

Some lectotypifications in the tribe Olyreae (Poaceae: Bambusoideae)

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Summary. Lectotypes are designated for seven names included in different genera of the tribe Olyreae. In addition, the currently accepted names are provided for the taxa to which each type belongs.

Resumo. São designados lectótipos para sete nomes incluídos em diferentes gêneros da tribo Olyreae. Em adição, são fornecidos os nomes atualmente aceitos para os táxons aos quais cada tipo pertence.

Key Words. Herbaceous bamboos, historical collections, lectotypification, Olyreae.

Introduction

The tribe Olyreae includes the herbaceous bamboos, comprises about 106 mainly neotropical species in 21 small genera (Judziewicz *et al.* 1999). *Olyra* L. is the most diverse genus in the tribe, and many species described under this name have been transferred to other genera, such as *Raddia* Bertol., *Sucrea* Soderstr., *Parodiolyra* Soderstr. & Zuloaga, *Raddiella* Swallen and *Cryptochloa* Swallen. As part of ongoing studies for a monograph of *Raddia* and allied genera (Oliveira 2006), type material of related taxa has been investigated.

Lectotypes are designated here for five such names. The lectotypifications are proposed because several syntypes were mentioned in the protologue, because several isotypes exist and no holotype was indicated, or if the protologue included only the locality of the collection and no particular specimen. We are also completing the process of lectotypification of two names initiated by Judziewicz *et al.* (2000), proposing a second stage lectotypification (Art. 9.8) for *Olyra sympodica* Döll and *Strepidium guianense* Brongn., based on specimens deposited at P.

Material and Methods

The protologues of all names here lectotypified were examined, and original collections were studied in the following herbaria: B*, BM*, BOLO*, BR, C, FI*, G*, K*, M*, NY, P*, PI*, US and W* (acronyms according to Holmgren & Holmgren 1998). The specimens were

studied during visits to some of these herbaria (indicated with *) or as loans to HUEFS and K.

The accepted names are presented in bold type, followed by the typified names in italics. For the designation of the lectotypes we chose the best preserved specimens that morphologically agreed with the original description. Furthermore, the specimens that had clear indications of having been studied by the author of the species were preferentially selected (e.g. notes in his own handwriting and those deposited in the herbarium where the author worked).

Lectotypifications

1. *Raddia guianensis* (Brongn.) Hitchc. (1936: 373).

Olyra floribunda var. *microphylla* Döll (1877: 329). Type: In Guyana Gallica, 1834, Leprieur (lectotype W!, selected here; isolectotype US 2942618!).

NOTES. We found one complete specimen of *Olyra floribunda* var. *microphylla* at W, annotated in Doll's handwriting as "*Olyra* (heterogenicae) *floribunda* var. β *microphylla*" with the same locality information as given in the protologue and with additional information indicating the year 1834, "*In Guyana Gallica, 1834, Leprieur*". This specimen is here designated as lectotype. There is another specimen morphologically similar at P, identified by a label "*Leprieur 1834, Olyra floribunda* var. Doll", which is perhaps a duplicate of

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the W material. However, as the information about the site of collection is absent on the specimen at P, we do not consider this specimen an isolectotype.

There is another specimen at US (2942618), also conspecific with *Raddia guianensis*, which comprises some leaf blades in an envelope, obtained by A. S. Hitchcock from the herbarium of Freiburg (FB). This specimen is annotated "*Olyra floribunda* var. *B. microphylla* Doll, Guiana Gallica, Leprieu", corresponding to the same material found at W and it is considered to be an isolectotype.

Attached to the same sheet (US 2942618) there is also a fragment of a flowering culm of *Strephium distichophyllum* (\equiv *Raddia distichophylla*) collected by Prince Maximilian, which was obtained from B (see number 5).

2. *Olyra longifolia* Kunth (1816: 198).

Olyra longifolia Kunth var. *parvifolia* Döll in Martius, *Fl. Bras.* 2 (2): 325 (1877). Type: In vicinibus Barra, Prov. Rio Negro, Dec. – March 1850 – 1851, coll. R. Spruce 880 (lectotype M!, selected here; isolectotype NY!).

