

FSA contributions 2: Asphodelaceae/Aloaceae, 1029010 *Chortolirion*

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Chortolirion A. Berger in Das Pflanzenreich 4, 38, III, II (Heft 33): 72 (1908); E. Phillips: 149 (1926), 187 (1951); Oberm.: 119 (1973). Type: *Haworthia angolensis* Baker, i.e. *Chortolirion angolense* (Baker) A. Berger.

Herbaceous perennial; acaulescent, with leaves originating from a short, simple (rarely once branched), cylindrical, subterranean butt ± 9 mm in diameter; roots few, fusiform, fleshy, up to 8 mm in diameter; bulb with few, loosely packed, membranous scales covering the inner, slightly fleshy leaf bases, ovoid-oblong, 30–40 mm long, ± 20 mm in diameter. *Leaves* rosulate, slender, grass-like, flaccid, erect, deciduous, ± 10 , light green to glaucous green, usually once or twice twisted, upper 5–10 mm of leaves often dry, ± 150 mm long, diameter ± 2 mm; *upper surface* canaliculate, immaculate or with very few white spots near base; *lower surface* convex, copiously white-spotted near base, the spots often slightly tuberculate-subspinulescent; *margins* armed with soft, white, decurved teeth, ± 0.5 mm long, larger low down, smaller upwards, 1–2 mm distant throughout. *Inflorescence* ± 360 mm tall; *peduncle* simple, diameter ± 2 mm, ± 200 mm long; *sterile bracts* membranous, ovate, abruptly long acuminate, erect, clasping the peduncle, keeled with 1–3 reddish brown vein(s), ± 8 mm long; *raceme* ± 150 mm long, ± 14 spirally arranged flowers and buds, 3 open simultaneously; *floral bracts* membranous, mucronate, keeled, clasping the pedicels, longer than the pedicels, 5 mm long; *pedicels* erect, persistent, brownish green, 1–2 mm long, diameter 1 mm. *Flowers* erect, zygomorphic, greenish, brownish or pinkish white with greenish keels to the segments, base obtuse; perianth funnel-shaped, tube straight, constricted to 3 mm above, 14 mm long, ± 2 mm across; *segments* greenish white with darker green veins, not free to the base, closely adhering for two thirds of the length, limb bilabiate; upper-outer segments strongly recurved, retuse, spoon-shaped at tips; upper-inner segment slightly recurved, obtuse, spoon-shaped at tip, lower-outer segments recurved, lower-inner segment strongly recurved, tips flared; bud narrow, straight, decurved and pinkish at tip; *stamens* 6, of \pm equal length, inserted within the perianth tube, attached below ovary, ± 7 mm long; *filaments* white, thinner towards apex; *anthers* yellow, dorsifixed, dehiscing longitudinally and introrsely; *ovary* green, sessile, 3 mm long, diameter 2 mm; *style* white, straight, capitate, 4 mm long. *Fruit* light green, capsule trilocular, cylindrical, apically acute, dehiscing loculicidally, chartaceous when dry, ± 15 mm long, 5–6 mm in diameter. *Seed* dark brown to black, angled, shortly winged, ± 3 mm long. *Chromosome number*: $2n = 14$. Figure 1.

Monotypic. In southern Africa it occurs in Namibia, Botswana, Lesotho and in all the provinces of the Republic of South Africa except the Western Cape. For KwaZulu-Natal the genus is known from a single accession only [grid reference unknown: Zululand, *Anon. s.n.* (K)!] which is not shown in Figure 2. It also occurs in Angola and Zimbabwe. *Chortolirion* is found from near sea level up to altitudes of more than 2 000 m; the general habitat of *Chortolirion* is the climatically severe inland area above the Great Escarpment. The genus is adapted to sparse or dense grasslands in which a wide variety of graminoids and forbs dominate. These grasslands are usually subject to natural or deliberate seasonal burning.

