

SAPOTACEAE

A 'BEQUAERTIODENDRON' BY ANY OTHER NAME?

The taxonomy and nomenclature of the genus *Bequaertioidendron* De Wild. have caused considerable controversy over the last thirty years. To complicate matters, two recent revisions, one of *Bequaertioidendron* (Liben 1989) and the other of the genera of the Sapotaceae (Pennington 1991), differ markedly from each other.

Chrysophyllum magalismontanum was described by Sonder (1850) and based on Zeyher 1849, a specimen from the Magaliesberg. This species as well as *C. natalense* Sond. and *C. glomeruliferum* Hutch. & Dalz. have fruit characters which separate them from the rest of the genus. The need to recognise this group as a separate entity prompted various researchers to describe new genera and sections in which members of the group could be accommodated. Thus, *Chrysophyllum* L. sect. *Zeyherella* Pierre ex Engl., *Pachystela* Pierre ex Engl. sect. *Zeyherella* (Engl.) Lecomte, *Tisserantiodoxa* Aubrév. & Pellegr., *Zeyherella* (Engl.) Aubrév. & Pellegr., *Boivinella* Aubrév. & Pellegr. and *Neoboivinella* Aubrév. & Pellegr. originated.

The genus *Bequaertioidendron* was established by De Wildeman (1919) and was based on *Bequaert* 2483 from the Belgian Congo. *Chrysophyllum magalismontanum* Sond. was considered to be congeneric with the type species of the genus, namely *Bequaertioidendron congolense* De Wild. This meant that the concept of *Bequaertioidendron* had to be broadened, and this was done by Heine & Hemsley in 1960, hence *Bequaertioidendron* De Wild. emend. Heine & J.H. Hemsley.

The genus *Englerophytum* was described by Krause in 1914 and typified by *Englerophytum telechantha* Krause. It comprises five to ten poorly defined species in tropical Africa. *Bequaertioidendron* was reduced to synonymy under *Englerophytum* by Aubréville in 1960. However, Heine & Hemsley (1960, 1968) did not recognise this genus for the following reasons: the type material was thought to have been destroyed, the diagnosis and illustrations did not fully agree, and the genus was described without fruits.

Liben (1989), in a revision of the West and Central African species, concluded that the material placed in *Bequaertioidendron magalismontanum* by Heine & Hemsley (1960) could be divided into eight different species. On the basis of macromorphological floral and seed characters, these species were grouped into three genera, namely *Englerophytum* Krause, *Wildemaniodoxa* Aubrév. & Pellegr., and *Zeyherella* (Pierre ex Engl.) Aubrév. & Pellegr. Liben (1989) reduced *Bequaertioidendron magalismontanum* to synonymy under *Zeyherella magalismontana* (Sond.) Aubrév. & Pellegr.

Steyn (1990), in an attempt to retain *Bequaertioidendron magalismontanum*, used macromorphological characters of female and hermaphroditic flowers from gynodioecious populations to evaluate Liben's concept of *B. magalismontanum* *sensu lato*. According to Steyn (1990), characters which distinguish the southern African *B. magalismontanum* from the tropical African material are the presence of a stylar comitum, an ovarian nectary,

introrse apiculate stamens, or staminodes derived from such stamens, and a tendency in female plants to increase to ten the number of corolla lobes, of epipetalous staminodes and of locules. It is also emphasised that the staminal structure of southern African plants and *Englerophytum* (*sensu* Liben 1989) differ considerably. In the latter genus short filaments are united in a staminal tube that adheres tightly to and completely covers the pistil and bears nonapiculate anthers.

Pennington (1991) reduced *Bequaertiodendron* to synonymy under *Englerophytum*, because of the rediscovery of authentic material of the type species of *E. stellechanthum* (Aubréville 1971). He pointed out that closely related species groups in Sapotaceae are often highly variable in the number of their floral parts. An examination of the *Englerophytum* complex throughout its range showed that there was no clear distinction between free stamens and those fused into a tube, but rather a range of conditions from free, through slightly fused to completely fused. As a whole, the complex is characterised by a tendency towards fusion.

Concerning the genus *Bequaertiodendron* in southern Africa, it is clear that *Englerophytum* is the earlier name and Pennington's treatment of the genus should be followed. Nevertheless, on the basis of characters pointed out by Steyn (1990), it is recommended that more research should be undertaken at species level within *Englerophytum*. The NBI agrees with Pennington's views and accepts the following name changes:

Englerophytum magalismontanum (Sond.) Pennington, The genera of Sapotaceae: 252 (1991).

Chrysophyllum magalismontanum Sond.: 72 (1850). *Pachystela magalismontana* (Sond.) Lecomte: 189 (1919). *Zevherella magalismontana* (Sond.) Aubrév. & Pellegr.: 37 (1958). *Pouteria magalismontana* (Sond.) Meeuse: 335 (1960). *Bequaertiodendron magalismontanum* (Sond.) Heine & Hemsley: 307 (1960).

Englerophytum natalense (Sond.) Pennington, The genera of Sapotaceae: 252 (1991).

Chrysophyllum natalense Sond.: 72 (1850). *Boivinella natalensis* (Sond.) Pierre ex Aubrév. & Pellegr.: 37 (1958). *Neoboivinella natalensis* (Sond.) Aubrév. & Pellegr.: 23 (1959). *Pouteria natalensis* (Sond.)

Meeuse: 339 (1960). *Bequaertiodendron natalense* (Sond.) Heine & Hemsley: 308 (1960).

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