NOTES. Döll (1877) cited two gatherings, *Spruce* 880 and 1145, in the protologue of *Olyra longifolia* var. *parvifolia*. We found five specimens collected by Spruce, annotated as *Olyra longifolia* var. *parvifolia* in five different herbaria (B, K, M, NY, W). The specimens at B, M, NY and W bear similar typewritten labels, with the information "In vicinibus Barra, Prov. Rio Negro, dec-mar 1850 – 1851, coll. R. Spruce". The specimen at K has different information on its label, is handwritten and the wording does not correspond exactly to the protologue of the varietal name.

The specimens at M and NY have the collector number "880", whereas the specimens from K and W have the number "1145" (both in handwriting), corresponding to the syntypes cited by Döll (1877). The specimen at M (*Spruce* 880) is the only one that bears a label in Döll's handwriting and for this reason we are designating it as lectotype of *Olyra longifolia* Kunth var. *parvifolia* Döll. Soderstrom & Zuloaga (1989) and Judziewicz *et al.* (2000) cited as syntypes *Spruce* 1145 at NY, P and US, but we could not locate these specimens in P and US.

3. *Parodiolyra lateralis* (J. Presl ex Nees) Soderstr. & Zuloaga (1989: 66).

Olyra sarmentosa Döll in Martius, *Fl. Bras.* 2 (2): 319 (1877). Type: Peroo, 1837, *Dombey* 146 (lectotype G!, selected here; isolectotype BM!, photo US 2877929!).

NOTES. Two collections were cited by Döll (1877) for *Olyra sarmentosa*: *Poeppig* 3055 and *Dombey* 146. Specimens of *Dombey* 146 were found at BM and G. One

specimen of *Poeppig* 3055 was also found in G. The specimen *Dombey* 146, deposited at G, is the most complete and representative of the species, regarding the habit and shape of leaves and inflorescences, and is identified in Döll's handwriting as *O. sarmentosa*. Although the data on the label agrees with only part of the protologue, *Dombey* 146 is here designated as lectotype. It was noted that "Ex. Herb. Mus. Paris" is on the label of *Dombey* 146 at G but we found no specimen of this collection at P.

Soderstrom & Zuloaga (1989) and Judziewicz *et al.* (2000) indicated the two syntypes of *Olyra sarmentosa*, *Poeppig* 3055 and *Dombey* 146 as being deposited at B, but these specimens were not found in this herbarium. The same authors also cited fragments of the two syntypes at US from which we examined the photographs, indicating "from B" in the label.

4. *Piresia sympodica* (Döll) Swallen (1964: 153).

Olyra sympodica Döll in Martius, *Fl. Bras.* 2 (2): 322 (1877). Type: Guyane Francaise, Acarouany (...) 1856, Herb. *Sagot* 925 A (lectotype P!, designated by Judziewicz *et al.* (2000); isolectotypes P[3]!, B!, BM!, K!, W!, photo US 2877980!).

NOTES. In the original description of *Olyra sympodica*, (Döll 1877) indicated the material "*Sagot* 925, *Guiana Gallica*". Judziewicz *et al.* (2000), cited the "holotype" of *O. sympodica* as being deposited at P, but in fact there are four sheets of this material at P, without any indication of typification. Although the citation made by Judziewicz *et al.* (2000) can be considered a first stage lectotypification (Art. 9.8), we are completing the process by selecting one of the four specimens as the lectotype.

We chose the most complete of these specimens as the lectotype of *Olyra sympodica* (which we labelled *Sagot* 925A). This specimen agrees with the diagnosis of Döll and bears a label annotated by Sagot, "in sylvis, flores sempis distinctis sitis, vix hume inter folia (...) sylvis latentis". The other three specimens at P (*Sagot* 925B, C and D) and those from the same collection found at B, BM, K and W, are all isolectotypes.

5. *Raddia distichophylla* (Schrad. ex Nees) Chase (1908: 184).

Strephium distichophyllum Schrad. ex Nees, *Agrostologia brasiliensis*, in Martius, *Fl. Bras. Enum. Pl.* 2: 298 (1829). Type: *Prince Maximilian*, (1816) in Herb. *Nees* 285 (lectotype B!, selected here; isolectotype US 2942618!).

