

AGAVACEAE

AGAVE VIVIPARA: THE CORRECT NAME FOR AGAVE ANGUSTIFOLIA

At least three taxa of *Agave* L. (Agavaceae) are naturalised in southern Africa. Two of these, *A. americana* L. var. *americana* and *A. sisalana* Perrine have been treated by Smith & Mössmer (1996) in the series *FSA contributions*. A catalogue of the naturalised flora of any country is by definition dynamic: new species names are added to the list as and when they are reported. It is therefore not surprising that the naturalisation of a third species, *A. decipiens* Baker, only came to light recently (Smith & Steyn in prep.). Some species of *Agave* are aggressive growers and it is likely that further taxa will in due course be added to the ever-expanding list of naturalised aliens. *A. vivipara* L. (Figure 4), a native of Mexico (Gentry 1982), is one such species. This agave is often offered for sale at nurseries and is frequently grown as a garden ornamental, as a hedge plant or as a barrier plant.

However, in South Africa this species is consistently, but incorrectly known under a later homotypic synonym, *A. angustifolia* Haw. Wijnands (1983) and Forster (1992) have shown conclusively that the correct name for this species is *A. vivipara*. The following nomenclature should therefore be adopted for the two taxa of this species, namely *A. vivipara* var. *vivipara* and *A. vivipara* cv. *Marginata*, which are found in South Africa:

Agave vivipara* L. var. *vivipara, Species plantarum 1: 323 (1753). Type: Commelin, Praeludia botanica 65, t. 15 (1703) [lectotypified by Wijnands (1983)].

Agave angustifolia Haw: 72 (1812).

***Agave vivipara* cv. *Marginata* (Hort. ex Gentry) P.Forster** in Brittonia 44: 74 (1992). Type: not designated.

Agave angustifolia var. *marginata* Hort. ex Gentry: 564 (1982).

The leaves of this horticultural cultivar have distinct yellow edges. The cultivar *Variiegata* with leaves that are variously striped with yellow or white has yet to be recorded for southern Africa.

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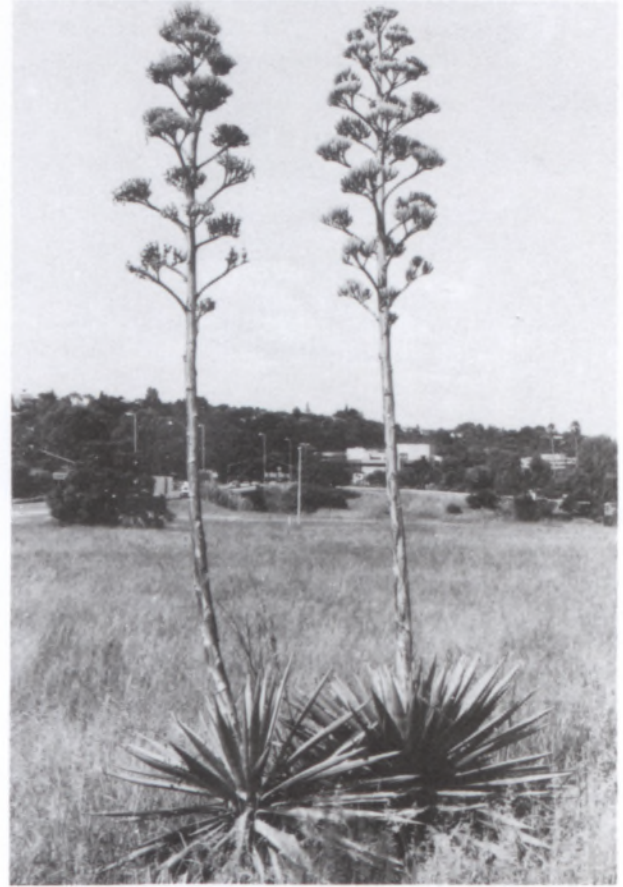


FIGURE 4.—*Agave vivipara* growing on an empty stand in urban Pretoria, South Africa. Photograph: A. Romanowski.

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LAMIACEAE

SALVIA THERMARA, A NEW SPECIES FROM THE WESTERN CAPE, SOUTH AFRICA

***Salvia thermara* Van Jaarsv., sp. nov.**, a *S. granitica* Hochst. foliis oblanceolatis dimidio distali serrulatis, racemis brevibus densis 3–4 verticillis, corolla 40–50 mm longa differt. Figure 5.

Erect branched shrub, up to 1 m tall from a stoloniferous base. *Stolons* horizontal with erect aerial branches. *Branches* square, green, up to 3 mm diam., purplish when dry; the young vegetative parts glandular hairy, becoming



FIGURE 5.—*Salvia thermara*. A, part of plant with inflorescence; B, calyx; C, leaf; D, stamen, showing connective branch with sterile theca; E, part of calyx showing pistil, ovary and young developing nutlets. A–C, $\times 1$; D, E, $\times 2$.

glabrescent with age. *Leaves* simple, glabrous, sessile to subsessile, oblanceolate to linear-oblanceolate, 20–35 \times 4–7 mm, green (green group 138B, R.H.S. Colour Chart), with prominent veins below, margin serrate in upper half, rarely entire (teeth up to 2 mm long, with up to 6 pairs of teeth); apex acute to acuminate; upper leaves gradually smaller and similar to bracts. *Inflorescence* a short dense terminal raceme 80–100 mm long (not branched); verticillasters 3 or 4, 2-flowered, up to 7 mm apart. *Bracts*

oblanceolate-acuminate, glandular hairy, 7–8 \times 2.5 mm. *Pedicels* ascending, 5–6 mm long. *Calyx* tubular-campanulate 23–25 mm long, up to 8-veined and covered with short eglandular hairs, not expanding in fruit, two-lipped, reddish purple (red-purple group 59B, R.H.S. Colour Chart); upper lip oblong, up to 10 mm long, more or less truncate, 3 subequally toothed; teeth 2 mm long, acuminate; lower lip oblong, 10 mm long, 2-toothed; teeth acuminate, 4 mm long. *Corolla*, 40–50 mm long, reddish



FIGURE 6.—The inflorescence of *Salvia thermara*.

