AL FAATEH UNIVERSITY
FACULTY OF SCIENCE
DEPARTMENT OF BOTANY

FLORA OF LIBYA

78

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PEDALIACEAE

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PEDALIACEAE

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Herbs or rarely undershrubs, with glandular hairs. Leaves exstipulate, opposite or occasionally alternate above, simple, rarely palmately compound, entire or lobed. Inflorescence axillary of solitary flowers or in 3-flowered dichasial cymes. Flowers bisexual, zygomorphic; pedicel with glands at the base; disc fleshy. Sepals 4-5, united at the base. Petals 5, united into 5-lobed, sub-bilabiate wide corolla tube. Stamens 4, free, epipetalous, didynamous; staminode 1, posterior or absent; anthers free or connate in pairs, dithecous, with gland tipped connective. Ovary bicarpellary, syncarpous, superior, 2-loculed or 4-loculed due to false septation; placentation axile; locules multiovulate; style simple with 2 stigmas. Fruit a loculicidally dehiscent capsule or an indehiscent nut with hooked thorns or wings. Seeds endospermous.

A small Old World family containing 12 genera and c. 50 species, distributed in arid and coastal tropical and subtropical regions in Africa and Asia (Indo-Malaya); introduced and naturalized in the new world tropics. Represented in Libya by one cultivated species only.

*SESAMUM

L., Sp. Pl. 634. 1753; Gen. Pl. ed. 5. 282. 1754.

Erect to suberect or prostrate herbs or subshrubs with minute mucilaginous hairs. Leaves simple, opposite or terminal ones alternate, sessile to petiolate, linear to lanceolate, entire to deeply incised, rarely compound. Flowers solitary or fasciculate, white, purple or rose-coloured, short pedicelled; disc annular. Sepals 5, persistent or deciduous. Petals 5, united into a campanulate-ventricose, sub-bilipped, oblique tube. Stamens included, staminode minute or absent. Fruit an oblong or ovoid, 4-angled and grooved, beaked capsule, without appendages. Seed oblong, obovate or pyriform, winged or not, glabrous.

A genus with c. 30 species, mainly Asian and African; represented by 1 species in Libya.

*__Sesamum indicum__ Linn., Sp. Pl. 634. 1753; Keith, Prelim. Check List Lib. Fl. 2: 891. 1965. (Fig. 1)

S. orientale Linn., Sp. Pl. 634. 1753.

Annual, erect to suberect, up to 1.5 m tall, puberulent herb, with basally woody stem and strong odour. Leaves subsessile or with petiole up to 10 cm long; lamina linear-lanceolate narrowly ovate or oblong, 4-15 x 0.5-4 cm, entire to dentate-serrate or lobed, acute, puberulent. Flowers solitary axillary, pale-whitish with reddish, purplish or yellow spots. Sepals slightly united below, linear to lanceolate-oblong, 3-4 mm long, persistent, puberulous. Corolla tube 2-3 cm long, with hairy, short, obtuse lobes. Stamens with 8-10 mm long filaments; anthers glabrous or sparsely hairy along margins, c. 2 mm long. Ovary oblong, c. 1.5 mm long, pilose. Capsules erect, oblong, quadrangular, 15-25 (-28) x 5-8 mm, scabrous, shortly beaked. Seeds obovate, 2-3 mm long, wkite, pale-yellow, brown or black, finely reticulate or almost smooth when ripe.

Type: Described from India, Herb. Linn. 802/3 (LINN).

E-8 Kufra, 7.11.1968, *L. Boulos* 3214 (ULT).

Distribution: Widely cultivated and naturalized in tropical and subtropical Asia, Africa and America.

This is an exotic plant cultivated for its seeds yielding an odourless edible oil (tahina), which is used for confectionary, adulteration of olive oil, soap and vegetable fat in Europe and Asia, where the raw seeds are eaten as well. Rarely cultivated in Libya.

Fl. July-Nov. *Vern* Jiljilan, Jenjalan, Simsim.

