

Gladiolus microcarpus* Lewis subsp. *italaensis
Oberm., subsp. nov., a subsp. typica foliis glabris et
 rhachidi dense pubescenti differt.

TYPE.—Natal, 2731 (Louwsburg): Itala Nature
 Reserve (—AC), *Mauve et al.* 5266 (PRE, holo.).

When Lewis in 1966 examined material of
Gladiolus at PRE, she identified *J. C. Smuts* 2371
 from Wakkerstroom, collected in December 1944, as
 near *G. microcarpus* cf. *Jl S. Afr. Bot., Suppl.* 10: 87
 (1972). In 1976 Messrs Brown and Shapiro under-
 took a survey of the flora of the Itala Nature Reserve
 and collected specimens of this species (their No. 411)
 at the junction of the Thalu and Pongolo Rivers, in a
 Lowveld type of vegetation. This was the first record
 of a precise locality and it seemed worthwhile to ex-
 amine it more closely as the typical material of *G.*
microcarpus comes from the Drakensberg at high
 altitudes, some 200 km to the south or south-west of
 the localities referred to above. The species therefore
 appears to have a disjunct distribution. The reserve
 was visited in January 1980 and more material was
 obtained from the same area. It was found on a N.
 W.-facing, steep slope, growing in rock crevices
 shaded by small trees and shrubs. The flowers were
 delicate in texture and light pink in colour; the lower
 lobes had a dark pink midrib flanked by a white area.
 When fading the pink turns to pale- and later to dark
 lilac. Although closely related to the typical form,
 some differences in the pattern of pubescence and the
 distribution suggest that we are dealing with a
 subspecies (Fig. 23).

Key to subspecies

- Rhachis and spathes glabrous; leaves with short, patent hairs on
 the nerves; growing in the Drakensberg at high altitudes, c.
 1 800 m above sea-level; plants usually pendulous.....
 subsp. *microcarpus*
- Rhachis and spathes shortly and densely pubescent; leaves
 glabrous; growing in Lowveld vegetation, c. 250 m above sea-
 level; plants erect subsp. *italaensis*

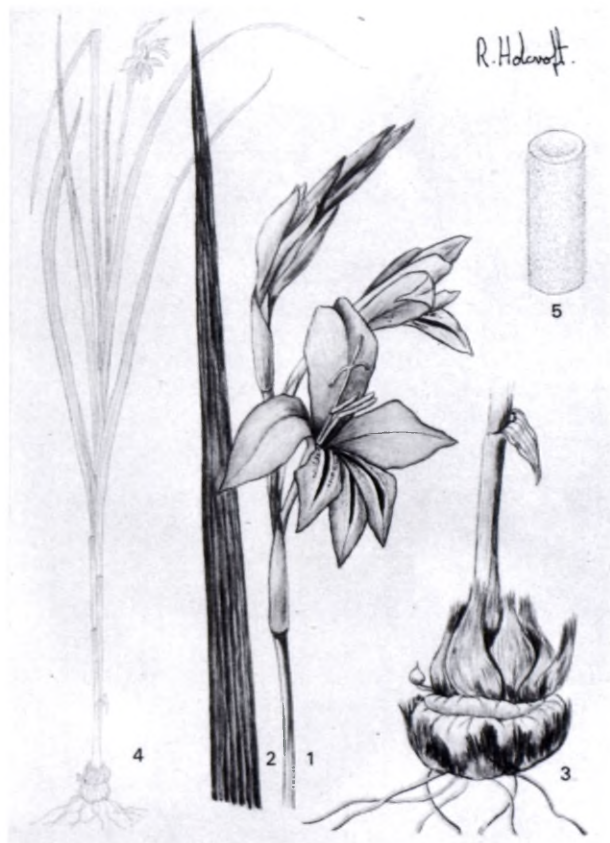


FIG. 23.—*Gladiolus microcarpus* subsp. *italaensis*. Painting of
 holotype plant, *Mauve et al.* 5266, by R. Holcroft.

