CYPERACEAE

FICINIA LUCIDA: AN INTERSPECIFIC HYBRID BETWEEN F. CEDARBERGENSIS AND F. IXIOIDES SUBSP. GLABRA

The type of *F. lucida* C. B. Cl. (*Bolus* 6023, Fig. 5) was collected in the Cedarberg mountains of the western Cape Province in 1878, a little over one hundred years ago. It most closely resembles *F. cedarbergensis* Arnold & Gordon-Gray and *F. ixioides* Nees subsp. *glabra* Arnold & Gordon-Gray, possessing characters of both these taxa, yet it cannot satisfactorily be placed in either of them.

F. lucida resembles *F. cedarbergensis* mainly in vegetative form, and in the form of the style and inflorescence axis. Its inflorescence bracts and glumes and the overall form of the inflorescence are more like those of *F. ixioides*. In *F. lucida:* (i) the style is thick, red and granular (Fig. 6b) like that of *F. cedarbergensis* (Fig. 6a) and unlike that exhibited by *F. ixioides*, which is long, slender, light brown and papillate (Fig. 6c); (ii) the 2 or 3 outermost inflorescence bracts have papery lobes along their margins, a condition not found elsewhere in *Ficinia*, except in *F. ixioides*, and unlike that in *F.*

cedarbergensis (see Figs 7a-c); (iii) the glumes have obtuse, apiculate apices — a feature absent in *F. cedarbergensis*, yet closely resembling the situation found in *F. ixioides* (see Figs 8a-c); (iv) the sheathing bases of the lower 2-3 inflorescence bracts enclose the head more or less completely, as in *F. ixioides*, and unlike *F. cedarbergensis* in which only V_3 of the head is covered (see Figs 9a-c); and (v) the inflorescence axes, although somewhat intermediate in form, are more typical of the type characterizing *F. cedarbergensis* (see Figs 10a-c).

Two of the characters that *F. lucida* shares with its putative parents, are rare in the genus *Ficinia*. The species (mentioned below), which do share these features, all have distributions disjunct from *F. lucida* and its putative parents: (i) the only other species to possess a red, granular style is *F. levynsiae* Arnold & Gordon-Gray; (ii) the only other species to possess the same form of inflorescence axis is *F. petrophylla* Arnold & Gordon-Gray.

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FIGS 6 – 10.—Comparative morphology of styles (\times 8), inflorescence bracts (\times 2), glumes (\times 6,5), inflorescence heads (\times 2), inflorescence axes (\times 4) between Ficinia cedarbergensis, F. ixioides subsp. glabra and F. lucida.

It is here postulated that *F. lucida* C. B. Cl., known only from a single specimen (*Bolus* 6023, Fig. 5), is of hybrid origin. This theory cannot be proved at present, since no breeding, chromosome or pollination studies have been carried out in the genus. The evidence for a hybrid origin of *F. lucida* rests on its intermediacy between two distinct species that are very different morphologically; the lack of other specimens that even remotely resemble it; the likelihood of cross-pollination (outbreeding) in the group, as indicated by protandry and probable wind pollination; and the occurrence of the putative parent species in the type locality (see Fig. 11).

The idea of interspecific hybridation within *Ficinia* is not new. Levyns (1950) in her treatment of the genus for the Flora of the Cape Peninsula stated that hybrids between certain species appeared to exist. Hybridization is certainly suspected to be responsible for much of the variation within the section *Bracteosae* of *Ficinia*. It appears not only to have brought about the blurring of specific boundaries in the *F. indica*-complex but has possibly been an important factor in the origin of some species such as *F. grandiflora* Arnold & Gordon-Gray.

The status of *F. lucida* C.B.Cl. is therefore altered as follows:

Ficinia \times lucida C. B. Cl. in Dur. & Schinz, Consp. Fl. Afr. 5: 640 (1895). Type: South Africa, Cape, Cedarberg mountains, Clanwilliam Div., *Bolus* 6023 (k, holo!).

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FIG. 11.—Sympatric distribution of *Ficinia cedarbergensis*, *F. ixioides* subsp. glabra and *F. lucida*.