(red group 37A, R.H.S. Colour Chart); tube oblong, up to 22 mm long, 2–3 mm wide at base and expanding to 12 mm; hood falcate to subfalcate, oblong, sometimes straight, 15–16 mm long, 5 mm deep; lower lip drooping, two-lobed, up to 7 × 9 mm (Figure 6). *Staminal connectives* 19–20 mm long, with sterile lower theca (4.0 × 1.5 mm) pointing inwards; filaments 4 mm long; fertile thecae oblong, 3 mm long; pollen white. *Ovary* broadly globose-ovate, 3 mm diam.; style slender, 50–63 mm long. *Nutlets* dark brown, smooth, up to 3.5 × 3 mm. *Flowering time*: December–January.

TYPE.—Western Cape, 3319 (Worcester): Badsberg, Goudini Spa, near Worcester on the Slanghoek trail, 15 Dec. 1997, (–CB), Van Jaarsveld & Vorster 15533 (NBG, holo!).

Salvia thermara occurs on the lower N slope of the Badsberg (adjacent to Slanghoek Mountains) in Fynbos, among quartzitic sandstone rock and soil (Figure 7). The specific epithet *thermara* pertains to the Goudini warm springs where the plant was collected. It occurs locally, scattered in full sun forming small groups. Associated species include *Protea nitida*, *P. laurifolia*, *Diospyros glabra*, *Leucadendron salignum*, *Montinia caryophyllacea*, *Othonna parviflora*, *Oldenburgia paradoxa* and *Maytenus oleoides*.

It is interesting to note the galls on the stems as a result of perhaps a parasitic wasp. These appear as small growths of about 10 mm diam. bearing ovate, densely hairy, imbricately arranged leaves in a rosette.

S. thermara is related to *S. granitica* Hochst., a species confined to an area south of Citrusdal and in the Caledon District. It is at once distinguished from *S. granitica* by its large reddish corolla, 40–50 mm long, and short dense racemes consisting of 3 or 4 verticillasters. *S. granitica* is a smaller perennial up to 0.6 m high with a mauve-pink corolla, 20 mm long and elongated racemes. Among the South African species, it shares with *S. thermara* the two-flowered verticillasters, the upper lip of the corolla distinctly falcate, the truncate upper calyx lobe, its stoloniferous habit and also an absence of aroma when the leaves are crushed. Among the other Western Cape species it superficially resembles

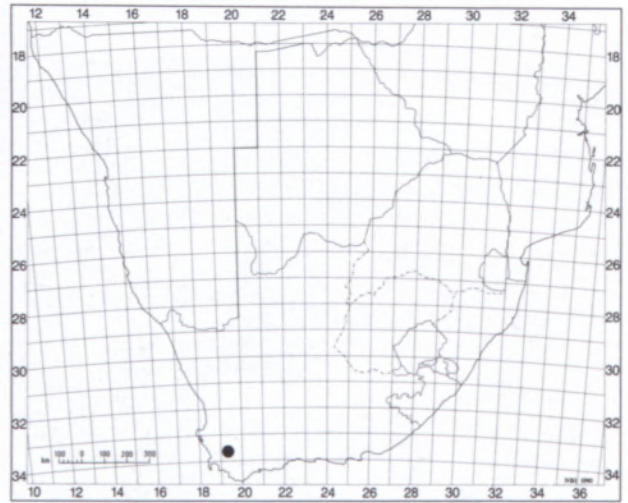


FIGURE 7.—Distribution of *Salvia thermara*.

S. lanceolata Lam. and *S. africana-lutea* L., both species bearing large reddish brown to rose corollas in 2–4-flowered verticillasters and with a strong aroma. Both are much-branched shrubs up to 2 m tall (not stoloniferous) bearing grey velvety leaves.

The genus *Salvia* in Africa was treated by Hedge (1974) and is represented by ± 60 species of which 27 have been recorded for South Africa and also treated by Codd for the *Flora of southern Africa* (1985). Two centres are recognised: 1, along the Mediterranean coast in N Africa; and 2, a centre in South Africa confined to the southern parts of the Western and Eastern Cape. The Western Cape species are mostly large shrubby species bearing attractive flowers, whereas many of the Eastern Cape species are herbaceous with weedy characteristics. *S. thermara* shows promise as a garden subject together with other South African species such as *S. africana-lutea* L., *S. muiirii* L. Bolus, *S. lanceolata* Lam., *S. africana-caerulea* L., *S. dentata* Aiton, *S. chamelaeagnea* Berg, *S. albicaulis* Benth., *S. radula* Benth. and *S. dolomitica* Codd. The reddish colour of the corolla of *S. thermara* is unique among the South African salvias.

ACKNOWLEDGEMENTS

Dr O.A. Leistner is thanked for the Latin diagnosis, G. Germishuizen for editing the manuscript, and Vicky Thomas for the illustration.

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MS. received: 1998-01-13.