Polydora Fenzl (1844) is recognised to be a nomen nudum that was only validly published by Robinson (1999). The inclusion by Robinson (1999) of the earlier validly published Crystallopollen Steetz ([in Peters] 1864) as a synonym however, rendered Polydora Fenzl ex H.Rob. (1999) superfluous and so illegitimate. Crystallopollen Steetz ([in Peters] 1864) is therefore the correct name for the genus as circumscribed by Robinson (1999) and later authors. Only one of the names currently accepted in Polydora has a combination in Crystallopollen and the necessary additional combinations are provided here for C. bainesii (Oliv. & Hiern) J.C.Manning, C. chloropappum (Baker) J.C.Manning, C. jelfiae (S.Moore) J.C.Manning, C. mbalense (G.V.Pope) J.C.Manning, C. rhodesiana (S.Moore) J.C.Manning, C. serratuloides (DC.) J.C.Manning and C. sylvicola (G.V.Pope) J.C.Manning.

Keywords: Africa; classification; illegitimate superfluous name; nomenclature; nomen nudum; taxonomy.

The genus Polydora Fenzl (1844) (Asteraceae: Vernonieae) is one of twelve segregates of Vernonia Schreb. that were recognised by Robinson et al. (2016) in their synopsis of the southern African members of the tribe Vernonieae. It comprises mostly annual herbs with L-shaped or asymmetrically T-shaped hairs on the stems, a 6- or 7-seriate involucre of acute to awned bracts and lophate, pantoporate pollen (Robinson et al. 2016; Swelankomo et al. 2018). The generic circumscriptions adopted by Robinson et al. (2016) followed his earlier conclusion (Robinson 1999) that Vernonia in the narrow sense was restricted to the Western Hemisphere, and that the African and Asian taxa previously included in it had to be removed to other genera in order to render it monophyletic.

The revised classification proposed by Robinson (1999) was adopted for the southern African flora by Herman and Swelankomo (2011), who provided a nomenclator for the flora of the region. This was superseded by the more comprehensive synopsis provided by Robinson et al. (2016). None of these three accounts included critical taxonomic assessments of the species themselves. These have now been provided for some of the genera, viz. Distephanus Cass. (Swelankomo & Manning 2014), Gymnanthemum Cass. (Swelankomo et al. 2016a), Hilliardiella H.Rob. (Swelankomo et al. 2016b) and most recently Polydora Fenzl (Swelankomo et al. 2018).

It has since emerged that the generic name Polydora was not validly published by Fenzl (1844) and that the earliest available name for the genus is Crystallopollen Steetz ([in Peters] 1864). We examine this issue here and summarise the
nomenclature, as well as providing several new combinations in Crystallopollen for taxa currently recognised in Polydora.

Crystallopollen Steetz ([in Peters] 1864) was published for the two species C. angustifolium Steetz and C. latifolium Steetz, without the designation of a type. The citation by Robinson (1999) of C. angustifolium as the type of Crystallopollen is thus to be regarded as designation of that species as the type (Turland et al. 2018: ICN Art. 10.2). The combination of this name in Polydora was also provided by Robinson (1999). The second species, C. latifolium, is the type of Vernoniasiastrum H.Rob. (1999).

The generic name Crystallopollen Steetz is thus the earliest available name for the group of species treated as Polydora by Robinson (1999) and later authors. Unfortunately, only one of the several species that are currently included in the genus has a combination in Crystallopollen and we therefore provide the necessary combinations here. Typification of the names is provided in Pope (1986) and Swelankomo et al. (2018).

Crystallopollen Steetz in Peters, Naturw. Reise Mosambique 6 (Bot., 2): 363 (1864). Type species: C. angustifolium Steetz, designated by Robinson: 232 (1999). Polydora Fenzl ex H.Rob. in Proc. Biol. Soc. Washington 112(1): 232 (1999), nom. illeg. superfl. pro Crystallopollen Steetz ([in Peters] 1864); Robinson et al.: 103 (2016); Swelankomo et al.: 336 (2018). Type: P. stoechadifolia Fenzl, nom. nud. = P. serratuloides (DC.) H.Rob.

Polydora Fenzl in Flora 27: 312 (1844), nom. nud., without description]
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