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Panicum maculatum Aubl.: its type and the correct use of *Lasiacis maculata* (Aubl.) Urb. (Poaceae, Paniceae)

Riccardo M. BALDINI
Università degli Studi,
Dipartimento di Biologia Evoluzionistica "Leo Pardi",
& Centro Studi Erbario Tropicale,
via G. La Pira 4, I-50121 Firenze (Italy)
rbaldo@unifi.it

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ABSTRACT
The type of *Panicum maculatum* Aubl. is confirmed here in order to establish the correct application of *Lasiacis maculata* (Aubl.) Urb. The interpretation of the Plumier's plate on which *Panicum maculatum* Aubl. is based confirms that this species cannot be referred to *Lasiacis ligulata* Hitchc. & Chase as reported either by old or recent literature, but to *Lasiacis sorghoidea* (Desv. *in* Ham.) Hitch. & Chase (=*P. sorghoideum* Desv. *in* Ham.). A nomenclatural synopsis for *L. maculata* (Aubl.) Urb. is also provided so as to clarify its nomenclatural framework.

KEY WORDS
Poaceae,
Paniceae,
Panicum maculatum,
Lasiacis,
nomenclature.

RÉSUMÉ
Panicum maculatum *Aubl. : son type et l'utilisation correcte du nom* Lasiacis maculata *(Aubl.) Urb. (Poaceae, Paniceae).*
Le type du *Panicum maculatum* Aubl. est confirmé ici afin d'établir l'application correcte du nom *Lasiacis maculata* (Aubl.) Urb. L'interprétation de la planche de Plumier, sur laquelle se fonde *Panicum maculatum* Aubl., confirme que cette espèce ne peut pas être rapportée à *Lasiacis ligulata* Hitchc. & Chase, comme indiqué dans la littérature ancienne comme récente, mais à *Lasiacis sorghoidea* (Desv. *in* Ham.) Hitchc. & Chase (= *P. sorghoideum* Desv. *in* Ham.). En outre un synopsis de *L. maculata* (Aubl.) Urb. est fourni pour clarifier son histoire nomenclaturale.

MOTS CLÉS
Poaceae,
Paniceae,
Panicum maculatum,
Lasiacis,
nomenclature.

INTRODUCTION

One of the most intriguing nomenclatural and taxonomical problems which passionated many neotropical agrostologists either in the past or in recent times has been represented by *Panicum maculatum* Aubl. Aublet (1775), in his *Histoire des Plantes de la Guiane Françoise*, described *P. maculatum* in a Charles Plumier's manuscript endorsed by a colour plate drawn by himself from a plant he saw in Martinique. The description given by Aublet (1775) is very scanty and without correct interpretation of C. Plumier's manuscript and table is impossible to identify *P. maculatum* Aubl. As Hitchcock (*in* Hitchcock & Chase 1910) established the genus *Lasiacis* (Griseb.) Hitchc., from the sectio *Lasiacis* Griseb. (Grisebach 1864) within the genus *Panicum* L., *Panicum maculatum* Aubl. became a doubtful name within *Lasiacis* (Griseb.) Hitchc. Hitchcock himself (1920) attributes *P. maculatum* Aubl. to *Lasiacis ligulata* Hitch. & Chase (Hitchcock & Chase 1917) on the basis of the description given by Schultes *in* Roemer & Schultes (1824) resulting on material collected by C. Bertero (L!, TO!) in the West Indies improperly referred to "*P. arborescens* L." and "*P. latifolium* L.".

As a matter of fact many botanists in the past (e.g., Schlechtendal & Chamisso 1833) and in recent years (e.g., Lourteig 1983) misunderstood *P. maculatum* Aubl. assigning it to the two most widespread *Lasiacis* species present between Caribbean and South American areas, i.e. *Lasiacis ligulata* Hitchc. & Chase and *Lasiacis sorghoidea* (Desv. *in* Ham.) Hitchc. & Chase.

Urban (1919) considered *P. maculatum* Aubl. as an acceptable name and proposed (Urban 1921) the new combination *Lasiacis maculata* (Aubl.) Urb. (= *L. sorghoidea* (Desv. *in* Ham.) Hitchc. & Chase), but in more recent important contributions to the neotropical grass taxonomy and floristics (Davidse 1978, 2003; Judziewicz 1990; W3Tropicos Database 2004), *P. maculatum* Aubl. is still considered as a doubtful name and consequently of uncertain application. On the other hand, in recent years other authors like Adams (1972), Fournet (1978), Lourteig (1983) and Tovar (1993) reported *P. maculatum* Aubl. as the accepted name within *Lasiacis* (Griseb.) Hitchc., under the combination *L. maculata* (Aubl.) Urb., considering in its synonymy *L. sorghoidea* (Desv. in Ham.) Hitchc. & Chase and/or *L. ligulata* Hitchc. & Chase.

However, what is reported by Emmet Judziewicz about *L. maculata* (Aubl.) Urb. (Judziewicz 1990: 303) is noteworthy: "Aublet's description is too brief to permit identification and no type was cited, only the illustration in Plumier's unpublished manuscript 4, t. 82 (not seen), which must serve as the type. [...]. Until the plate can be examined, *L. maculata* must be regarded as a name of uncertain application". Meanwhile, Davidse (2003: 280) is of the same opinion, without any specific reference to the Plumier's plate, that *L. maculata* (Aubl.) Urb. can be applied to "either *Lasiacis sorghoidea* (Desv. ex Ham.) Hitchc. & Chase or *L. ligulata* Hitchc. & Chase, but until the type can be examined, its application remains uncertain".

Owing to the conflictual opinions, the scope of this contribution is to definitevely elucidate the identification and consequent application of *P. maculatum* Aubl. and the correct use of *Lasiacis maculata* (Aubl.) Urb.

THE TYPE OF *PANICUM MACULATUM* AUBL.: THE ULTIMATE ACT OF A NEVER ENDED DEBATE?

As pointed out by Lourteig (1983) the Aublet's descriptions cannot be well interpreted because the names are based on pre-linnean publications and without careful investigation of them we are not able to define either their nomenclature or taxonomy leading to mistakes and misconceptions in their current identification.

