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Annea gen. nov. (Detarieae, Caesalpinioideae, Leguminosae): a home for two species long misplaced in *Hymenostegia sensu lato*

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Abstract

A new genus *Annea* is described to accommodate two tropical African legume species previously misplaced in *Hymenostegia* (Leguminosae, Caesalpinioideae, Detarieae). *Annea gen. nov.* is widespread in tropical Africa but has an unusual disjunct generic distribution, occurring in both upper and lower Guinea but absent from Gabon. *Annea afzelii* accounts for the generic range in Upper Guinea extending as far east as Equatorial Guinea in the Lower-Guinea region whereas *A. laxiflora* occupies the southern part of Lower Guinea and shows a preference for drier habitats than the more wide ranging *A. afzelii*. *Hymenostegia dinklagei*, a synonym of *A. afzelii* is neotypified. Neither species of *Annea* qualifies for a category of threat and both are assessed here as Least Concern (LC) according to IUCN criteria. *Scorodophloeus*, another exclusively tropical African genus is sister to *Annea*. Two tables of characters are included, one comparing the morphologies of *Annea*, *Scorodophloeus* and *Hymenostegia sensu stricto* and another providing morphological characters that can be used to separate the two species of *Annea*. A distribution map of *Annea*, an illustration of *A. afzelii* and photographs of *A. laxiflora* are presented.

Key words: Amherstieae, Conservation, Fabaceae, Taxonomy, Neotype, Tropical Africa

Introduction

Leguminosae is the most species rich flowering plant family in tropical Africa (Lebrun & Stork 1998) and is currently recognised as three subfamilies, Caesalpinioideae, Mimosoideae and Papilionoideae. Many species of subfamily Caesalpinioideae are ecological dominants of African forest and woodland (White 1983). Together, caesalpinioid legumes number c. 2900 species in 171 genera and are traditionally arranged in four tribes. The largest tribe, Detarieae, contains 82 accepted genera as enumerated by Mackinder (2005) but with the addition of *Isomacrolobium* by Breteler (2010) and the removal of *Pellegriniodendron* which was synonymised with the genus *Gilbertiodendron* by Estrella *et al.* (2012).

At least two detarioid genera, *Hymenostegia sensu lato* and *Cynometra sensu lato* are not natural groups as currently defined (Bruneau *et al.* 2000, 2001, 2008; Mackinder *et al.* 2010). *Hymenostegia sensu lato* is an exclusively African genus, principally of trees of lowland forest, currently comprising 18 species. Of those 18, only ten may be congeneric with the type (Mackinder *et al.* 2010; Wieringa and Mackinder 2012, Mackinder and Wieringa 2013; Wieringa *et al*. 2013). Species presently assigned to the genus in its broad circumscription are morphologically diverse in several respects but all have paripinnate leaves and bear persistent paired petaloid bracteoles which are usually large and showy.

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