

12. *S. aegyptiaca* Linn., Sp. Pl. 23 (1753).

Syn.: *S. arida* Salisb., Prodr. Stirp. Chapel Allerton 73 (1796)—nomen illegit.

Thymus hirtus Viv., Fl. Lib. Spec. 30, t.14, f.1 (1824).

Type. Egypt! (BM—Hort. Cliff.).

Ic.: Jacquin, Hort. Vindob. 2:t.108 (1772); Ozenda, Fl. Sahara 404, fig. 148 (1958); Fig. 8.

Ref.: Linn., Mantissa 26 (1767); Etlinger, Salvia 29 (1777); Aiton, Hort. Kew. 1:37 (1789); Desf., Fl. Atlant. 1:19 (1798); Vahl, Enum. 1:221 (1804); Benth., Labiat. 309 (1833); Webb & Berthelot, Hist. Nat. Iles Canar. 3:91 (1845); DC., Prodr. 12:355 (1848); Bonnet & Barratte, Cat. Pl. Tunis. 334 (1896); Pitard & Proust, Fl. des Iles Canaries 309 (1909); Durand & Barratte, Fl. Libycae Prodr. 187 (1910); Lunds Univ. Arsskr. n.f. 2, 19, 1:30 (1923); Lindinger, Beitr. Fl. kanar. Ins. 223 (1926); Pampanini, Fl. Cirenaica 397 (1931); Mém. Soc. Hist. Nat. Afr. Nord 3:185 (1933); Jahandiez & Maire, Cat. Pl. Maroc 3:644 (1934); Revue Bot. Appl. Agric. Trop. 15:733 (1935); Schwartz, Fl. Trop. Arab. 226 (1939); Guinea, Sahara Español 780 (1949); Täckholm, Students Fl. Egypt 146 (1956); Andrews, Fl. Pl. Sudan 3:224 (1956); Ozenda, Fl. Sahara 405 (1958); Sarracenia 5:52 (1960); Bull. Jard.

G.A.M.

