J. Biodivers. Conservation 9(3): 89-95 ISSN: 2457-0761 (online)
2025 http://www.aprfjournal.in

Research Article

New combinations in three genera of Poaceae

Rajeev Kumar Singh

Botanical Survey of India, Arid Zone Regional Centre, AIIMS Road, Jodhpur, Rajasthan, India

E-mail: rksbsiadsingh@gmail.com; ORCID: https://orcid.org/0000-0002-0136-9243

Article Details: Received: 2025-04-25 | Accepted: 2025-09-08 | Available online: 2025-09-10

Licensed under a Creative Commons Attribution 4.0 International License

Abstract: One new name and 21 new combinations are proposed for 22 species of the family Poaceae, representing three genera. These nomenclatural changes are necessary to align the species with current taxonomic and phylogenetic concepts accepted for their respective genera. In addition, to ensure accurate application and to stabilize nomenclature, lectotypes are designated *Brachiaria serrifolia* var. *pubescens* Chiov. and *Panicum lacteum* Mez.

Keywords: *Brachiaria*, *Camusiella*, *Elytrigia*, Lectotype, *Panicum*, *Paspalidium*, *Roegneria*

Introduction

Recent molecular phylogenetic studies have significantly altered the generic concepts, delimitation and classification within the family Poaceae. Based on the current, stable and broadly accepted generic circumscriptions in the family Poaceae (Soreng et al., 2022), one new name and 21 new combinations are proposed for 22 species belonging to three genera (*Elymus* L., *Setaria* P.Beauv. and *Urochloa* P.Beauv.), which are made here. To fix the application of names and prevent misidentification, lectotypes are designated here for *Brachiaria serrifolia* var. *pubescens* Chiov. and *Panicum lacteum* Mez, as no holotypes were cited in their protologues and these names have not been typified until now. Lectotypifications follow the guidelines and recommendations of Article 9 of the International Code of Nomenclature for algae, fungi, and plants (Turland et al., 2018).

New combinations

Elymus aduoensis (S.L.Lu & Y.H.Wu) R.Kr.Singh, *comb. nov.*

≡ *Roegneria aduoensis* S.L.Lu & Y.H.Wu, Guihaia 28(3): 285. 2008.

Holotype: China, Qinghai, Zaduo County, Aduo Xiang, 4680 m, 6 August 2005, *Y.H. Wu 35567A* (HNWP).

Distribution: Endemic to China (Qinghai).

Elymus fursaevii (Laktionov, Tzvelev & Mavrodiev) R.Kr.Singh, *comb. nov.*

≡ *Elytrigia fursaevii* Laktionov, Tzvelev & Mavrodiev, Novosti Sist. Vyssh. Rast. 45: 19. 2014.

Holotype: Russia, Delta fluminis Volgae, pars Obzhorovski in reservato publico Astrachanico, ad alveo fl. Ostovaja, 29 July 1936, *N. Chvalina s.n.* (LE).

Distribution: Endemic to Russia (European Russia).

Elymus nuristanicus (Ohwi) R.Kr.Singh, *comb. nov.*

≡ *Roegneria nuristanica* Ohwi, Acta Phytotax. Geobot. 17(1): 14. 1957.

Holotype: Afghanistan, Nuristan, Inter Seprigal et Voma, 29 July 1955, *S. Kitamura 177* (KYO).

Distribution: Endemic to Afghanistan.

Elymus yenchianus (X.Fan & L.N.Sha) R.Kr.Singh, *comb. nov.*

≡ *Roegneria yenchiana* X.Fan & L.N.Sha, Ecol. Evol. 14(3)-e11171: 5. 2024.

Holotype: China, Yunnan, Shangri-la, Tiger Leaping Gorge, in the stony slope of Haba Snow Mountain, 3200 m, 11 November 2021, *X. Fan & L.N. Sha 20211127* (SAUTI).

Distribution: Endemic to China (Yunnan).

Elymus zaquensis (Y.H.Wu) R.Kr.Singh, *comb. nov.*

≡ *Roegneria zaquensis* Y.H.Wu, Acta Bot. Boreal.-Occid. Sin. 28(2): 396. 2008.

