

Nomenclatural consequences of some new combinations and replacement names in *Eulophia* (Orchidaceae: Eulophiinae)

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Abstract: The nomenclatural consequences of some recently published new combinations and replacement names under *Eulophia* R.Br. (Orchidaceae) are discussed with a suggestion to follow the existing usage of these name under *Geodorum* Andrews until their nomenclatural status is resolved in the future.

Keywords: *Eulophia diffusiflora*, *Eulophia exigua*, *Geodorum*, Replaced synonym, Replacement name.

Introduction

Chase *et al.* (2021b) proposed to conserve the name *Eulophia* R.Br. (Orchidaceae: Eulophiinae) against the name *Geodorum* Andrews. But even before the proposal was published, and naturally also much before the possibility of effective publication by approval of the General Committee (see Art. 14.15, Turland *et al.*, 2018), Chase *et al.* (2021a) published thirty new combinations (*comb. nov.*) and five replacement names/new names (*nom. nov.*) in *Eulophia* as though that name had priority over the earlier validly published and legitimate name *Geodorum*. Because Chase *et al.* (2021a) explicitly cited *Geodorum* Andrews (1811) as a synonym of *Eulophia* R.Br. (1821), albeit mistakenly referring to the latter as “*nom. cons.*”, all the species names that they included under *Eulophia* are incorrect, including the existing names *E. ambongensis* Schltr., *E. schlechteri* H. Perrier and *E. tristis* (L.f.) Spreng., for which, given the authors accepted generic synonymy, new combinations in *Geodorum* should have been provided under Art. 11.4. The thirty new combinations and the

five replacement names published in *Eulophia* by Chase *et al.* (2021a) are nomenclaturally incorrect as, under Chase *et al.*'s taxonomic treatment they should have been provided with species names in *Geodorum*. Although nomenclaturally incorrect, the new combinations are not illegitimate under Art. 52.4 of the *Shenzhen Code* (Turland *et al.*, 2018) and would become the correct names if and when the conservation proposal is accepted. Though there is no doubt that these replacement names are incorrect, it is a matter of argument whether they are illegitimate as per the definition and example provided in the *Shenzhen Code* (Turland *et al.*, 2018). Further, it is uncertain whether the replacement names would be illegitimate or legitimate as there is no provision in the *Code* to protect replacement names in such a way (Art. 6.4). So, for example, *Eulophia diffusiflora* M.W.Chase, Kumar & Schuit. (Chase *et al.*, 2021a), with the replaced synonym *Geodorum laxiflorum* Griff., was nomenclaturally not correct when published as a replacement name (*nom. nov.*) because *Eulophia* was not conserved against *Geodorum* when *E. diffusiflora* was published. Moreover, the name would not become correct/legitimate under the current provisions of the *Code*, notably Art. 6.4 (Turland *et al.*, 2018), even if the conservation proposal of *Eulophia* against *Geodorum* is accepted in the future. Though the replacement names (*Eulophia bosseriana* M.W.Chase & Schuit., *E. chrysea* M.W.Chase & Schuit., *E. diffusiflora*, *E. exigua* M.W.Chase, Kumar & Schuit. and *E. hermansiana* M.W.Chase & Schuit.) are incorrect/illegitimate, they are validly published and therefore, they preclude later publication of the

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same names. Therefore, new epithets would be needed for correct/legitimate replacement names to be published if the conservation of *Eulophia* becomes effective and these would only date to their actual publication. Though these names are presently treated as correct names in two recent publications (Chakraborty *et al.*, 2021; Ormerod *et al.*, 2022) and also on several websites, including POWO (2023), IPNI (2023), they are actually incorrect/illegitimate names. Hence, it is suggested to use the name *Geodorum laxiflorum* Griff. and *G. siamense* Rolfe ex Downie instead of *Eulophia diffusiflora* and *E. exigua* respectively, and to treat the names *Eulophiella longibracteata* Hermans & P.J.Cribb, *Oeceoclades aurea* Loubr., *O. longibracteata* Bosser & Morat under *Geodorum* by making new combinations or by using these names as such until their nomenclatural status is fixed in the future.

Therefore, one should abide by Rec. 14A.1 (Turland *et al.*, 2018) which advises (though non-binding) to follow the existing usage of names as far as possible when a proposal for the conservation (Art. 14) or protection (Art. F.2) of a name has been referred to the appropriate specialist committee for study pending the General Committee's recommendation on the proposal. Similarly, Rec. 56A.1 (Turland *et al.*, 2018) suggests to follow the existing usage of a name as far as possible when a proposal for the rejection of a name under Art. 56 or F.7 has been referred to the appropriate specialist committee for study pending the General Committee's recommendation on the proposal.

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