Aublet (1775: 51) provides a brief description and a polynomial in the protologue of *P. maculatum* from C. Plumier's unpublished manuscript as follows:

"5. PANICUM (*maculatum*) scandens, caule arundinaceo.
Milium arundinaceum, scandens & maculatum. Plum. *Mss. 4. tab. 82*"

Jean Baptiste Christophe Fusée Aublet (1720-1778), during his stay of two years (1762-1764) in

French Guyana, made many drawings and preserved the specimens which constituted the basis of his four volumes *Histoire des plantes de la Guiane Françoise*. The Aublet's main herbarium is kept in part at BM and P (Stafleu & Cowan 1976), and after many attempts in the past (see Davidse 1978) and recently by us, it was not possible to trace any specimen to be considered as the type of *P. maculatum* Aubl. Anyway, a possible endeavor in order to find the type of *P. maculatum* Aubl. can be done taking into consideration the Plumier's description and table both cited in the Aublet's protologue.

According to Pennell (1945), Howard (1975), Stafleu & Cowan (1983), Rankin Rodríguez & Greuter (1999) and McClellan & Regourd (2000), Charles Plumier (1646-1704) did not collect plants during his stay in the Caribbean area between 1689 and 1695 but instead made drawings and descriptions of the plants he saw in the field, even if some specimens of Pteridophytes recently have been discovered in the Vaillant, Danty d'Isnard and Jussieu herbaria at P (Cremers & Aupic 2007). A Plumier's collaborator, Joseph Donat Surian, collected some specimens that from his return to Paris in 1691 have been kept at P (Pennell 1945; Rankin Rodríguez & Greuter 1999) but they cannot be considered as type material which Plumier's names are based, except in several cases as suggested by Stafleu & Cowan (1983: 301). In the Surian's herbarium at P no specimen has been found under *P. maculatum* Aubl. Furthermore Stafleu & Cowan (1983: 301) suggest that "The types of Plumier's American plants are his original drawings", so that the original Plumier's plate cited by Aublet (1775) may be considered the type for *P. maculatum* Aubl.

At the Bibliothèque centrale du Muséum national d'Histoire naturelle in Paris where the original unpublished Plumier's manuscripts and the related drawings of Caribbean plants are preserved in a set of 8 volumes under the common title "*Botanicon americanum*" (cf. also Rankin Rodríguez & Greuter 1999), we have found the manuscript cited in the Aublet's protologue including the related beautiful colour plate n. 82 (Figs 1; 2).

The description (Fig. 1) is in accordance with the related plate and is as follows:

"*Radicem habet hac planta ex innumeris fibris compactam crassiusculis, longissinis nigricantibus et tenuissimis villis et ruttescentibus capillaris.*

Eius summum caput plurimas producet arundines seu arundinaceos culmos digitum minimum crassos, fistulosos, longisque intervallis nodosos rados variegatos, ac tandem membranaceis inuductis usque ad medium internodium contectos.

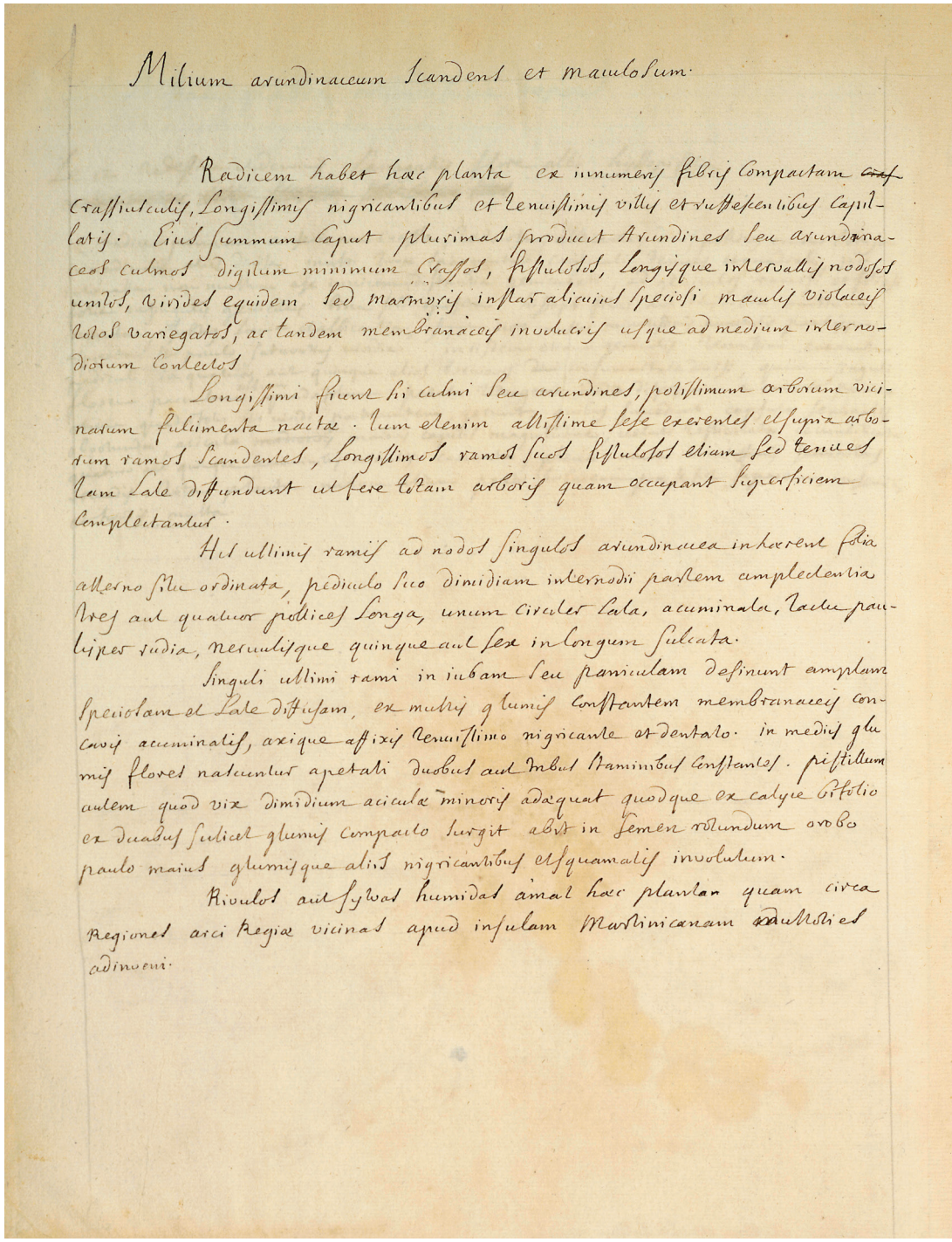
Longissimi fiunt sive culmi seu arundines, potissimum arborum vicinarum filamenta nactae. Cum et enim altissime sese execrentes et supra arborum ramos scandentes, longissimos ramos suos fistulosos etiam sed tenues cum late diffundunt ut fere totam arboris quam occupant superficiem complectantur.

