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Research Article

New combinations in *Cyperus* (Cyperaceae)

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Abstract: One new name and three new combinations are proposed in the genus *Cyperus* L. (Cyperaceae). A lectotype is designated for *Mariscus mayottensis* Cherm. to ensure nomenclatural stability.

Keywords: *Kyllinga mtotomwema*, Lectotype, *Mariscus mayottensis*, *Pycreus richardsiae*, *Pycreus robinsonii*

Introduction

The genus *Cyperus* L. is represented by approximately 955 species worldwide (POWO, 2025). Recent molecular phylogenetic analyses showed that the genera *Kyllinga* Rottb., *Mariscus* Vahl and *Pycreus* P.Beauv. are synonymous with *Cyperus* (Larridon et al., 2014, 2021). Accordingly, one validly published species name in *Kyllinga* (*Kyllinga mtotomwema* Beentje), one in *Mariscus* (*Mariscus mayottensis* Cherm.) and two in *Pycreus* (*Pycreus richardsiae* Vollesen and *P. robinsonii* Vollesen) are here transferred to *Cyperus*. These new combinations reflect the molecular phylogenetic evidence supporting the monophyly of an expanded *Cyperus* that includes *Kyllinga*, *Mariscus* and *Pycreus*. This treatment follows the most recent phylogenomic framework for the Cyperaceae and aligns with current taxonomic practice under the *Cyperus s.l.* concept. Lectotype for the name *Mariscus mayottensis* Cherm. is designated here in accordance with the guidelines and recommendations of Article 9 of the Shenzhen Code (Turland et al., 2018).

New combinations

Cyperus mayottensis (Cherm.) R.Kr.Singh, *comb. nov.*

≡ *Mariscus mayottensis* Cherm., Notul. Syst. (Paris) 5: 270. 1936.

Lectotype (designated here): Comoros (Union of the Comoros), Anjouan, September 1847, *L.H. Boivin*

s.n. (left hand side specimen of P00196823!).

Remaining syntype: Mayotte (Department of Mayotte), *L.H. Boivin 3062* (right hand side specimen of P00196823!).

Distribution: Comoros and Mayotte.

Notes: Two original specimens of *Mariscus mayottensis* Cherm. are mounted on a single herbarium sheet at P (P00196823). The better-preserved specimen on the left-hand side of the sheet is designated here as the lectotype, as it agrees well with the protologue.

Cyperus mtotomwemae (Beentje) R.Kr.Singh, *comb. nov.*

≡ *Kyllinga mtotomwema* Beentje, Fl. Zambes. 14: 322. 2020.

Holotype: Malawi (Republic of Malawi), Nyika plateau, Chelinda bridge, 3 January 1977, *Pawek 12249* (K); isotypes MAL, MO.

Distribution: Malawi and Zambia.

Cyperus richardsiae (Vollesen) R.Kr.Singh, *comb. nov.*

≡ *Pycreus richardsiae* Vollesen, Fl. Zambes. 14: 296. 2020.

Holotype: Zambia (Republic of Zambia), Abercorn (Mbala) district, 24 km south of Mbala, Lunzawa, 25 December 1961, *E.A. Robinson 4743* (K001322214!).

Distribution: Endemic to Zambia.

Cyperus vollesenii R.Kr.Singh, *nom. nov.*

≡ *Pycreus robinsonii* Vollesen, Fl. Zambes. 14: 280. 2020.

Holotype: Zambia (Republic of Zambia), Mporokoso district, Mweru Wantipa, Kabwe Plain, 1000 m, 18 December 1960, *H.M. Richards 13751* (K001322215!).

Distribution: Endemic to Zambia.

Etymology: Named after Kaj Børge Vollesen, Danish botanist who worked at the Royal Botanic Gardens, Kew.

Notes: The species epithet *robinsonii* is preoccupied in the genus *Cyperus* L. (*C. robinsonii* Podlech, Mitt. Bot. Staatssamml. München 4: 111. 1961), therefore, a new name is herein proposed.

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References

Larridon, I., Bauters, K., Reynders, M., Huygh, W. and Goetghebeur, P. (2014). Taxonomic changes in C_4 *Cyperus* (Cypereae, Cyperoideae, Cyperaceae): combining the sedge genera *Ascolepis*, *Kyllinga* and *Pycreus* into *Cyperus s.l.* Phytotaxa 166(1): 33–48. http://dx.doi.org/10.11646/phytotaxa.166.1.2

Larridon, I., Zuntini, A.R., Léveillé-Bourret, É., Barrett, R.L., Starr, J.R., Muasya, A.M., Villaverde, T., Bauters, K., Brewer, G.E., Bruhl, J.J., Costa, S.M., Elliott, T.L., Epitawalage, N., Escudero, M., Fairlie, I., Goetghebeur, P., Hipp, A.L., Jiménez-Mejías, P., Kikuchi, I.A.B.S., Luceño, M., Márquez-Corro, J.I., Martín-Bravo, S., Maurin, O., Pokorny, L., Roalson, E.H., Semmouri, I., Simpson, D.A., Spalink, D., Thomas, W.W., Wilson, K.L., Xanthos, M., Forest, F. and Baker, W.J. (2021) A new classification of Cyperaceae (Poales) supported by phylogenomic data. Journal of Systematics and Evolution 59(4): 852–895. https://doi.org/10.1111/jse.12757

POWO. (2025). Plants of the World Online. Royal Botanic Gardens, Kew. Available from: http://www.plantsoftheworldonline.org/ (accessed 15 May 2025).

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