## LILIACEAE

Two New Species of Bulbine

Bulbine inflata Oberm., sp. nov., B. asphodeloidi (L.) Roem. & Schult. affinis, sed capsula tumida, pedicello firmo longiore differt.

Planta rhizomata glabra. Folia 10-15, erecta subteretia subulata c. 50 cm longa 1 cm diam. sulcata succulenta. Racemus multiflorus; scapus c. 35 cm longus fistulosus; pedicelli teretes in fructu 2·5 cm longi; perianthii segmenta reflexa. Capsula inflata, globosa, c. 13 mm diam. viridis nitida. Plate 3.

Type: Transvaal, Carolina District, 6 miles S.E. of The Brook, *Codd* 9503 (PRE, holo.).

Perennial rhizomatous glabrous herbs. *Roots* long, spreading, numerous, from a small compact rhizome. *Leaves* rosulate, 10–15, erect, terete, c. 50 cm long, 1 cm wide, the vaginate bases forming a short tube below, attenuated to a subulate point, dorsally convex, grooved, light green, succulent. *Raceme* 60–125 cm tall, bearing over 100 closely packed flowers which open consecutively, about 3 opening each day during anthesis; scape cylinderical, hollow, c. 35–75 cm long, rhachis elongating during anthesis, 15–35 cm long; bracts small, aristate, exserted in bud-stage; pedicels spreading-reflexed, afterwards patent with erect apices, up to 2·5 cm. *Flowers* sweet smelling, with a yellow perianth; segments reflexed, linear-lanceolate, 10 × 3 mm, outer with an orange spot; stamens erect, filaments 7 mm long, with patent erect hairs up to 3 mm long, attached to the outside of the filament except at the apex where they cover all sides; locules introrse, versatile, attached near the base dorsally; ovary turbinate, 3 mm, truncate at the apex, grooved: ovules about 8, biseriate, style filiform, 7 mm long, stigma apical, minute. *Capsule* inflated, globose, about 13 mm in diam., green, glossy; seeds angled through pressure, c. 2 mm in diam., black, sparsely tuberculate and ridged.

TRANSVAAL.—Carolina; 6 miles S.E. of The Brook at foot of rocky koppie, Codd 9503.

Swaziland.—Malkerns: near Manzini, farm Marula, Adelaar in PRE 30027. Mbabane: Hill west of Mbabane, Compton 25721; Usutu Forests, hills, Compton 25640.

NATAL.—Ixopo: Kununata, Strey 6127.

As far as is known one other species, *B. namaensis* Schinz from South West Africa, also bears inflated fruits but it differs from the above species in being shorter and caespitose, with the many shiny brown leaf-bases persisting as in *B. stenophylla* Verdoorn.

Bulbine coetzeei Oberm., sp. nov., B. inflata Oberm. affinis, sed planta minore solitaria, capsula minore non inflata differt.

Planta solitaria glabra basi bulbosa, radicibus multis tumidis. *Folia* filiformia c. 50 cm longa et 1 mm diam. sulcata. *Racemus* foliis aequens vel plus minusve superans pedicelli steriles recurvati; loculi 4-ovulati. *Capsula* minor dura.

Type: Transvaal, Barberton District, 8 miles from Nelspruit on road to Kaapsehoop, Coetzee in PRE 30026 (PRE, holo.).

Solitary, slender, glabrous herbs forming a small bulbous base, c. 2 cm long and 1.5 cm broad from which a circle of swollen spreading roots are given off (the younger roots situated above those of the previous year). Leaves erect, in a rosette, sheathing below to form a very short neck about 2 cm long; about 7 leaves per flowering shoot, lamina filiform, c. 50 cm long and 1 mm in diam. deeply grooved, acuminate, somewhat succulent, applegreen. Raceme about as long as, or just overtopping the leaves; scape firm, terete, 1.5 mm in diam. Flowers congested at first, rhachis lengthening during anthesis, up to 15 cm long; bracts aristate, 1 cm long, brown keeled, membranous, much exserted in bud stage; pedicels 15 mm long, recurving if infertile flower drops off. Perianth yellow, segments 6 mm long, 1 mm broad; stamens typical, as long as the perianth; ovary ovoid, 3-lobed, membranous, ovules 4 in each locule. Capsule small, obovoid, 4 mm, woody; seed (somewhat immature) 2 mm in diam. angled through pressure, ridged, obscurely and sparsely tuberculate.

Transvaal.—Barberton: 8 miles from Nelspruit on road to Kaapsehoop, on mountain slopes in moist crevices rich in humus, *Coetzee* in PRE 30026.

SWAZILAND.—Piggs Peak, Emlembe, moist slope, Compton 24979, 30519.

NATAL.—Vryheid: Zungwini Mountain, 8½ miles N.E. of Vryheid, steep moist hillside below sandstone krantzes, solitary plants, *Codd* 6959. Utrecht: Pongola Mountains, to Kaffir Drift, *Thode* A.345. Nkandla: Nkandla Mountain, summit above forest, *Wells* 2504A.

The type plant was collected by Mr. J. Coetzee, who investigated the anatomy in a research project for his M.Sc. thesis at the Pretoria University in 1966. The species is undoubtedly related to *B. inflata* but it is smaller in all respects and does not bear inflated fruits.

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