His ultimis ramis ad nodos singulos arundinacea inhaerent folia alterno fila ordinata, pediculo seco dimidiam internodii partem amplectentia tres aut quator pollices longa, unum circuler lata, acuminata, caule paulisper rudia, neruulisque quinque aut sex in longum sulcata.

Singuli ultimi rami in iubam seu paniculam definunt ampliam speciosam et late diffusam ex multis glumis constantem membranaceis concavis acuminatis, axique affixis tenuissimo nigricante et dentato in mediis glumis flores nascuntur apetali duobus aut tribus staminibus constantes. Pistillum autem quod vix dimidium acicula minoris adaquat quodque ex calyce bifolco ex duabus sulicet glumis compacto surgit a bis in semen rotundum orobo paulo maius glumisque aliis nigricantibus et squamatis involutum.

Rivulos aut sylvas humidas amat hac planta quam circa regiones arci Regiae vicinas apud insulam Martinicanam (un?)dies adinveni."

The plate (Fig. 2) consists of a watercolour illustration of lignified, maculate stem base, median and a terminal culm; the latter with an open, large and prominent panicle with ascending and spreading branches, and the spikelets in oblique position; sheath with acuminate apex and not evident ligule which is supposed to be inconspicous. The polynomial clearly related to *P. maculatum* Aubl. at the bottom of the plate is in Plumier's handwriting. An additional sketch of a panicle possibly attributable to *Olyra* sp. is at the bottom on the right side of the plate and a single floret belonging to the main subject is sketched below on the right side of the plate.



Milium arundinaceum scandens et maculosum.

Radicem habet hæc planta ex innumeris fibris compactam ~~cras~~ crassiusculis, longissimis nigricantibus et tenuissimis villis et ruffescentibus capillatis. Eius summum caput plurimas producit Arundines seu arundinaceos culmos digitum minimum crassos, fistulosos, longisque intervallis nodosos unitos, virides equidem sed marmoris instar alicuius speciosi maculis violaceis totos variegatos, ac tandem membranaceis involucris usque ad medium internodiorum contectos

Longissimi fiunt hi culmi seu arundines, potissimum arborum vicinarum fulcimenta nactæ. Tum etenim altissime sese exerentes et supra arborum ramos scandentes, longissimos ramos suos fistulosos etiam sed tenues tam late diffundunt ut fere totam arboris quam occupant superficiem complectantur.

His ultimis ramis ad nodos singulos arundinacea inhærent folia alterno situ ordinata, pediculo suo dimidiam internodii partem amplectentia tres aut quatuor pollices longa, unum circiter lata, acuminata, tactu paulisper rudia, nervulisque quinque aut sex in longum sulcata.

Singuli ultimi rami in iubam seu paniculam desinunt amplam speciosam et late diffusam, ex multis glumis constantem membranaceis concavis acuminatis, axique affixis tenuissimo nigricante et dentato. in mediis glumis flores nascuntur apetali duobus aut tribus staminibus constantes. pistillum autem quod vix dimidium aciculæ minoris adæquat quodque ex calyce bifolio ex duabus scilicet glumis compacto surgit abit in semen rotundum orobo paulo maius glumisque aliis nigricantibus et squamatis involutum.

Rivulos aut sylvas humidas amat hæc planta quam circa regiones arci regiæ vicinas apud insulam Martinicanam multoties adinveni.

Fig. 1. — C. Plumier's unpublished manuscript of "*Milium arundinaceum scandens et maculatum*": manuscript 4 in C. Plumier's handwriting. Photo Bibliothèque centrale du Muséum national d'Histoire naturelle, Paris.



Fig. 2. — C. Plumier's watercolour plate 82 related to manuscript 4, holotype of *Panicum maculatum* Aubl. (= *Lasiacis maculata* (Aubl.) Urb.). Photo Bibliothèque centrale du Muséum national d'Histoire naturelle, Paris.

Urban (1919: 149) in his comment on *P. maculatum* Aubl., maintains that the Plumier's plate resembles two similar species like *P. sorghoideum* Desv. *in* Ham. (Hamilton 1825) and *P. sloanei* Griseb. (Grisebach 1864), opting for *P. sorghoideum* (= *L. sorghoidea* (Desv. *in* Ham.) Hitchc. & Chase) a common species present in Martinique where the plant sketched by Plumier was found instead of *L. sloanei* that seems not to be present in Martinique, as confirmed later also by Davidse (1978) and Fournet (1978) and after a consistent check in BM and P herbaria by us. The presence of *L. sloanei* in Martinique reported by Gould (1979) seems not to be supported by any herbarium specimen.

In contrast, Davidse (1978) hypothesizes that *P. maculatum* Aubl. could be referred to *Lasiacis ligulata* Hitchc. & Chase because: "He [Urban 1919] further stated that Plumier *probably* (my emphasis) described a plant from Martinique, and since *L. sloanei* did not occur there, the name must apply to *L. sorghoidea*. However, Aublet's description almost certainly was based on a plant from the Guianas. Since *L. ligulata* is the most common species in this region, the name may actually refer to *L. ligulata*." (Davidse 1978: 1233, 1234). Both unusual and provisional postulated interpretations are difficult to accept.

Considering Plumier's description and colour plate, we can confirm that the species in question must be referred to *Panicum sorghoideum* Desv. *in* Ham., actually recognised under *Lasiacis sorghoidea* (Desv. *in* Ham.) Hitchc. & Chase as firstly suggested by Urban (1919, 1921) and later reported in Adams (1972), Fournet (1978) and Tovar (1993).

