

Three new combinations in African *Cyperus* (Cyperaceae)

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Background – During the past decade several molecular phylogenetic studies tackled the complex relationships within tribe Cyperaceae. Based on these studies, previously accepted segregate genera such as *Pycreus* were sunk into the genus *Cyperus*. Recently, while revising the West African species of *Cyperus*, three taxa previously placed in *Pycreus* were identified for which a name in *Cyperus* is lacking.

Methods – The taxonomic changes are performed according to the *International Code of Nomenclature for algae, fungi, and plants*.

Results – Three new combinations in *Cyperus* are made for names currently placed in *Pycreus*.

Keywords – Cyperaceae; *Cyperus*; new combination; *Pycreus*.

INTRODUCTION

During the past decade several molecular phylogenetic studies tackled the complex relationships within tribe Cyperaceae (Larridon et al. 2011a, 2011b, 2013, 2014, Bauters et al. 2014). Based on these studies, thirteen segregate genera recognised by Goetghebeur (1998) were sunk into *Cyperus* L., including *Pycreus* P.Beauv. which was shown to be non-monophyletic (Larridon et al. 2013). Recently, while revising the West African species of *Cyperus*, three taxa previously placed in the segregate genus *Pycreus* were identified for which a name in *Cyperus* is lacking. Two taxa were previously known but taxonomic uncertainties halted Larridon et al. (2014) from combining them into *Cyperus* at that time, i.e. *Pycreus testui* Cherm. (Chermezon 1931) and *Pycreus pseudodiaphanus* (S.S.Hooper) Lye var. *occidentalis* S.S.Hooper (Hooper & Raynal 1969). Here, we follow the opinion of Hooper & Napper (1972) on the delimitation of both taxa. The third species was recognised by I. Larridon and J. Browning as a new taxon in the K herbarium, respectively as part of an effort to red list the plant species of Guinea and during the preparation of an account for Cyperaceae in tropical West Africa (Verloove et al. 2019). In the latter

study, the new species was placed in *Pycreus*. Below, the three taxa are combined into *Cyperus*.

MATERIALS AND METHODS

The taxonomic changes are performed according to the *International Code of Nomenclature for algae, fungi, and plants* (Turland et al. 2018). This study was performed using herbarium material; acronyms of institutes holding herbarium collections follow Thiers (continuously updated).

TAXONOMIC TREATMENT

Cyperus rubidomontanus (J. Browning) Larridon, **comb. nov.**

Pycreus rubidomontanus J.Browning, *Phytotaxa* 405(2): 83. 2019 (Verloove et al. 2019). – Type: Guinea, Hollandé, Tossékéré, Labé, 15 Oct. 1956, J.-G. Adam 12732 (holotype: K, barcode K001322386; isotypes: BR, barcode BR0000018180220, P, barcode P00584799).

Pycreus atrorubidus auct. afr. occ., non Nelmes.

Cyperus testui (Cherm.) Reynders, **comb. nov.**

Pycreus testui Cherm., *Archives de Botanique*, Tome 4, Mémoire 7: 13. 1931 (Chermezon 1931). – Type: Central African Republic, Marais du Brini, 21 Jun. 1921, *G.M.P.C. Le Testu 2860* (lectotype: P, barcode [P00573015](https://doi.org/10.1111/j.1095-8339.2011.01160.x), **designated here**; isolectotypes: P, barcodes [P00573013](https://doi.org/10.1111/boj.12020), [P00573014](https://doi.org/10.1111/boj.12020)).

Cyperus pseudodiaphanus (S.S.Hooper) Lye **var. occidentalis** (S.S.Hooper) Reynders, **comb. nov.**

Pycreus pseudodiaphanus (S.S.Hooper) Lye var. *occidentalis* S.S.Hooper, *Kew Bulletin* 23(2): 313. 1969 (Hooper & Raynal 1969). – Type: Senegal, Casamance, Oussouye, 6 Oct. 1961, *J.-G. Adam 18311* (holotype: K, barcode [K000362906](https://doi.org/10.1111/boj.12020); isotype: IFAN).

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