THE GENERIC DISPOSITION OF THE AFRICAN *VERNONIA BIAFRAE* Oliv. & Hiern (VERNONIEAE: ASTERACEAE).

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ABSTRACT

Vernonia biafrae of West and Central tropical Africa is transferred to the genus *Distephanus. Phytologia 91(3): 534-536 (December, 2009).*

KEY WORDS: Africa, Vernonieae, Asteraceae, *Vernonia biafrae*, *Distephanus*.

Two points are important regarding the Vernonieae of Africa. First, none of the native species that has been called *Vernonia* in Africa truly belong to that genus (Robinson 1999a, b); and second, the alternative taxonomy remains incomplete. For the present, only some of the needed segregates have been properly established or defined (Robinson 1999a, 2007, 2009). One other author, Isawumi (2008),who has direct access to many of the species, has been able to make some further changes. A disposition is provided here for one additional species. *Vernonia biafrae* Oliv. & Hiern.

Vernonia biafrae has been described as shrub or small tree, occurring in West and Central tropical Africa from the areas of Nigeria, Kameroon, Gabon, Equatorial Guinae, Sudan, Ethiopia, Kenya, Uganda, Tanzania, Zambia, and Malawi. In the most general way, its habit resembles plants of the *Vernonia zanzibarensis* Less. relationship, but details, such as the acute-tipped sweeping hairs on the styles and structure of the achene wall, belie any close relation. No attempt was made to place the species by Robinson (1999a) in the first effort to realign the African Vernonieae.

In Jones (1981), *Vernonia biafrae* was placed in *Vernonia* subsection *Pawekianae* S.B. Jones. This subsection was typified by *Vernonia angulifolia* DC.

Jeffrey (1988), in the text of his study, placed *Vernonia biafrae* in his "*Vernonia* group 2 subgroup B, third aggregate" with mostly persistent inner involucral bracts, ca. 5-ribbed achenes, and ovate to cordate leaves. This "aggregate" included subsection *Pawekianae* of S.B. Jones. In a comment under the species, Jeffrey suggested that *V. biafrae* might be conspecific with the South African *V. angulifolia*. In fact, *V. angulifolia*, though superficially very similar, differed by having trinervate or triplinervate leaves, and was already placed in *Distephanus* Cass. by Robinson & Kahn (1986). An examination of *V. biafrae* shows that it has little in common with other species in the "aggregate" in which it was placed by Jeffrey (1988), an aggregate consisting primarily of *V. zanzibarensis* Less. and its close relatives. However, the papery, persistent, blunt involucral bracts with a median dark line, and the multiply pseudodichotomous branching of the inflorescence are almost identical to the condition in *Distephanus angulifolia* (DC.) H. Rob. & Kahn, and some of its close relatives such as *D. anisochaetoides* (Sond.) H. Rob. & Kahn. Thus, Jeffrey's placement of the species in his treatment was incorrect, but his comment under the species seems to have identified the correct relationship.

A problem still remains in the placement of *V. biafrae*. *Distephanus* is mostly defined by its trinervate or triplinervate leaf venation and by its yellow florets. The leaves of *V. biafrae* are strictly pinnately veined, and its florets are reddish to purplish, as in most of the other genera of the Vernonieae. There are exceptions to these characters in some *Distephanus*, especially in those species in continental Africa, species that often lack yellow corollas. Proof will await DNA sequencing, but for the present, it seems that the placement of Jones (1981) and the comment by Jeffrey (1988) have proven essentially correct. The transfer is as follows.

Distephanus biaferae (Oliv. & Hiern) H. Rob., **comb. nov.** Basionym: *Vernonia biafrae* Oliv. & Hiern, in Oliver, Fl. Trop. Afr. 3: 270. 1877.

Vernonia tufnelliae S. Moore, J, Bot. 46: 292. 1908.

Vernonia leptolepis O. Hoffm. in Engl., Pflanzenw. Ost.—Afr. C. 405. 1895. As indicated by Jeffrey (1988), neotypification is needed. Such neotypification awaits more appropriate material. I follow Jeffrey (1988) in his doubt about this synonym. The Hoffmann (Engler 1895) description of the involucral bracts, "oblongis obtusis pallidis, nervo obscuriore percursis . . ." certainly applies, but description of the leaves as, "lanceolatis vel ovato-lanceolatis plerumque obtusis . . ." seems wrong unless the word "obtusis" applied to something other than the leaf apex.

Vernonia verschuerenii De Wild., Bull. Jard. Bot. Brux. 5: 94. 1915.

Vernonia rhodocalymma Chiov., Atti Reale Accad. Ital. Mem. Rendiconti della Classe di scienze fisiche, matematiche e naturali 11 (Pl. Nov. Aethiop.): 36. 1940.

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