Lourteig (1983) confirmed the nomenclatural validity of *P. maculatum* Aubl., and the correct application of *Lasiacis maculata* (Aubl.) Urb., but she gave an incorrect taxonomical interpretation considering erroneously as synonyms both *L. sorghoidea* (Desv. *in* Ham.) Hitchc. & Chase and *L. ligulata* Hitchc. & Chase, which are definitively recognized as two different species (cf. Hitchcock 1920, 1922, 1927; Lemée 1955; Davidse 1978, 2003; Smith *et al*. 1982; Renvoize 1984, 1998; Judziewicz 1990; Killeen 1990; Tovar 1993; Garcia Santos & Takeo Sano 2001; Funk *et al*. 2007).

Lasiacis sorghoidea is a robust plant, frequently with maculate stem base, an inconspicuous ligule (0.3-1.5 mm long; up to 3 mm long only in Southern American populations (!) and an open, occasionally curved, dense inflorescence.

In contrast, *L. sloanei* Griseb. presents a ligule up to 1 mm long, and slender culms with open, scarcely dense inflorescences.

On the other hand, *L. ligulata* Hitchc. & Chase is characterized by a very long ligule up to 3-4(-5) mm long, with a scarcely dense inflorescence, where the spikes are normally curved. As a matter of fact, in Plumier's description no reference is made to the presence of a conspicuous ligule, and this led us to exclude any relationship with *L. ligulata* Hitchc. & Chase, as suggested by Davidse (1978).

In conclusion we assume Plumier's unpublished colour plate 82 (Fig. 2) as the holotype of *Panicum maculatum* Aubl. In order to endorse the interpretation of the unpublished Plumier's plate, we designate an epitype specimen according to Art. 9.7 of the *International Code of Botanical Nomenclature* (McNeill *et al.* 2006) as follows:

Lasiacis maculata (Aubl.) Urb.

Symbolae Antillanae 8: 751. (1921). — *Panicum maculatum* Aubl., *Histoire des Plantes de La Guiane Françoise* 1: 51 (1775). — Type: (unpublished iconography from a plant of Martinique) "*Milium arundinaceum scandens et maculatum*" in Plumier's *Botanicon americanum* MS 4!: t. 82 (holo-, Bibliothèque centrale du Muséum national d'Histoire naturelle!) (Figs 1; 2). — Martinique, environs de St. Pierre, Mai 1853, *Belanger 390* (epi-, FI-Webb! [Fig. 3], here designated; isoepi-, G!, P! see also http://www.mnhn.fr/base/sonnerat.html).

Panicum lanatum Sw., *Prodromus descriptionum Vegetabilium maximam partem incognitorum quae sub Itinere in Indiam Occidentalem* 24. 1788, non Rottb. (1776), *nom. illeg*. — Type: Jamaica*, Swartz s.n.*, (holo-, S; iso-, BM!).

Panicum glutinosum Lam., *Tableau encyclopédique et méthodique* 1: 174, tab. 43, fig. 3 (1791), non Sw. (1788), *nom. illeg.* — *Panicum agglutinans* Kunth, *Enumeratio Plantarum* 1: 120. (1833), *nom. illeg.* based on *P. glutinosum* Lam. (Lamarck 1791). — *Panicum divaricatum* L. var. *agglutinans* (Kunth) Hack. ex Sodiro, *Anales de la Universidad Central del Ecuador* 3 (25): 478



Fig. 3. — Epitype of *Panicum maculatum* Aubl. (= *Lasiacis maculata* (Aubl.) Urb.), "Martinique, environs de St. Pierre, Mai 1853, *Belanger 390*" (FI-Webb).

(1889). — Type: Tab. 43, fig. 3. in Lamarck (1791) (lecto-, here designated).

Panicum sorghoideum Desv. *in* Ham., *Prodromus Plantarum Indiae Occidentalis* 10 (1825). — *Panicum lanatum* Sw. var. *sorghoideum* (Desv.) Griseb., *Flora of the British West Indian Islands* 551 (1864). — *Lasiacis sorghoidea* (Desv. *in* Ham.) Hitchc. & Chase, *Contributions from the United States National Herbarium* 18: 338 (1917). — Type: Porto Rico, *Desvaux Herb. 24*. (holo-, P!).

Panicum orinocense Willd. ex Spreng., *Systema Vegeabilium* 1: 316 (1825), *pro syn.* — Type: *Humboldt s.n., P. orinocense 1*, Venezuela, Orinoco, s.d., (lecto-, B-W!, here designated; isolecto-, B-W! [5 sheets!], BM!).

Panicum arborescens Sieb. ex Trin., *De Graminibus paniceis* 208. 1826, non L. (1753), *pro syn.* — Type: Martinique, *Sieber 267* (lecto-, BM!, here designated; isolecto-, FI-Webb!, GOET!, HAL!, L!, P!, W!).

Panicum divaricatum L. var. *latifolium* Schltdl. & Cham., *Linnaea* 6: 33 (1831). — Type: *Sieber 120* (lecto-, HAL!; isolecto, L!).

Panicum divaricatum L. var. *lanatum* Schltdl. & Cham., *Linnaea* 6: 33. (1831). — Type: Jamaica, *Willdenow Herb. 18760* (holo-, B).

Panicum fuscum Sieb. ex C.Presl, *Abhandlungen der Böhmischen Gesellschaft der Wissenschaften, nebst der Geschichte derselben* 3: 550 (1845), *pro syn.* — *Panicum martinicense* Griseb., *Flora of the British West Indian Islands* 552. 1864, *nom. illeg.,* based on *P. fuscum* Sieb. ex C.Presl (1845). — *Panicum fuscum* Sieb. ex Griseb., *Flora of the British West Indian Islands* 552. 1864, *pro syn*. — Type: Martinique, *Sieber,* 1822, *Flora Martin. No. 29* (lecto-, GOET! designated by Hitchcock [1920]; isolecto-, FI-Webb!, HAL!, L!, MO, P!, US, W!).

Panicum praegnans Steud., *Synopsis Plantarum Glumacearum* 1: 74 (1854). — *Panicum maculatum* Aubl. var. *pilosum* Fourn., *Mexicanas plantas* 32 (1886), *nom. illeg.*, based on *P. praegnans* Steud. — Type: Mexico, Oaxaca *Buchinger 488* (lecto-, P! designated by Hitchcock [1920]).

