## LILIACEAE/ASPHODELACEAE

## THE TYPE OF CHORIOLIRION BERGERIANUM (ALOOIDEAE)

Berger (1908) erected the genus *Chortolirion* to accommodate the four bulbous species of *Haworthia* known at the time. Six years after this genus was established, Dinter (1914) described a fifth species as *C. bergerianum* from specimens which he collected near Windhoek in Namibia. Obermeyer (1973) sank the four *Chortolirion* species recognized by Berger (1908) in the synonymy of *H. angolensis* Baker. However, she did not mention *C. bergerianum* in her treatment of *Chortolirion*.

A revision of the smaller genera of the subfamily Alooideae of the Asphodelaceae currently under way has shown that *Chortolirion* represents a natural, monotypic entity which should be afforded separate generic recognition (Smith 1985, 1988). In an attempt to establish the identity of *C. bergerianum*, I became aware that Dinter failed to designate a type specimen when he described this species. In this paper I present the results of my efforts to typify the name *C. bergerianum*.

According to the International Code of Botanical Nomenclature (Articles 7.1 and 7.2) all taxa of the rank of family or below must have a nomenclatural type (Greuter *et al.* 1988). However, no Dinter material collected in January 1913 from the type locality ('Voigtland', 20 km east of Windhoek) could be traced in any of the herbaria listed by Holmgren *et al.* (1988), Stafleu & Cowan (1976) or Gunn & Codd (1981). The following discussion should clarify the typification of *C. bergerianum*:

1, Dinter (1914) did not cite any herbarium specimens nor did he mention any plant material which he used in establishing this taxon; 2, no specimens collected in January 1913 at the type locality and used (Article 7.3) or annotated by Dinter in preparing the description, but not cited or designated as type, could be found; 3, Dinter

(1914) included a single reference to an illustration (Fig. 12) which was published along with the original description of *C. bergerianum* in *Neue und wenig bekannte Pflanzen Deutsch-Südwest-Afrikas* (1914); 4, this figure, which therefore forms part of the protologue, is of a sterile specimen, but clearly agrees with Dinter's description; 5, Article 7.3 and Note 1 of this article clearly specify that any designation made by the original author, if definitely expressed at the time of the original publication of the name of a taxon, is final. Furthermore, the type of a name may be either a specimen or an illustration.

After considering the existing evidence, I concluded that Dinter's illustration, as an element included in the protologue, is the type of *C. bergerianum*. Since it is the only element cited, and no specimens used or annotated by Dinter can be found, the illustration should be referred to as the holotype and not treated as a lectotype. The type of *C. bergerianum* is:

TYPE.—K. Dinter, Neue und wenig bekannte Pflanzen Deutsch-Südwest-Afrikas t. 12 (1914) (icono.).

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