The Natal Parks Board and their staff at the Itala
 Nature Reserve are thanked most sincerely for their
 kind co-operation.

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Plant succulent, acaulescent or rarely with a stem up to 50 cm, the stem procumbent, simple. *Leaves* lanceolate-ensiform, arcuate-erect, densely rosulate, dull green, up to 64 cm long, 5–9 cm broad at the base, the apex armed with a pungent thorn; upper surface flat to slightly concave, smooth, devoid of markings; lower surface convex, smooth or sometimes with thorns in the median line near the apex, the thorns pungent, brownish, about 3 mm long, 5 mm apart, the teeth arising from white bases, the interspaces straight, the same colour as the leaf. *Inflorescence* 70–75 cm high, two to four branched from below the middle. *Peduncle* 3.5–4 cm diam. near the base, naked below the first branch, branches below the racemes clothed with several sterile bracts. *Racemes* cylindric, slightly acuminate, densely multi-flowered, 30–40 cm long, 5–6 cm diam., the buds and flowers pendulous. *Bracts* deltoid-acuminate, 6 mm long by 4–5 mm broad at the base, scarious, brownish, many-nerved, reflexed. *Pedicels* green, 3 mm long. *Perianth* curved-cylindrical, up to 40 mm long, the base rounded, tube 5 mm diam. enlarging to about 7 mm above the middle, narrowing slightly towards the mouth; outer segments connate into a tube for about 25 mm, the free portion 15 mm, the two upper segments bright orange with five red-brown nerves, margins paler, the apices subacute, slightly falcately connivent, the lower segment lemon-yellow with three to five darker coloured nerves, apex subacute, straight; inner segments free but dorsally adnate to the outer to about the middle, with narrow white margins, the upper segment with a 15 mm keel the colour of the perianth becoming brownish at the apex, the two lower segments with a less pronounced keel formed by three greenish nerves. *Filaments* distinctly flattened, the three inner narrower and lengthening in advance of the three outer, pale lemon-yellow within the perianth, the exerted portion brownish-orange. *Anthers* exerted by 8 mm. *Style* a deeper yellow than the filaments, the exerted portion the same brownish-orange colour. *Stigma* becoming exerted by 10 mm. *Ovary* olive-green, 6 mm long, 3 mm diam. at base. *Capsule* 15 mm long, 10 mm diam. Fig. 24.

NATAL.—2730 (Vryheid): farm 'Oorspring' between Vryheid and Natal Spa (—DB), 10 Sept. 1971, Hardy 3589 (PRE).

This interesting variety differs from the typical variety in the following respects: the floral bracts are deltoid-acuminate in shape, 6 mm long by 4–5 mm broad as opposed to lanceolate-acute and 14 mm long by 7 mm broad. The mature capsules are also very much smaller, 15 mm long and 10 mm in diameter compared with 25 mm long and 14 mm diameter in the typical variety.

There are also differences in flowering time and in distribution: var. *reitzii* flowers during February and



FIG. 24—*Aloe reitzii* var. *vernalis*. Plant in natural habitat on steep, well-drained granitic slopes.

March, whereas var. *vernalis* flowers during the spring months of August and September, hence the varietal epithet. Var. *reitzii* has been recorded from three or four localities in the Belfast District of eastern Transvaal, whereas var. *vernalis* is apparently confined to a very small area in the Vryheid District of Natal.

A closely related species, *A. gerstneri* Reynolds, occurs near the Nondweni River south of where *A. reitzii* var. *vernalis* occurs and can, when not in flower, be easily confused with the latter; in both the slender leaf marginal teeth arise from distinct white bases, a character not occurring in var. *reitzii*. When in flower, however, *A. gerstneri* is readily distinguished by its cylindric-ventricose flowers which are up to 30 mm long.