., *Philippine Agricultural Review* 12: 35, t. 4, fig. 7 (1919).

#### NAMES PUBLISHED BY K. CHERIAN JACOB IN 1952

Jacob (1952) described 64 infraspecific taxa of his *M. sapidisiaca*, which are only listed here. *Musa sapidisiaca* is a superfluous name, but the infraspecific names are potentially available if understood. We refer here only to the page number (in parentheses) in the publication (Jacob 1952). Some ecotypes are also named; however, these are illegitimate names, and not listed here.

- Musa sapidisiaca* var. *cavendishii* stat. nov. (39).  
*Musa sapidisiaca* var. *giant governorana* (40).  
*Musa sapidisiaca* var. *peddapachchaaratiana* (42).  
*Musa sapidisiaca* var. *plantaniana* f. *plantaniana* (43).  
*Musa sapidisiaca* var. *plantaniana* f. *kaalietthhaniana* (44).  
*Musa sapidisiaca* var. *plantaniana* f. *elariana* (44).  
*Musa sapidisiaca* var. *plantaniana* f. *kaleiththhaniana* (44).

TABLE 1. — Summary of the *Musa* L. names found in literature. Seven articles are treated separately as the names (145 in total) in these are most ambiguous. *Ensete*, *Heliconia* and 1 *Musella* were first described in genus *Musa*. In parentheses is given the number of typified names of illegitimate and dubious names. The names by De Wildeman (1920) are lectotypified in this article. Those are considered as cultivars.

	Holotype	Lectotype here	Neotype here	Typified before	Nom. illeg.	Dubious/ cultivars	Total
Species	34	38 (4)	2	22	64	16	176
Subspecies	4	1			2		7
Variants	24	22 (15)	1	3	8	9	67
Forms		8 (5)		2	2	1	13
Hybrids				1	1		2
Subtotal	64	69 (24)	3	28	77	26	265 (24)
Cultivars or illegitimate names							
Blanco 1837						17	17
Hubert 1907					5		5
Gillet 1909						28	28
Teodoro 1915						10	10
Quisumbing 1919						17	17
Jacob 1952						64	64
Subtotal					5	136	141
First described as <i>Musa</i>							
<i>Ensete</i>		3					32
<i>Heliconia</i>							1
Subtotal							33
Total							439

*Musa sapidisiciaca* var. *plantaniana* f. *velaththaniana* (45).  
*Musa sapidisiciaca* var. *plantaniana* f. *myndoliana* (45).  
*Musa sapidisiciaca* var. *corniculata* (46).  
*Musa sapidisiciaca* var. *chinganina* f. *chinganina* (47).  
*Musa sapidisiciaca* var. *chinganina* f. *manniyillachinganiana* (48).  
*Musa sapidisiciaca* var. *eththachinganiana* (49).  
*Musa sapidisiciaca* var. *chinaliana* (50).  
*Musa sapidisiciaca* var. *kaiona* (52).  
*Musa sapidisiciaca* var. *kadaliana* (53).  
*Musa sapidisiciaca* var. *suryakadaliana* (55).  
*Musa sapidisiciaca* var. *mattiana* (56).  
*Musa sapidisiciaca* var. *namaraiana* (57).  
*Musa sapidisiciaca* var. *anaiakombiana* (59).  
*Musa sapidisiciaca* var. *karimkadaliana* (60).  
*Musa sapidisiciaca* var. *grosmicheliana* (62).  
*Musa sapidisiciaca* var. *chakkarakeliana* (64).  
*Musa sapidisiciaca* var. *nallachakkarakeliana* (66).  
*Musa sapidisiciaca* var. *karivazhaiana* (67).  
*Musa sapidisiciaca* var. *rubra* f. *rubra* (69).  
*Musa sapidisiciaca* var. *rubra* f. *venkadaliana* (70).  
*Musa sapidisiciaca* var. *sannachenkadaliana* (71).  
*Musa sapidisiciaca* var. *champa* f. *champa* (73).  
*Musa sapidisiciaca* var. *champa* f. *ayirankarasthaliana* (74).  
*Musa sapidisiciaca* var. *suganthiana* (76).  
*Musa sapidisiciaca* var. *neypoovaniiana* (77).