Holotype: China, Qinghai, Zadoi County, Angsai Xiang, Southwest valley, 3900–4200 m, 10 July 2005, *Y.H. Wu 33035* (HNWP).

Distribution: Endemic to China (Qinghai).

Setaria ankarensis (A.Camus) R.Kr.Singh, *comb. nov.*

≡ *Paspalidium ankarense* A.Camus, Bull. Soc. Bot. France 72: 706. 1925.

Holotype: Madagascar, Ankarana plateau, 15 June 1902, *H. Perrier de la Bâthie 11153* (P00450132!); isotype P00450133!.

Distribution: Endemic to Madagascar.

Setaria fiherenensis (Bosser) R.Kr.Singh, *comb. nov.*

≡ *Camusiella fiherenensis* Bosser, Adansonia sér. 2, 6: 108. 1966.

Holotype: Madagascar, Fiherenana valley, 30–35 km from Tulear (Toliara), March 1960, *J. Bosser 14030* (P00450314!); isotypes P00450315!, P00450316!.

Distribution: Endemic to Madagascar.

Setaria johnsonii (B.K.Simon) R.Kr.Singh, *comb. nov.*

≡ *Paspalidium johnsonii* B.K.Simon, Austrobaileya 8(2): 212. 2010.

Holotype: Australia, Queensland, Burke District, Amphitheatre, 40 km north of Musselbrook Mining camp, 3 May 1995, *R.W. Johnson & M.B. Thomas MRS792* (BRI-AQ0489755!); isotype DNA-D0269832.

Distribution: Endemic to Australia (Queensland).

Urochloa antsirabensis (A.Camus) R.Kr.Singh, *comb. nov.*

≡ *Brachiaria antsirabensis* A.Camus, Bull. Soc. Bot. France 77: 640. 1931.

Lectotype (designated by Vorontsova, 2022): Madagascar, Province Fianarantsoa, Region Amoron'i Mania, environs d'Antsirabe ravins, 1500 m, January 1914, *H. Perrier de la Bâthie 10758* (P00450157!); isolectotypes K000244724!, P00450158!.

Distribution: Endemic to Madagascar.

Urochloa bemarivensis (A.Camus) R.Kr.Singh, *comb. nov.*

≡ *Brachiaria bemarivensis* A.Camus, Bull. Soc. Bot. France 72: 369. 1925.

Lectotype (designated by Vorontsova, 2022): Madagascar, Province Mahajanga, Region Boeny, Haute Bémarivo, February 1907, *H. Perrier de la Bâthie 11295* (P00450163!); isolectotypes P00450164!, P00450165!.

Distribution: Endemic to Madagascar.

Urochloa chiovendae R.Kr.Singh, *nom. nov.*

≡ *Brachiaria serrifolia* var. *pubescens* Chiov., Webbia 8(1): 65. 1951. *Brachiaria pubescens* (Chiov.) S.M.Phillips, Kew Bull. 46(3): 536. 1991.

Lectotype (designated here): Ethiopia, Dande rive del Caschei, 23 August 1939, *R. Corradi 396* (FT000205!); isolectotypes FT000206!, FT000207!, FT000208!, FT000209!, FT000210!, FT000211!.

Remaining syntype: Ethiopia, Rive del ruscello Seghidò, 24 August 1939, *R. Corradi 953* (FT000204!).

Distribution: Ethiopia and Kenya.

Etymology: Named after Emilio Chiovenda (1871–1941), Italian Botanist.

Notes: Eight original specimens of *Brachiaria serrifolia* var. *pubescens* Chiov. were located at F (FT000204–FT000211). Among these, the better-preserved specimen FT000205 is here designated as the lectotype, as it agrees well with the protologue. The species epithet *pubescens* is preoccupied in the genus *Urochloa* P.Beauv. (*U. pubescens* Kunth, Révis. Gramin. 1: 31. 1829), therefore, a new name is herein proposed.

