



New combinations in *Cenchrus* and *Urochloa* (Gramineae)

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Key words

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Abstract Recent taxonomic innovations have led to the inclusion of most of the *Brachiaria* species in *Urochloa* and of all *Pennisetum* species in *Cenchrus*. Many of the necessary combinations have been made for the West African species, but still nine new combinations and seven lectotypifications are presented here.

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INTRODUCTION

During the preparation of the *Gramineae* of West and Northern sub-Saharan Africa (WNSA, http://grasses-africa.linnaeus.naturalis.nl/linnaeus_ng/) new taxonomic insights in the delimitation of genera were encountered. Recent molecular phylogenetic studies (Chemisquy et al. 2010) have led to the amalgamation of the genera *Cenchrus* L. and *Pennisetum* Rich. and the inclusion of most of the species of *Brachiaria* (Trin.) Griseb. in the genus *Urochloa* P.Beauv. (Veldkamp 1996, Sosef 2016). The generic names of *Cenchrus* and of *Urochloa* have priority and so the species of *Pennisetum* and most of *Brachiaria* need to be transferred to them. Recently, Verloove (2002) and Sosef (2016) made new combinations, but a number of new combinations for species in the West African region still needs to be made. Therefore, nine new combinations are presented here, of which seven are lectotypified.

For on-line specimen information JStor Plants was consulted (plants.jstor.org), specimens seen only as image are denoted with an *.

TAXONOMY

Cenchrus gracilescens (Hochst.) Zon, *comb. nov.*

Pennisetum gracilescens Hochst. (1855) 199. — Lectotype (designated here): *Schimper 1411* (lecto P P00442918; isolecto G G00022563*, K K000281181, K00281182, L L0044929, P P00442250, S S14-20436*), Ethiopia, Dsche Dselia.

Lectotypification — Hochstetter (1855) designated the collection as type, but did not indicate a holotype among the duplicates.

Cenchrus laxius (Clayton) Zon, *comb. nov.*

Beckeropsis laxior Clayton (1963) 118. — *Pennisetum laxior* (Clayton) Clayton (1978) 580. — Type: *Keay FHI22678* (holo K K000281173), Nigeria, Idanre summit, Orusun.

Cenchrus nodiflorus (Franch.) Zon, *comb. nov.*

Pennisetum nodiflorum Franch. (1895) 363. — Lectotype (designated here): *Hens b32* (lecto P P00442930; isolecto G G0022556*, G00022557*, L L0822667, P P00442929*), Democratic Republic of Congo, Stanley pool, Kinshasa.

Lectotypification — Franchet (1895) cited two specimens: *Hens b32*, DRC, Stanley Pool, and *Dybowski s.n.* (P P02256337*), Congo, Brazzaville. *Hens b32* is selected as lectotype, based on a specimen in P, because it has most duplicates.

Cenchrus nubicum (Hochst.) Zon, *comb. nov.*

Gymnotrix nubica Hochst. (1844) 251. — *Pennisetum nubicum* (Hochst.) K.Schum. ex Engl. (1894) 58. — Lectotype (designated here): *Kotschy 13* (lecto W W0030467; isolecto G G00022329*, K K000281238, S S09-13390*), Sudan, Kordofan, Monte Beci.

Lectotypification — Hochstetter (1844) cited three specimens: *Kotschy 13*, *Kotschy 152* (BM, G G00022327*, HAL HAL0106782*, K K000281237*, L L0539824, L0539825, L0539827, M M0104086*, W W0030467*, WAG WAG0001536), Arasch Cool, Sudan and *Kotschy 368* (G G00022330*, S S09-13390, W W0030468*), Sudan. *Kotschy 13* from Vienna was selected.

Cenchrus pirottae (Chiov.) Zon, *comb. nov.*

Pennisetum pirottae Chiov. (1903) 37. — *Beckeropsis pirottae* (Chiov.) Stapf & C.E.Hubb. (1933) 269. — Lectotype (designated by Phillips 1995): *Ter-racciano & Pappi 2814* (lecto FT FT000357*; isolecto G G00022918*), Eritrea Barca, Agorda.

Note — Phillips (1995: 275) gives the FT collection as holotype. This collection should be considered as the lectotype, because Chiovenda (1903) did not select a holotype among the duplicates.

Cenchrus schweinfurthii (Pilg.) Zon, *comb. nov.*

Pennisetum schweinfurthii Pilg. (1901) 121. — Lectotype (designated here): *Schweinfurt 1500* (lecto K K000281247; isolecto B B 10 0167808*, BM BM000923366*, G G00022542*, US US00140920*, W W18890245022*), Sudan, Gallaba.

Note — Pilger (1901) did not indicate a holotype, therefore a lectotype is selected following Phillips (1995), who mentioned the K specimen as isotype.

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***Urochloa falcifera* (Trin.) Zon, comb. nov.**

Panicum falciferum Trin. (1826) 127. — *Brachiaria falcifera* (Trin.) Stapf (1919) 517. — Type: *Sabine s.n.* (not seen), Ghana, Accra.

***Urochloa ovalis* (Stapf) Zon, comb. nov.**

[*Panicum ovale* R.Br. (1814) lxii, *nom. nud.*] — *Brachiaria ovalis* Stapf (1919) 546. — Lectotype (designated here): *Salt s.n.* (lecto K K000282117*), Abyssinia.

Note — Stapf (1919) cited four specimens, *Hildebrandt 337* (BM BM000923194*), Eritrea, Habab; *Salt s.n.* (K K000282117*), Abyssinia; *Thomson s.n.* (K K000282115*), British Somaliland, Haud, and *Appleton s.n.* (K K000282116*), British Somaliland, Bohotle? and Upper Sheikh. I selected *Salt s.n.* as lectotype, because this specimen was used by Brown (1814).

***Urochloa serrifolia* (Hochst.) Zon, comb. nov.**

Panicum serrifolium Hochst. (1855) 196. — *Brachiaria serrifolia* (Hochst.) Stapf (1919) 548. — Lectotype (designated by Clayton 1982): *Schimper 2171* (lecto K K000282206), Ethiopia, Dschadscha.

Note — Hochstetter (1855) refers to the collections of Schimper from Abyssinia as original material. Clayton (1982: 596) gives as type: *Schimper 2171* (K), ?Ethiopia, Dschadscha. This should be considered as the lectotypification.

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