Panicum guaraniticum Speg., *Anales de Sociedad Científica Argentina* 16: 107 (1883). — *Lasiacis guaranitica* (Speg.) Parodi, *Notas del Museo de La Plata, Botánica* 8: 95 (1911). — Type: Argentina, Misiones, Posadas, Mar 1883, *von Gulich s.n.* (holo-, LPS).

Panicum swartzianum Hitchc., *Contributions from the United States National Herbarium* 12: 140 (1908), *nom. illeg.*, based on *Panicum lanatum* Sw. — *Lasiacis swartziana* (Hitchc.) Hitchc., *Botanical Gazette (Crawfordsville)* 51: 302 (1911).

Lasiacis patentiflora Hitchc. & Chase, *Contributions from the United States National Herbarium* 18: 338 (1917). — *Lasiacis sorghoidea* (Desv.) Hitchc. & Chase var. *patentiflora* (Hitchc. & Chase) Davidse, *Annals of the Missouri Botanical Garden* 64: 375 (1978). — Type: Tobago, 20.XII.1912, *Hitchcock* 10268, (holo-, US; iso-, US, L!, W!).

Lasiacis acuminata Swallen, *Memoirs of the New York Botanical Garden* 9: 267 (1957). —Type: Venezuela, Territorio Amazonas, Great Rapids of the Orinoco, Isla Carestia at Saltos Carestia y Galio, 5 km north of Sanariapo, 100-200 m, erect to 2 m, 11.XI.1953, *Maguire, Wurdack & Bunting 36171* (holo-, US; iso-, NY!).

Representative selected material seen from West Indies and Guyanas

Lasiacis maculata (Aubl.) Urb. (previously named under *L. sorghoidea* (Desv. *in* Ham.) Hitchc. & Chase).

Puerto Rico. S.l., 1827, *Wydler 222* (FI-Webb). — Maricao, 13.XI.1884, *Sintenis 215* (L). — Coamo, 13.XI.1885, *Sintenis 3062* (K, P, W). — Aybonito, 25.XI.1885, *Sintenis 2861* (K). — Two miles NE of Mayaguez, 23.I.1900, *Heller 4375* (L). — Vicinity of San Juan, 6.XI.1913, *Chase 6412* (L). — Rosario Road, Monte Mesa, 12.XII.1913, *Chase 1809* (L, W). — Vicinity of Mayagüez, Monte Mesa, 12.XII.1913, *Chase 6824* (L).

Virgin Islands. Scenic Drive, W slope of Mt. Eagle, 12.I.1980, *Fosberg 5922* (BM).

Antigua. 15.X.1931, *Box 115* (BM, K).

St. Kitts. 28.I.1932, *Box 160* (BM, NY, K).

Martinique. 1868, *Husnot 94* (P). — Vallée de St. Pierre, V.1870, *Hahn 105* (K, P).

Grenada. 6.XII.1889, *Eggers 6224* (P). — Bequia, 1950, *Howard 11276* (BM). — St. Patrick, Marli Hill, 1.XII.1957, *Proctor 17293* (BM).

Dominica. Vicinity of Sophia Bay, 21.I.1966, *Chambers 2608* (BM). — St. David near Madjini, 2.II.1969, *De Filipps 191* (BM).

Guadeloupe. S.d., *Bertero s.n.* (FI-Webb, TO). — 1839, *Beaupertuis s.n.* (P). — Gourbeyre, 31.I.1934, *Rodriguez 2589* (P). — Grands Fonds de Saint-Anne, 18.XII.1987, *Fournet 4272* (P). — Petit Bourg, Montebello, 16.IV. 1989, *Fournet 4482* (P).

Trinidad. Port of Spain, Fort Gorge Road, edge of jungle, 27.XI.1912, *Hitchcock 592* (BM, C, K, L, W). — St. Anns near Port of Spain, 28.XI.1912, *Hitchcock 594* (BM, C, K, L, P, W). — Trinidad, 19.XI.1913, *Broadway 4841* (K). — St. Ann, 17.III.1920, *Britton & al. 665* (K). — Aripo Road, 15.I.1926, *Broadway 5991* (K). — Maraval, 9.XII.1928, *Broadway 706* (BM, K). — Maracas, 26.VI.1929, *Broadway 7233* (BM, G). — St. Anns, 21.II.1933, *Broadway 9064* (BM, G). — Arima Valley, 1961, *Snow s.n.* (K). — Guanaco River 4 miles N de Maturita près Arima, 29.V.1975, *Raynal 15598* (K).

Tobago. Pigeon Hill, 7.IV.1959, *Cowan 1448* (K, NY). —

Parlatuvier-Roxborough Trace, Bloody Bay, 8.IV.1959, *Cowan 1484* (K, NY, P). — Between Studley Park and Hillsborough Dam, 24.III.1993, *Clement & Ryves 270* (BM).
Guyana. Oreala, Corentyne River, X.1879, *Jenman 256* (K). — Rupununi, western extremity of Kanuku Mts., 4-22.III.1938, *Smith 3314* (K, P, W). — Rupununi, Kanuku Mts., 14.XI.1957, *Cook 173* (K). — Rupununi, 1 mile S of Emprensa, 14.IX.1963, *Goodland 715* (K, NY, P). — Kanuku Mts., slope of Nappi Mt., 8.XI.1987, *Jansen-Jacobs & al. 758* (K). — Kanuku Mts., Maipama, 17.XI.1987, *Jansen-Jacobs & al. 966* (K). — Rupununi Distr., Karanambo, 1.IX.1988, *Maas & al. 7150* (K). — Rupununi, Eastern Kanuku Mts., NE of Warimure, 23.I.1991, *Jansen-Jacobs 2182* (K, NY, P); Rupununi, Kanuku Mts., Crabwood Creek, 25.I.1994, *Jansen-Jacob & al. 3346* (K, P). — Rupununi, NE slope of Mount Shiriri, 18.VI.1995, *Jansen-Jacobs & al. 4149* (K, NY).
French Guiana. S.l., 1842, *Melinon 397* (L, P). — Route de Kourou, 1.IX.1955, *Hoock 83* (NY, P). — Route de Kourou, 28.IX.1955, *Hoock s.n.* (K, NY, P). — Saül, 30.VI.1956, *Hoock 91* (P). — Mount Saint-Marcel, 27.VI.2002, *De Granville & al. 15518* (K).
Suriname. Voltzberg, 21.VIII.1920, *Pulle 227* (L). — Granitic plateau ± 8 km in line from Paka Paka (Saramacca R.) to Ebbatop (v. Asch v. Wijck-Range), 19.II.1951, *Florschütz 1563* (C). — Circa portum aeronauticum ad flumen Oelemari, 1.IV.1963, *Wessels Boer 1158* (C). — Lely Mts., 21.XI.1975, *Lindeman & al. 158* (K, NY, P).