Chortolirion is morphologically quite distinct from *Haworthia*, especially with regard to the presence of an underground bulbous rootstock. Furthermore, it is the only haworthioid taxon of which the leaves are deciduous and die back to ground level after fires or frost.

The name *Chortolirion* means 'heath lily' and refers to the fact that plants of the genus usually occur in grassland and, especially when not in flower, can easily be mistaken for small tufts of grass.

Chortolirion angolense (Baker) A. Berger in Das Pflanzenreich 4, 38, III, II (Heft 33): 73 (1908). Type: Angola, Huilla, regio subtemperata, in dumetis arenosis, *Welwitsch 3756* (BM, holo., PRE, photo!).

Description as for the genus.

Haworthia angolensis Baker: 263 (1878); Baker: 210 (1880); Baker: 469 (1898); Oberm.: 119 (1973). Type: as above.

H. tenuifolia Engl: 2 (1888); Baker: 355 (1896). *Chortolirion tenuifolium* (Engl.) A. Berger: 73 (1908). Type: Betschuanaland, Manjereng pr. Kuruman, in arenosis alt. 1 200 m, *Marloth 1049* (B, holo.).

H. stenophylla Baker: sub t. 1974 (1891); Baker: 355 (1896). *Chortolirion stenophyllum* (Baker) A. Berger: 72 (1908); Dyer: t. 932 (1944). Type: Transvaal, grassy mountain slopes of the Saddleback range near Barberton, *Galpin 858* (K, holo.).

H. saundersiae Baker: sub t. 1974 (1891), nom. nud.

H. subspicata Baker: 998 (1904). *Chortolirion subspicatum* (Baker) A. Berger: 74 (1908). Type: Transvaalkolonie, Modderfontein, *Conrath 645* (Z, holo.).

Chortolirion bergerianum Dinter: 24 (1914). Type: Deutsch-Südwest-Afrika (Namibia), the Farm Voigtland, 20 km to the east of Windhoek, K. Dinter, Neue und wenig bekannte Pflanzen Deutsch-Südwest-Afrikas t. 12 (1914) (holo., icono!).

Icones: Dyer: t. 932 (1944); Fabian & Germishuizen: t. 13a (1982).

Vouchers: *Dinter 4295* (B); *Hanekom 1843* (PRE); *Smith 8* (PRU); *Smith 12* (PUC); *Ubbink 318* (PUC).

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FIGURE 1.—*Chortolirion angolense*: A, habit, $\times 1$; B, inflorescence, $\times 1$; C, longitudinal section of flower (one stamen removed), $\times 3$; D, flower face showing reflexed segments, $\times 2$; E, fruit, acuminate capsule, $\times 1.5$. All drawings, except E, were made from live material collected by Craib, deposited under Smith 234 (PRE). Fruit drawn from Leeman s.n. (PRE 34956). Artist: Gillian Condy.

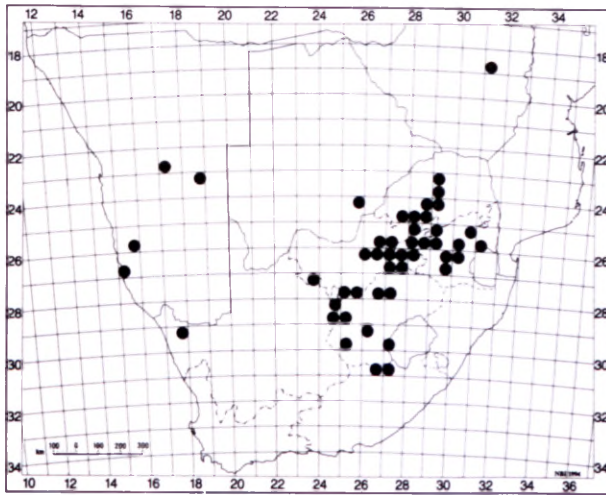


FIGURE 2.—Distribution of *Chortolirion angolense* in southern Africa.

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