



A new species of *Monanthotaxis* from Gabon with a unique inflorescence type for Annonaceae

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Introduction

Monanthotaxis Baillon (1890: 878) currently consists of 56 species (Rainer & Chatrou 2006) confined to tropical Africa and Madagascar and is the second most species-rich genus of Annonaceae in Africa after *Uvaria* Linnaeus (1753: 536). Both genera belong to the tribe Uvarieae Hooker & Thomson (1855: 91, 92). Circumscription of this tribe has recently been modified to comply with the principle of monophyly, and it now almost exclusively consists of climbing species, all from the Old World tropics (Chatrou *et al.* 2012). Generic circumscription within Uvarieae has been in disarray for considerable time. Delimitation of *Uvaria* and related genera has recently been modified based on phylogenetic relationships (Zhou *et al.* 2010, Zhou *et al.* 2009). *Monanthotaxis* was monophyletic in Wang *et al.* (2012), based on a limited sampling of seven species. Subsequent study with increased sampling (Hoekstra, unpub.) has revealed that the African species of *Friesodielsia* van Steenis (1948: 458) and *Exellia* Boutique (1951b: 117) are nested in *Monanthotaxis*. Whatever the solution and taxonomic consequences, the name *Monanthotaxis* with the type *Monanthotaxis congoensis* Baillon (1890: 879) will be retained as it is the oldest valid generic name.

Along with phylogenetic analysis, we are conducting a taxonomic revision. The last revision of *Monanthotaxis* and allied genera was published over a century ago by Engler & Diels (1901). Since then, only contributions to local floras have been published (e.g. Boutique 1951a, Le Thomas 1969, Robson 1960, Verdcourt 1971a). While studying the material of *Monanthotaxis*, we encountered a remarkable new species, which differs from all other species of Annonaceae in its large and lax panicle-like inflorescence. Panicle-like inflorescences are rare in Annonaceae, and those that have been recorded are either congested, as in e.g. *Unonopsis* and *Gutteria* (Erkens *et al.* 2008, Maas *et al.* 2007), or with only a few flowers, as in *Monanthotaxis le-testui* Pellegrin (1950: 75). This new species is probably closely related to *M. congoensis* since they share several characters. Verdcourt (1971b) divided the genus in three subgenera and five sections. In his classification, this new species would join *M. congoensis* in the typical section *Monanthotaxis*, which is easily distinguished by having flowers with the four to six petals in a single whorl and less than 17 stamens. Because it is so similar to *M. congoensis*, our new species will almost certainly be classified within *Monanthotaxis*, and we decided to publish it before a new generic classification has been completed.

Monanthotaxis paniculata P.H.Hoekstra, *spec. nov.* (Fig. 1)

Type:—GABON. Ogooué-Ivindo: north of Koumameyong along SHM lumber roads, 0° 25' N, 11° 55' E, 31 January 1993, McPherson 16123 (holotype: WAG!, isotypes: MO!, P!).

Additional specimen examined: GABON, Estuaire: ca 20 km N of Libreville, 29 January 1987, Reitsma 2870 (NY!, WAG!).

Monanthotaxis paniculata resembles *Monanthotaxis congoensis*, but differs in the panicle-like inflorescence, instead of a raceme.

Liana to 20 m long; old branches dark, blackish, glabrescent with lenticels, young branches densely pubescent with appressed, ferruginous-brown hairs 0.5 mm long. Petioles 4–8 mm long, 1.0–1.5 mm wide, grooved adaxially, densely

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