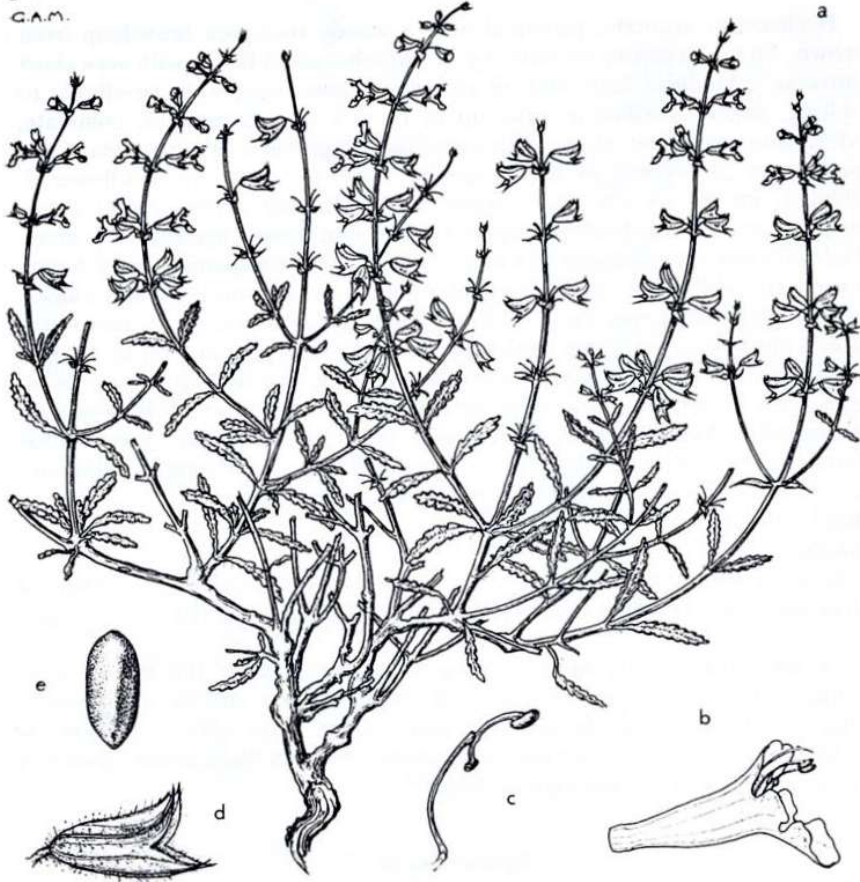


FIG. 8. *Salvia aegyptiaca* Linn.: a, habit $\times \frac{2}{3}$; b, corolla $\times 4$; c, stamen $\times 6$; d, fruiting calyx $\times 2\frac{1}{2}$; e, nutlet $\times 8$. (Davis 48465).

Bot. Brux. 32:318 (1962); Quezel & Santa, Nouv. Fl. Algér. 2:795 (1963); Lid, Contrib. Fl. Canar. 153 (1967); Publ. Cairo Univ. Herb. no. 4:63 (1971); Sunding, Check list Cape Verde Is. 17 (1973).

Much branched suffruticose herb, 10–20(–40) cm. *Stems* above and below with short or longer retrorse eglandular hairs. *Leaves* narrow linear-elliptic, rarely obovate-oblong, up to 55 \times 8 mm, crenate to serrate, sessile or narrowed into an indistinct petiole; above and below with very short eglandular hairs and at leaf base with long spreading eglandular hairs. *Verticils* up to 8, 2–6-flowered, up to 3 cm apart below, less above. *Floral leaves* ovate-lanceolate, up to 4.5 \times 2 mm; bracts present. *Pedicels* up to 5 mm. *Calyx* ovate to tubular campanulate, up to c.5 mm, enlarging in fruit to 7 mm, 13-veined, with a prominent indumentum of glandular capitate hairs and eglandular hairs; upper lip of three closely connivent teeth up to 0.3 mm, concave in fruit; lower lip with two c.3 mm acuminate-subulate teeth. *Corolla* pale lilac or lavender up to 8 mm; upper lip fairly broad, \pm straight or somewhat reflexed; lower lip longer than upper; median lobe clearly bifid; tube with a thin annulus. *Staminal connectives* c.2 mm; filaments

c.2.5 mm; lower thecae fertile. *Nutlets* black, trigonous, 2×1 mm, mucilaginous on wetting. $2n=28$ (Delestaing, 1954). *Fl.* Oct.–June.

Arid to desertic habitats.

Cape Verde Islands, Canary Islands, NW and N Africa, Sudan, Ethiopia eastwards to W Pakistan and India. Fig. 9.

CAPE VERDE ISLANDS. St. Vincent, 1822, *Forbes!* (K). Also present on all the larger islands (9) of the archipelago from near sea level to 1500 m, and one of the most characteristic species of the lower regions. Cf. Chevalier (1935).

CANARY ISLANDS. Tenerife: Santa Cruz, Bourgeau 549! (E) Gran Canaria: Bco. Arguiguin near Maspalomas, *Bramwell* 1245! (E). Lanzarote, Arcife, *Murray* s.n.! (K).

Also on Gomera, Fuerteventura; arid uncultivated places in the lower maritime region.

SPANISH SAHARA. Common in the N of the country. Cf. Guinea 780 (1949).

MAURITANIA. No records or specimens have been seen but it is probably present at least in the NW of the country.

MOROCCO. 5 km E of Tiznit, *Davis* 48697! (E). Imouzzer-des-Ida-Outanane to Oulma, *Davis* 48526! (E). Sous valley, 16–24 km from Taroudannt to Irherm, *Davis* 48900! (E). Cap Ghir, *Davis* 48465! (E).

Also throughout most of the country in the drier regions. Cf. Jahandiez & Maire 3:644 (1934).