NOTES. In the protologue of *Strephium distichophyllum*, (Nees von Esenbeck 1829) cited "Brasilia, habitat in sylvis primaevae, prov. Bahiensis ad viam Felisberti alibiqui, floret Novembri et Decembri", without col-

lector and date. We did not find any material with this information in the consulted herbaria. One specimen annotated by Nees as *S. distichophyllum* indicating “Brazil”, the year of the collection (“1816”), the collector (“Prince Maxim”) and “H. Nees 285”, was found at herbarium B. The other data on the label are not clear. This material agrees with the original description of this species (Nees von Esenbeck 1829) and is very well preserved. It is here designated as lectotype of *S. distichophyllum*. In the US herbarium there is a fragment (US 2942618) of this material collected by Prince Maximilian, which was obtained from B. This is the same material commented upon above, under *Olyra floribunda* B *microphylla* (see no. 1.). Judziewicz *et al.* (2000) indicated the type of *S. distichophyllum* as being deposited at M, but the material was not found in that herbarium.

6. *Raddia guianensis* (Brongn.) Hitchc. (1936: 373).
Strepthium guianense Brongn., *Bull. Soc. Bot. France* 7: 470 (1860). Type: Guiane Francaise, *Leprieur* 430A (lectotype P!, designated by Judziewicz *et al.* (2000); isolectotypes US 2942619 and 2942620!).

NOTES. In addition to the Leprieur specimen at W [mentioned under 1. *Olyra floribunda* var. *microphylla*], there are five other specimens of Leprieur’s collection from Guiana housed at P. Each collection bears different information on the label, concerning the collection number (7, 430 or none) and the year of collection (1834 or none), making it difficult to determine their exact nomenclatural status. Two of them have the number 430 (which we labelled as *Leprieur* 430A and B), but only one is annotated by Brongniart as *Strepthium guianense* (*Leprieur* 430A), although Brongniart (1860) did not cite any collector number in the protologue of the species.

Judziewicz *et al.* (2000) cited the specimen *Leprieur* 430 (P) as the holotype of *Strepthium guianense* and indicated two fragments to US (US 2942619 and US 2942620). The statement by these authors must be accepted as a first lectotypification for this name, under Art. 9.8 and 9.15 of the ICBN (McNeill *et al.* 2006). However, as we found two specimens at P (the ones we designated *Leprieur* 430A and B) we select, from this lectotype gathering, one as lectotype specimen, and the best choice, in our opinion, is the one annotated by Brongniart as *Strepthium guianense* (*Leprieur* 430A).

Two other specimens, “*la Guyana, Leprieur*”, without number and date, were originally identified as *Strepthium distichophyllum* but the identifications were later corrected to *Raddia guianensis*. A fifth specimen, “*Guyana, M. Leprieur* 1834”, originally identified as *Olyra floribunda* Raddi var. *Döll* (sic) was also later changed also to *Raddia guianensis*. Both *S. guianensis* and *O. floribunda* var. *microphylla* were indicated as

synonyms of *R. guianensis* [Judziewicz *et al.* (2000); Oliveira (2006)].

7. *Cryptochloa strictiflora* (E. Fourn.) Swallen (1942: 321).

Strepthium strictiflorum E. Fourn., *Bull. Soc. Roy. Bot. Belgique* XV: 465 (1876). Type: *Plantae mexicanae Liebmann*, Mirador, Gramineae n. 266 (lectotype C!, selected here).

NOTES. Fournier (1876) indicated three syntypes in the protologue of *Strepthium strictiflorum*: Arroyo Sellero (*Karw.* n. 1473 in herb. Petropolitano), Hacienda de Jovo, in sylvis udis (*Liebm.*, maio) and Mirador (*Liebm.* n. 266). Judziewicz *et al.* (2000) indicated that one of these specimens (*Karwinski* 1473) is at LE and two, (*Liebmann* s.n. and *Liebmann* 266) are at C. In the list of types deposited at LE, presented by Soreng *et al.* (1995) no specimens of *Strepthium* are cited. On the other hand, three specimens collected by Liebmann and identified as *S. strictiflorum* by Fournier are deposited at C: *Liebmann* 266 and *Liebmann* 267 (2 specimens). The specimen *Liebman* 267 was also found at K, dated May 1841 and annotated “*S. strictiflorum*” in Fournier’s own handwriting.

Liebmann 266 at C is a very well preserved and complete specimen and it is here selected as the lectotype of *Strepthium strictiflorum*.

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