

New and Interesting Records of African Flowering Plants

by

Various Authors

CELASTRACEAE

THE CASSINE COMPLEX

Dr. N. K. B. Robson, in Bol. Soc. Brot. 39: 5–55 (1965), published an analysis of the genera allied to *Cassine* L. occurring in the *Flora Zambesiaca* area and included those found in the neighbouring territory of Southern Africa. He deserves credit for his meticulous study, which has brought together a great deal of data. However, many of his conclusions do not commend themselves to the present author, who prefers the broader concept presented by Ding Hou in *Flora Malesiana* 6, 2: 284 (1962).

An important contribution by Robson concerns the typification of *Cassine* L. On the evidence produced, it appears that the genus should be typified by the Cape species, *C. peragua* L., Sp. Pl. 268 (1753) (= *C. capensis* L.), an opinion that will probably be generally accepted. Differences of opinion may arise, however, regarding his conclusion to restrict the genus to the two Cape species, *C. peragua* L. and *C. parvifolia* Sond. This conclusion, he argues, follows from an attempt to classify the species into “natural” groups, leading him to uphold the following five genera in addition to *Cassine* sens. str.: *Elaeodendron* Jacq.f. ex Jacq. (in which he includes *Lauridia* Eckl. & Zeyh.), *Crocoxylon* Eckl. & Zeyh. (in which he includes *Pseudocassine* Bredell), *Hartogia* L.f., *Mystroxylon* Eckl. & Zeyh. and *Allocassine* N. Robson.

Certain of these genera, such as *Mystroxylon* and *Allocassine* sens. str., may well be “natural” ones in the sense that they appear to be relatively discrete units in an intricate and reticulate pattern. The question arises whether any useful purpose is served by attempting to split up a heterogeneous but easily recognized group into a number of units based on characters which appear to be matters of degree. The result, as applied to the South African species, is unsatisfactory and, until more information of a fundamental nature is forthcoming, which supports this treatment throughout the entire range of the group, it is preferred to adopt a broad concept of *Cassine* and to include within it the genera *Elaeodendron*, *Lauridia*, *Crocoxylon*, *Pseudocassine* and, probably, *Mystroxylon*.

The genus *Pseudocassine*, with its 3-merous flowers, has previously been regarded as an aberrant member of the Celastraceae, in which family flowers with three stamens are exceptional. When seen in perspective, it may be interpreted as the product of an evolutionary trend within the *Cassine* complex towards reduction in numbers of flower parts.

This broad concept of *Cassine* calls for certain combinations, which are now effected.

***Cassine reticulata* (Eckl. & Zeyh.) Codd, comb. nov.**

Lauridia reticulata Eckl. & Zeyh., Enum. Pl. Afr. Austr. 124 (1834–35).

Elaeodendron reticulatum (Eckl. & Zeyh.) Ettingshausen in Denkschr. K. Akad. Wiss. Wien 13: 58 (1857); Robson in Bol. Soc. Brot. 39: 39 (1965).

Cassine transvaalensis (Burt Davy) Codd, comb. nov.

Salacia(?) *transvaalensis* Burt Davy in Kew Bull. 1921: 51 (1921).

Pseudocassine transvaalensis (Burt Davy) Bredell in S. Afr. J. Sci. 33: 330 (1937).

Crocoxydon transvaalsense (Burt Davy) Robson in Bol. Soc. Brot. 16: 41 (1965).

Hartogia L.f. (1781) is an illegitimate name, being antedated by *Hartogia* L. (1759). Consideration may be given to including it in *Cassine*, but it shows certain anomalous features which first require thorough investigation. It differs from *Cassine* mainly in the endosperm being scanty or absent(?), while the fruit is relatively thin-walled like that of typical *C. aethiopica*. Although the fruit usually contains one seed, a second seed may partially or fully develop. It may be noted that a similar situation arises in *C. tetragona*, included by Robson as a second species in his genus *Allocassine*. *C. tetragona* appears to be out of place in *Allocassine*. The similarities which it shows to the typical species, *A. laurifolia* (Harv.) Robson, are suggestive of convergent evolution rather than a natural relationship. *Allocassine* sens. str. may well be a good genus, but it is preferred to return *A. tetragona* to *Cassine* as it is clearly related to *C. aethiopica*.

THE STATUS OF THE GENUS LYDENBURGIA

Another point on which I must differ from Robson is in connection with his decision to erect the genus *Lydenburgia* Robson, based on *L. cassinoides* Robson, a species found in Sekukuniland, Lydenburg District. It so happens that I recently studied a range of material of this species and was in the process of describing it in the genus *Catha*. As stated by Robson, it differs from typical *Catha* in its longer seeds which are trigonous and possess a small aril, lacking the wing-like aril of typical *Catha*. In floral characters and general facies it closely resembles *Catha edulis* and I have no hesitation in reducing *Lydenburgia* to synonymy.

Catha Forsk. ex Scop., Introd. Hist. 228 (1777).

Lydenburgia Robson in Bol. Soc. Brot. 39: 34 (1965).

Catha cassinoides (Robson) Codd, comb. nov.

Lydenburgia cassinoides Robson in Bol. Soc. Brot. 39: 35 (1965).