Urochloa dimorpha (A.Camus) R.Kr.Singh, *comb. nov.*

≡ *Brachiaria dimorpha* A.Camus, Bull. Soc. Bot. France 72: 621. 1925.

Lectotype (designated by Vorontsova, 2022): Madagascar, Province Fianarantsoa, Region Ihorombe, Andringitra Massif, 2000 m, January 1923, *H. Perrier de la Bâthie 14333* (P03124753!); isolectotypes K000244728!, P03124768!, P03124773!.

Distribution: Endemic to Madagascar.

Urochloa epacridifolia (Stapf) R.Kr.Singh, *comb. nov.*

≡ *Panicum epacridifolium* Stapf, Bull. Misc. Inform. Kew 1919: 266. 1919. *Brachiaria epacridifolia* (Stapf) A.Camus, Bull. Mus. Natl. Hist. Nat. sér. 2, 22: 297. 1950.

Lectotype (designated by Vorontsova, 2022): Madagascar, Province Antananarivo, Region Vakinankaratra, cîme au N. d'Ambana près d'Antsirabe, Ankaratra, Rocailles, March 1912, 2000 m, *H. Perrier de la Bâthie 11160* (K000805466); isolectotypes K000244699!, P00450175!, P02022202!.

Distribution: Endemic to Madagascar.

Urochloa fragrans (A.Camus) R.Kr.Singh, *comb. nov.*

≡ *Brachiaria fragrans* A.Camus, Bull. Soc. Bot. France 82: 22. 1935.

Lectotype (designated by Vorontsova, 2022): Madagascar, Province Toliara, Region Atsimo-Andrefana, plateau calcaire au N du Fiherenana, forêt sèche de Fandrare à 40 km NE de Tulear, 400–700 m, March 1934, *H. Humbert 14315* (P00450177!); isolectotypes G00002394!, K000244727!, P00450178!, P00450179!, TAN000380!, US00131826!.

Distribution: Endemic to Madagascar.

Urochloa fruticulosa (A.Camus) R.Kr.Singh, *comb. nov.*

≡ *Brachiaria fruticulosa* A.Camus, Bull. Mus. Natl. Hist. Nat. sér. 2, 29: 276. 1957.

Lectotype (designated by Vorontsova, 2022): Madagascar, Province Toliara, Region Anosy, Mont Ankazovandamena, près de la Baie des Galions (Ronofotsy) au Sud-Ouest de Fort-Dauphin, 100–450 m, 21 February 1955, *H. Humbert & R. Capuron 29066* (P02344007!); isolectotypes L0820752!,

P02344004!, P02344009!.

Distribution: Endemic to Madagascar.

Urochloa lactea (Mez) R.Kr.Singh, *comb. nov.*

≡ *Panicum lacteum* Mez, Bot. Jahrb. Syst. 57: 186. 1921. *Brachiaria lactea* (Mez) A.Camus, Bull. Soc. Bot. France 93: 89. 1946.

Lectotype (designated here): Madagascar, Region Atsimo-Atsinanana, Vangaindrano District, Ambongo, 12 February 1841, *A. Pervillé 579* (P00540556!); isolectotype L0819924!.

Distribution: Endemic to Madagascar.

Notes: Two original specimens of *Panicum lacteum* Mez are extant, one at L (L0819924) and one at P (P00540556). Of these, the specimen at P (P00540556) is better preserved and is here designated as the lectotype.

Urochloa perrieri (A.Camus) R.Kr.Singh, *comb. nov.*

≡ *Brachiaria perrieri* A.Camus, Bull. Soc. Bot. France 77: 639. 1931.

Holotype: Madagascar, Region Haute Matsiatra, environs d'Ambalavao, 800 m, August 1923, *H. Perrier de la Bâthie 14438* (P00450187!); Isotype P00450188!.

Distribution: Endemic to Madagascar.

Urochloa pungipes (Clayton) R.Kr.Singh, *comb. nov.*

≡ *Brachiaria pungipes* Clayton, Kew Bull. 34(3): 558. 1980.