Lasiacis ligulata Hitchc. & Chase
Puerto Rico. 1827, *Wydler 250* (FI-Webb, G). — Puerto Rico, XII.1883, *Stahl 7* (W). — Maricao, 13.XI.1884, *Sintenis 215* (BM, K, NY, W). — Prope Lares in fruticetis ad "Palina Llanos", 17.I.1887, *Sintenis 5918* (C). — Jajome Alto, vicinity of Cayey, 3.XII.1913, *Chase 6747* (L). — Near Maricao, Indiera Fria, 19-22.II.1915, *Britton & al. 4490* (K, NY).
Dominica. *S.coll. 344* (K).
St. Kitts. S.d., *Walsh s.n.* (K).
St. Thomas. 1802, *Ventenat s.n.* (BM). — St. Thomas, 11.XII.1905, *Raunkiaer 2304* (C). — St. Thomas, Water Island, 3.I.1914, *Ostenfeld 55* (C).
St. Croix. Prosperity Garden, 5.I.1906, *Raunkiaer 642* (C).
Martinique. 1870, *Hahn 1158* (K).
St. Lucia. 6.XI.1929, *Sandwith s.n.* (K)
Guadeloupe. S.d., *Bertero s.n* (TO).
Trinidad. Green Hill, 2.XII.1910, *Broadway 4038* (BM). — Trinidad, above St. Anns, near Port Spain, among bushes along strema, high climbing, 28.XI.1912, *Hitchcock 10007* (= Am. Grass Natl. Herb. No. 589, holo-, US; iso-, BM!, G!, K!, NY!, P!, W!). — Tabaquite, 10.X.1912, *Hitchcock 10170* (L). — Cedros, 12-14. XII.1912, *Hitchcock 10157*, (L). — Cedros, XII.1914, *Hitchcock 33391* (L). — Morne Blue, 13.III.1921, *Britton & al. 2266* (G, K, NY). — Heights of Aripo, 10-26.I.1922, *Broadway 9929* (K). — Morne Blue, 18.XII.1924, *Broadway 5504* (BM, K). — Aripo Road, 15.I.1926, *Broadway 5892* (BM, K). — Zamsel Hill, Arouca, 15.II.1928, *Broadway 6811* (BM, K). — Above Spring Hill, Arima-Blanchisseuse road, 26.XII.1976, *Adams 14168* (K).
Tobago. Greenhill, 2.XII.1910, *Broadway 4038* (K, L). — Tobago, 25.X.1925, *Freeman & Williams 11426* (K). — Parlatuvier-Roxborough Trace, Bloody Bay to road-head above Roxborough, 8.IV.1959, *Cowan 1486* (K). — Mount St. George to Hillsborough Dam Road, 5.VI.1975, *Philcox & Raynal 7906* (K). — High up Roxborough to Main Ridge Road, 25.III.1993, *Clement & Ryves 330* (BM).
Guyana. Corentyne River, IX.1879, *Jenman 257* (K). — Near Bartica, VI.1884, *Jenman 2053* (K). — Berbice River, XII.1886, *Jenman 3593* (K, NY). — Pomeroon River, X.1886, *Jenman 1916* (K). — Upper Demerara River, IX.1887, *Jenman 4089* (K, NY). — Pomeroon River, IX.1904, *Bartlett s.n.* (K, NY). — Aruka River, X.1905, *Bartlett 8576* (K). — Issorora, Aruka River, 16.I.1920, *Hitchcock 17553* (BM, C, K, L, NY, P, W). — Along Potaro River, Tumatumari, VI-VII.1921, *Gleason 70* (K). — Waini River, NW Distr., 3-18.IV.1923, *De La Cruz 3663* (K). — Assakatta, NW Distr., 18-28. IX.1923, *De La Cruz 4291* (K). — Marudi Mts., *c.* 1 km along trail from NorMan Mines camp to Aishalton, 9.XI.1982, *Stoffers & al. 238* (K). — Region Potaro-Siparuni, Chenapou, Amerindian village (Patumona), 50 km upstream from Kaieteur Falls, 16.X.1987, *Kvist 305* (K). — Potaro-Siparuni Region, trail from Kato to Paramakatoi, 12.III.1989, *Hahn 5634* (P). — Barima-Waini Region, Aranka Head, 10.IV.1991, *McDowell 4365* (K). — Rupununi Distr., Kuyuwini Landing and Kasikaityu River, 30.X.1992, *Jansen-Jacobs & al. 3176* (NY, P). — Upper Ussequibo Region, Surama Village, *c.* 10 km N of new Parnapanum Rd., 19.II.1990, *McDowell 1889* (FT). — Upper Essequibo Region, Rewa River, Spider Mts., 16.IX.1999, *Jansen-Jacobs & al. 5930* (K).
French Guiana. La Mana, s.d., *Sagot 696* (P, W). — S.l., 1840, *Leprieur. s.n.* (FI-Webb, L, P). — S.l., 1842, *Mélinon s.n.* (L, P). — Cayenne-route du Mohury, 2.VI.1955, *Hoock 82* (K, P). — Cayenne, chemin du moulin Vidal, 13.VI.1955, *Hoock 89* (K, P). — Cayenne, 2.VI.1956, *Hoock s.n.* (P). — Près de Maripasoule, 1.IX.1961, *Schnell 11692* (P). — Manoi, 24.VIII.1962, *Hoock 93* (P). — Cayenne, route de Stoupan, 21.VI.1970, *Oldeman B-3485* (P). — Tumuc Humac, frontière Brésil-Guyane, 25.VIII.1972, *Granville 1380* (P). — Cayenne, Montravel, 8.IV.1982, *Cremers 7761* (P). — Haute Canopi, Mont Belvédère, 23.XI.1984, *Granville 6982* (P). — Haut Oyapock, village Zidock, 20.VIII.1985, *Prévost & Grenand 1969* (K, P). — Île de Cayenne, Mont Baduel, 23.V.1987, *Hoff 5199* (P). — Saül, 28.VII.1987, *Hahn 3663* (P). — Île de Cayenne, Mont Grand Matoury, 5.IV.1995,