*Musa sapidisiciaca* var. *poovaniana* f. *poovaniana* (79).  
*Musa sapidisiciaca* var. *poovaniana* f. *mottapoovaniana* (80).  
*Musa sapidisiciaca* var. *granulata* (81).  
*Musa sapidisiciaca* var. *kullaniana* (83).  
*Musa sapidisiciaca* var. *nendrapadathiana* (84).  
*Musa sapidisiciaca* var. *pachanadaniana* (86).  
*Musa sapidisiciaca* var. *kaaliana* (87).  
*Musa sapidisiciaca* var. *vannaniana* (89).  
*Musa sapidisiciaca* var. *kapuriana* (92).  
*Musa sapidisiciaca* var. *krishavazhaiana* (94).  
*Musa sapidisiciaca* var. *kunnaniana* (96).  
*Musa sapidisiciaca* var. *venneetukunnaniana* (97).  
*Musa sapidisiciaca* var. *adakkakunnaniana* (99).  
*Musa sapidisiciaca* var. *thaenkunnaniana* f. *thaenkunnaniana* (100).  
*Musa sapidisiciaca* var. *thaenkunnaniana* f. *thattillakunnaniana* (101).  
*Musa sapidisiciaca* var. *peyaniana* (103).  
*Musa sapidisiciaca* var. *peyladiana* f. *peyladiana* (104).  
*Musa sapidisiciaca* var. *peyladiana* f. *mayilvazhaiana* (105).  
*Musa sapidisiciaca* var. *boothibaleiana* (107).  
*Musa sapidisiciaca* var. *kosthabonthana* (108).  
*Musa sapidisiciaca* var. *peykunnaniana* (110).  
*Musa sapidisiciaca* var. *ennabenianana* (111).  
*Musa sapidisiciaca* var. *neymannaniana* (112).  
*Musa sapidisiciaca* var. *venneettumannaniana* (114).

- Musa sapidisica* var. *monthaniana* f. *monthaniana* (115).  
*Musa sapidisica* var. *monthaniana* f. *pachamonthabatheesiana* (117).  
*Musa sapidisica* var. *sambrani* *monthaniana* f. *sambrani* *monthaniana* (118).  
*Musa sapidisica* var. *sambrani* *monthaniana* f. *booditha-montha batheesiana* (120).  
*Musa sapidisica* var. *nallabonthana* f. *nallabonthana* (122).  
*Musa sapidisica* var. *nallabonthana* f. *nallabonthabatheesiana* (123).  
*Musa sapidisica* var. *thella* *bonthana* (125).  
*Musa sapidisica* var. *kuribonthana* (126).  
*Musa sapidisica* var. *kallumonthaniana* (127).

## CONCLUSION

Altogether, 439 *Musa* names, found in the IPNI (International Plant Name index, <http://www.ipni.org>) and literature have been studied by the authors. A summary concerning typified, illegitimate and dubious names is given in Table 1. These include 110 illegitimate names. Of the remaining 329 there are 134 "cultivar" and dubious names. Further, 32 names belong to *Ensete*, *Musella* and *Heliconia* (1). Remaining 162 names include 24 names validly published in De Wildeman (1920), which are "cultivar" or dubious names. Of the remaining 137 names 92 are species, five subspecies, 35 varieties, five forms and one hybrid. Presently we evaluate that there are about 80-90 "good" taxa.

However, as the genus *Musa* is a highly polymorphic genus, some of those dubious names like *M. fehi*, *M. textilis* and *M. tikap* could subsequently represent a good taxa, after further field research has taken place. A most important future goal is to study the taxonomy of *M. textilis* and *M. fehi*. Altogether 157 *Musa* names are now typified.

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