Holotype: Zambia, Mwinilunga District, Dambo, 100 yards N.E. of Dobeka Bridge, 11 December 1937, *E. Milne-Redhead 3617* (K000282062!); isotypes B100168262!, MO-1742298!, PRE0903478-0!, US00288832!.

Distribution: Endemic to Zambia.

Urochloa stefaninii (Chiov.) R.Kr.Singh, *comb. nov.*

≡ *Brachiaria stefaninii* Chiov., Pl. Nov. Aethiop. 23. 1928.

Holotype: Somalia, Bacino del Nogal, Boscaglia fra Dafurieroi e Gheidéli, 23 June 1924, *N. Puccioni & G. Stefanini 909* (FT000226!).

Distribution: Endemic to Somalia.

Urochloa subrostrata (A.Camus) R.Kr.Singh, *comb. nov.*

≡ *Brachiaria subrostrata* A.Camus, Bull. Soc. Bot. France 73: 691. 1927.

Lectotype (designated by Vorontsova, 2022): Madagascar, Province Antananarivo, Region Vakinankaratra, Betafo, bords de chemins, 1200 m, March 1920, *H. Perrier de la Bâthie 13064* (P00450190!); isolectotypes B100168671!, K000244725!, K000244726!, P00450191!, P00450192!.

Remaining syntypes: Madagascar, Province Antananarivo, Region Analamanga, Tananarive, 1300 m, March 1921, *H. Perrier de la Bâthie 13661* (L4407190!, P01914074!, P00450193!, P00450194!, P00450195!, US00157007!).

Distribution: Endemic to Madagascar.

Urochloa tsiafajavonensis (A.Camus) R.Kr.Singh, *comb. nov.*

≡ *Brachiaria tsiafajavonensis* A.Camus, Bull. Soc. Bot. France 72: 622. 1925.

Lectotype (designated by Vorontsova, 2022): Province Antananarivo, Region Vakinankaratra, Mont Tsiafajavona, 2000 m, May 1922, *H. Perrier de la Bâthie 14717* (P00450196!); isolectotype P00450197!.

Distribution: Endemic to Madagascar.

Urochloa urocoides (S.L.Chen & Y.X.Jin) R.Kr.Singh, *comb. nov.*

≡ *Brachiaria urocoides* S.L.Chen & Y.X.Jin, Acta Phytotax. Sin. 22(6): 471. 1984.

Holotype: China, Yunnan, Southern region, 1956, *S.L. Liou s.n.* (JSBI).

Distribution: Endemic to China (Yunnan).

Acknowledgements

The author is thankful to the Director, Botanical Survey of India, Kolkata and Head of Office, Botanical Survey of India, Arid Zone Regional Centre, Jodhpur for facilities. I am also grateful to the curators of B, BRI, FT, G, K, L, MO, P, PRE, TAN and US for the images and information of type specimens.

References

Soreng, RJ., Peterson, P.M., Zuloaga, F.O., Romaschenko, K., Clark, L.G., Teisher, J.K., Gillespie, L.J., Barberá, P., Welker, C.A.D., Kellogg, E.A., Li, D.Z. and Davidse, G. (2022). A worldwide phylogenetic classification of the Poaceae (Gramineae) III: An update. Journal of Systematics and Evolution 60(3): 476–521. https://doi.org/10.1111/jse.12847

Turland, N.J., Wiersema, J.H., Barrie, F.R., Greuter, W., Hawksworth, D.L., Herendeen, P.S., Knapp, S., Kusber, W.-H., Li, D.-Z., Marhold, K., May, T.W., McNeill, J., Monro, A.M., Prado, J., Price, M.J. and Smith, G.F. (2018). International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code). Regnum Vegetabile 159. Koeltz Botanical Books, Glashütten. https://doi.org/10.12705/Code.2018

Vorontsova, M.S. (2022). Revision of some Malagasy forage grasses and their relatives within *Brachiaria*, *Echinochloa*, *Moorochloa*, and *Urochloa*. Candollea 77(2): 199–236. https://doi.org/10.15553/c2022v772a7