## LILIACEAE

## A NEW VARIETY OF ALOE FROM THE VRYHEID DISTRICT

Aloe reitzii Reynolds var. vernalis Hardy, var. nov., a varietate typica bracteis floralibus deltoideo-acuminatis,  $6 \times 4-5$  mm, non lanceolato-acutis  $14 \times 7$  mm, capsula matura minima 15 mm longa 10 mm

diametro, non 25 mm longa et 14 mm diametro differt.

TYPE.—Natal, Vryheid District, farm 'Oorspring', 1971-09-10, *Hardy* 3589 (PRE. holo.).

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 multiflowered, 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 redbrown 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 exserted portion brownish-orange. Anthers exserted by 8 mm. Style a deeper yellow than the filaments, the exserted portion the same brownish-orange colour. Stigma becoming exserted by 10 mm. Ovary olivegreen, 6mm 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.