Cremers & al. 13869 (P). — Bassin de l'Oyapock, Roche Touatou, 19.V.1995, *Cremers & De Granville 14008* (P). — Montagne Trésor, le long route de Kaw, Roura, 21.XI.1997, *Rouselle GU96/106* (MA). — Montagne Favard, au sommet de la colline, 5.XI.1998, *Poncy & Crozier 1128* (P). — Région de Saül, 3.IV.1997, *Cremers & Crozier 14636* (P).
Suriname. S.loc., s.d., *Moricand s.n.* (FI). — S.loc., s.d., *Hostmann s.n.* (FI). — S.loc., s.d., *Hostmann 13* (K). — In fruticetis Surinami, prope Lustryk, 30.XII.1837, *Splitgerber 446* (L). — In distr. Para, II-IV.1844, *Kappler 1546* (K, W). — Sandrij, 14-25.XI.1934, *Archer 2759* (K). — Charlesburg Rift, 3 km N of Paramaribo, 5.IV.1944, *Maguire & Stahel 24746* (K). — Saramacca River, trail to Coppenam River, near village, Pakka Pakka, 26.VI.1944, *Maguire 23965* (K, P). — Inter Coppename fluv. ostium et Coronie oppidum, 15.X.1948, *Lanjouw & Lindeman 1384* (K). — In montibus qui dicuntus Nassau, 17.II.1949, *Lanjouw & Lindeman 2146* (K). — Jodensavanne-Mapane kreek area, along road to Mapane creek, 21.XII.1954, *Lindeman 6933* (W). — Wilhelmina Gebergte, Zuid River, 16.IX.1963, *Irwin & al. 55790a* (K, NY, P, W). — Wilhelmina Gebergte, Kaiser Airstrip, 45 km above confluente with Lucie River, 26.IX.1963, *Irwin & al. 57618,* (K, NY, P). — Montagne Ischoli-Epoyan, 1 km du dégrad Ouarémapan, 26.VI.1972, *Sastre 1460* (P). — Nickerie, area of Kabalebo Dam Project, *c.* 20 km SW of Avanavero dam site, 11.XI.1976, *Heyde & Lindeman 10* (K).

Lasiacis sloanei (Griseb.) Hitchc.
Puerto Rico. 1827, *H. Wydler 222* (FI-Webb). — Toa Alta, 11.XI.1960, *R. Woodbury s.n.* (NY).
Cuba. Pinar del Rio, Mariel, 4.VI.1921, *Ekman 12853* (NY). — Pinar del Rio, Sierra de Anafe, Loma de San Gabriel near Guanajay, 11.VII.1921, *Ekman 13035* (G). — Oriente, Mayarì arriba, at Rio Mayarì, 7.X.1922, *Ekman 15851* (G). — Santa Clara, Limones, Soledad, Cienfuegos, 29.VII.1927, *Jack 5187* (NY). — Vicinity of Soledad, VIII.1941, *Howard 6250* (NY).
Jamaica. Blue Mts., Pimento Grove, 22.I.1913, *Harris 11589* (BM, NY). — Orange River, near Montego Bay, 29-30.III.1920, *Maxon & Killip 1673* (NY). — Bog Walk and vicinity, 27.VII.1926, *Maxon 10502* (NY). — Middlesex, 28.I.1938, *Hunnewell 15226* (NY). — St. Ann Parish, 1.4 miles S of Ocho Rios at end of Fern Gully, 26.XII.1971, *Davidse & Convoy 32373* (NY).
Haiti. Port au Prince, hills between the town and Pétionville at Source Plaisance, 19.X.1924, *Ekman 2190* (C). — Vicinity of St. Louis du Nord, 30.III-7.IV 1929, *Leonard & Leonard 14292* (NY).
Santo Domingo. Macoris, 23 km W of San Pedro de Macoris, 18.X.1946, *Howard & Howard 9508* (NY). — Jaiqui' Picado, 20 miles W of Santiago, 27.XI.1969, *Bro. Liogier 17049* (NY).
Antigua. Forest NE of Dark Valley, below Boggy Peak, 16.XII.1931, *Box 119* (BM, K, US: cf. Davidse 1978).
St. Martin. Pic du paradis, sommet, 424 m, 7.XII.1977, *Raynal 19643* (P).
Suriname. Bei Paramaribo, 1913, *Kruper 27915* (L).

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REFERENCES

ADAMS C. D. 1972. — *Flowering Plants of Jamaica*. University of West Indies, Mona, Jamaica, 848 p.
AUBLET F. M. 1775. — *Histoire des Plantes de la Guiane Françoise* 1. P. F. Didot Jeune, London; Paris, xxxii + 621 p.
CREMERS G. & AUPIC C. 2007. — Spécimens de Charles Plumier déposés à Paris dans les collections de ptéridophytes américains de Tournefort, Vaillant, Danty d'Isnard et Jussieu. *Adansonia*, sér. 3, 29 (2): 159-193.
DAVIDSE G. 1978. — A systematic study of the genus *Lasiacis* (Gramineae, Paniceae). *Annals of the Missouri Botanical Garden* 65: 1133-1254.
DAVIDSE G. 2003. — *Lasiacis* (Griseb.) Hitchc., *in* ZULOAGA F. O., MORRONE O., DAVIDSE G., FILGUEIRAS T. S., PETERSON P. M., SORENG R. J. & JUDZIEWICZ E. (eds), Catalogue of New World Grasses (Poaceae): III. Subfamilies Panicoideae, Aristoideae, Arundinoideae, and Danthonioideae. *Contributions from the United States National Herbarium* 46: 278-283.
FOURNET J. 1978. — *Flore illustrée des phanérogames de Guadeloupe et de Martinique* 2. Institut national de la Recherche agronomique (INRA), Paris, 1654 p.
FUNK V., HOLLOWELL T., BERRY P., KELLOFF C. & ALEXANDER S. N. 2007. — Checklist of the plants of the Guiana Shield (Venezuela: Amazonas, Bolivar, Delta Amacuro); Guyana, Surinam, French Guiana).