ALGERIA. Oued-Biskra, *Balansa* 832! (E). Widespread in desertic regions in the south of the country including Ahaggar Mts, from 750–2100 m. Cf. Quezel & Santa 2:795 (1963).

TUNISIA. Kébili, sandy desert, *Pitard* 459! (E). Djerba, *Kralik* 121! (E,K).

LIBYA. Tripolitania: Homs, *Vaccari* 173! (E). Cyrenaica, Benghazi, *Cavarrà*. Scegga, El Garn-a-i-Gren, *Krüger*. Wadi Tangesir, *Guichard* KG/Lib./134! (BM). Fezzan, Gat (Corti, 226, 1942).

NIGER (French Soudan). Mts. Baguezane, I vii 1920, *Buchanan* s.n.! (BM).

CHAD. Tibesti Mts. Cf. *Mém. Inst. Fr. d'Afrique Noire* 8:51 (1950).

EGYPT. Nubian coast, Gebel Ferrajeh near Berenice, *Schweinfurth* 1864: 138! (K).

Mainly in the N and E. Cf. Täckholm, *Students Fl. Egypt* 146 (1956).

SUDAN. Red Sea hills, Erkowit, *Aylmer*. Mainly in the E near the Red Sea. Cf. *Andrews* 3:224 (1956).

ETHIOPIA. Eritrea-Amasen, Dongollo presso Ghinda, *Pappi* 4199! (EA). Eritrea-Assaorta, lungo il torrente Aideresso, *Pappi* 5090! (EA).

Considering its very great geographical range (fig. 9), *S. aegyptiaca* is a remarkably oligomorphic species. There is a tendency for the N African plants to have narrower leaves (with a length/breadth ratio of 6–10:1) than those from the extreme east of its total range (with a ratio of 3–5:1) but there are many exceptions. Also, at the eastern end of its range, in Afghanistan and Pakistan, forms with a glandular indumentum on the inflorescence axis and leaves are more frequently found than in Africa. From the available field notes these glandular forms appear to be more frequent in relatively mesophytic habitats but this requires confirmation. Although some authors of local Floras have recognised varieties or forms, e.g. var. *pumila* Asch. & Schweinf., var. *glandulosissima* Kneucker and f. *colorata* Maire (Bull. Soc. Hist. Nat. Afr. Nord 23:205, 1932), they scarcely merit formal recognition.

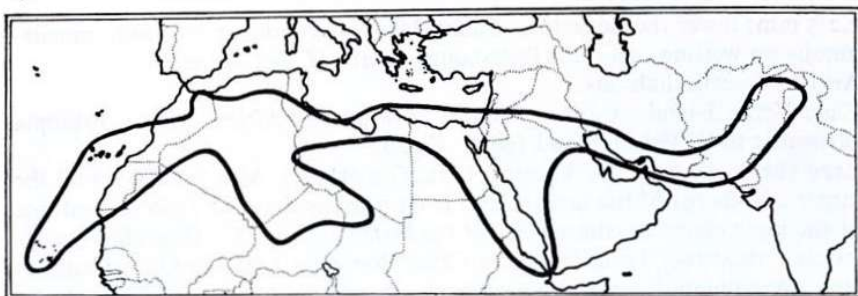


FIG. 9. Total distribution of *Salvia aegyptiaca* Linn. From east to west the total range is over 5,000 miles.

In addition to the specimen in the Hortus Cliffortianus herbarium which has the strongest claim to be the type specimen there are two other very early collections: one, no. 42/1, in the Linnaean herbarium (LINN!) and the other, labelled "ex oriente, Forskohl" in the British Museum (BM!).

S. aegyptiaca is related, in addition to the other two African species in this species-group, to several other species in SW Asia (such as *S. santoliniifolia* Boiss., *S. eremophila* Boiss., *S. trichocalycina* Benth., *S. tebesana* Bge. and *S. macilenta* Boiss. All of them are restricted to desertic areas, have similar morphological characters and together form a natural taxonomic group.