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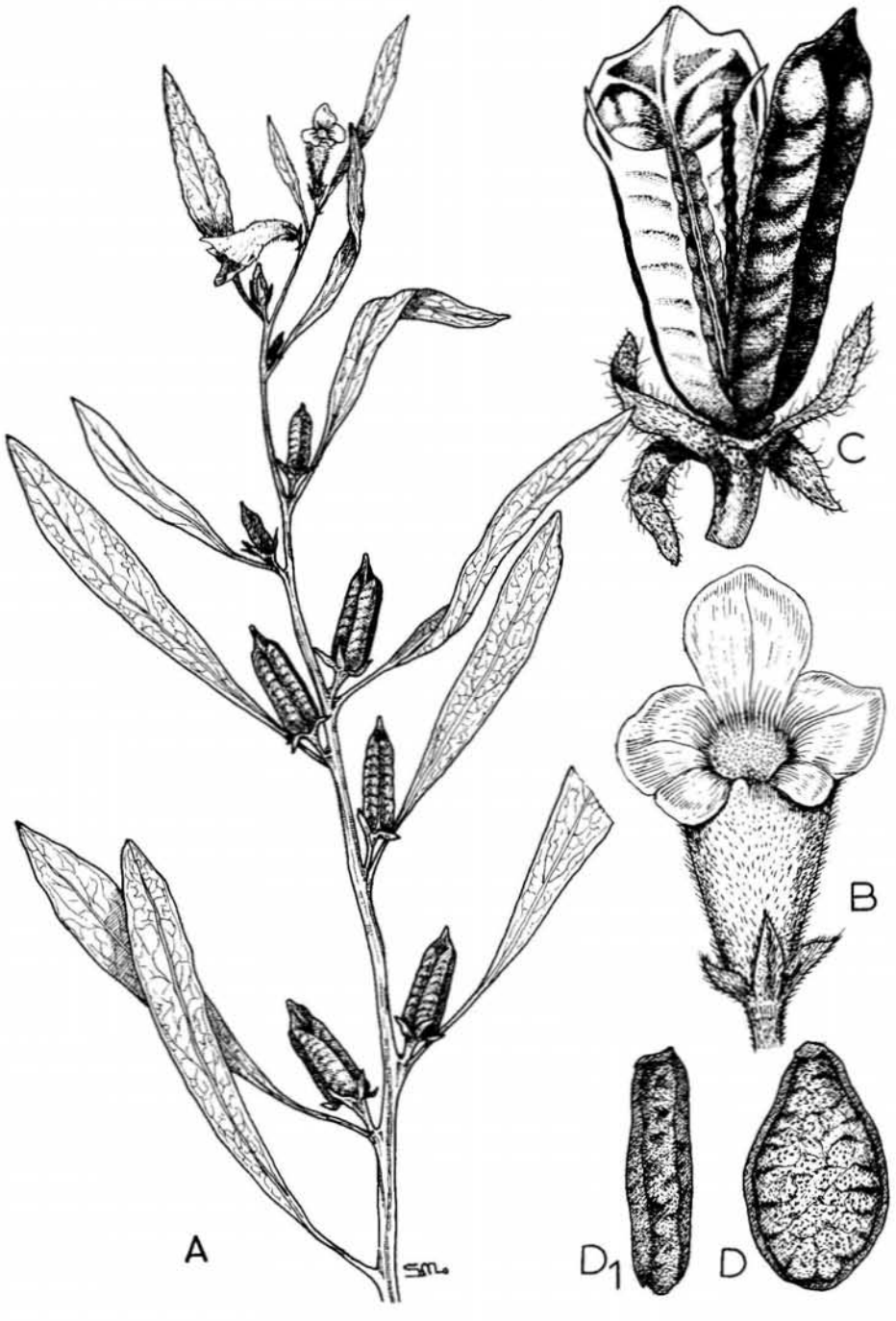


Fig. 1 **Sesamum indicum**: A, flowering and fruiting shoot x 0.6; B, flower x 3; C, dehisced fruit x 3; D, seed x 10; D_1, side view of seed x 10.