Contributions from the United States National Herbarium 55: 1-584.

GARCIA SANTOS C. A. & TAKEO SANO P. 2001. — *Lasiacis* (Griseb.) Hitchc., *in* LONGHI-WAGNER H. M., BITTRICH V., LAPA WANDERLEY M. G. & SHEPERD G. J. (eds), *Flora Fanerogâmica do Estado de São Paulo* 1. Fapesp. Hucitec Ed., São Paulo, Brasil: 163-164.

GOULD F. W. 1979. — *Lasiacis* (Grisebach) Hitchcock, *in* HOWARD R. A. (ed.), *Flora of the Lesser Antilles, Leeward and Windward Islands* 3. Arnold Arboretum, Harvard University: 165-169.

GRISEBACH A. H. R. 1864. — *Flora of the British West Indian Islands* 1 (6-7). Lovell Reede, London: 507-789.

HAMILTON G. 1825. — *Prodromus Plantarum Indiae Occidentalis*. Treuter et Würz, London, xvi + 67 p.

HITCHCOCK A. S. 1920. — The North American Species of *Lasiacis*. *Contributions from the United States National Herbarium* 22 (1): 13-31.

HITCHCOCK A. S. 1922. — Grasses of British Guiana. *Contributions from the United States National Herbarium* 22 (6): 497-498.

HITCHCOCK A. S. 1927. — The grasses of Ecuador, Peru, and Bolivia. *Contributions from the United States National Herbarium* 24 (8): 470-473.

HITCHCOCK A. S. & CHASE A. 1910. — The North American Species of *Panicum*. *Contributions from the United States National Herbarium* 15: 1-396.

HITCHCOCK A. S. & CHASE A. 1917. — Grasses of the West Indies. *Contributions from the United States National Herbarium* 18 (7): 261-405.

HOWARD R. A. 1975. — Modern problems of the years 1492-1800 in the Lesser Antilles. *Annals of the Missouri Botanical Garden* 62 (2): 368-379.

JUDZIEWICZ E. 1990. — Poaceae, *in* GÖRTS-VAN RIJN A. R. A. (ed.), *Flora of the Guianas*, ser. A, 8. 187. Koeltz Scientific Books, Koenigstein, Germany, 727 p.

KILLEEN T. J. 1990. — The Grasses of Chiquitania, Santa Cruz, Bolivia. *Annals of the Missouri Botanical Garden* 77: 125-201.

LAMARCK J. B. A. P. 1791. — *Tableau encyclopédique et méthodique* 1. Panckouke, Paris, xvi + 496 p.

LEMÉE A. 1955. — *Flore de la Guyane française* 1. *Ptéridophytes à Droséracées*. Lechevalier, Paris, 701 p.

LOURTEIG A. 1983. — Nomenclatura plantarum americanarum. I. Gramineae. *Phytologia* 53 (4): 245-249.

MCCLELLAN J. E. & REGOURD F. 2000. — The colonial machine: French science and colonization in the ancient regime. *Osiris* 15, 2 ser.: 31-50.

MCNEILL J., BARRIE F. R., BURDET H. M., DEMOULIN V., HAWKSWORTH D. L., MARHOLD K., NICOLSON D. H., PRADO J., SILVA P. C., SKOG J. E., WIERSEMA J. H., & TURLAND N. J. (eds) 2006. — International Code of Botanical Nomenclature (Vienna Code). Adopted by the Seventeenth International Botanical Congress Vienna, Austria, July 2005. *Regnum Vegetabile* 146: 1-568.

PENNELL F. W. 1945. — Historical Sketch, *in* VERDOORN F. (ed.), *Plants and Plant Science in Latin America*. Chronica Botanica Series 16. Waltham, Massachusetts: 35-48.

RANKIN RODRÍGUEZ R. & GREUTER W. 1999. — Charles Plumier's drawings of American plants and the nomenclature of early Caribbean *Aristolochia* species (Aristolochiaceae). *Taxon* 48 (4): 677-688.

RENVOIZE S. 1984. — *The Grasses of Bahia*. Royal Botanic Gardens, Kew, 301 p.

RENVOIZE S. 1998. — *Gramineas de Bolivia*. Royal Botanic Gardens, Kew, 644 p.

SCHLECHTENDAL D. F. L. VON & CHAMISSO L. A. VON 1833. — Plantarum Mexicanarum. *Linnaea* 6: 32-33.

SMITH L. B., WASSHAUSEN D. C. & KLEIN R. M. 1982. — *Lasiacis* (Grisebach) Hitchcock, *in* REITZ R. (ed.), *Flora Ilustrada Catarinense*, Parte 1. *Gramíneas*. Itajaí, Santa Catarina, Brazil: 626-633.

STAFLEU F. A. & COWAN R. S. 1976. — Taxonomic Literature I: A-G. 2nd ed. *Regnum Vegetabile* 94: 1-1136. Bohn, Scheltema & Holkema, Utrecht/Antwerp.

STAFLEU F. A. & COWAN R. S. 1983. — Taxonomic Literature IV: P-Sak. 2nd ed. *Regnum Vegetabile* 110: 1-1214. Bohn, Scheltema & Holkema, Utrecht/Antwerp.

TOVAR Ó. 1993. — Las Gramíneas (Poaceae) del Perú. *Ruizia* 13: 1-480.

URBAN I. 1919. — Sertum antillanum. IX. *Fedde Repertorium* 16: 132-151.

URBAN I. 1921. — *Symbolae Antillanae seu Fundamenta Florae Indiae Occidentalis* 8 (2). Fratres Borntraeger, Leipzig: 481-860.

W3TROPICOS 2004. — http://www.tropicos.org. Missouri Botanical Garden, Saint-Louis. Consulted on 15 December 2008.

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