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A NEW AMYGDALUS FROM ISRAEL

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ABSTRACT. *Amygdalus ramonensis* Danin, sp. nov., (Rosaceae) is described from the Negev of Israel. It is related to *A. communis* L. from which it differs principally in its smaller, glabrous, ovate fruits, subspinescent branches and apiculate leaves. Notes on habitat and population size are given.

Amygdalus ramonensis Danin, sp. nov., Fig. 1.

Ab *A. communis* L. foliis apiculatis (non acuminatis), ramulis subspinescentibus (non inermibus), drupis ovatis (non oblique ellipsoideis nec elongato-ellipsoideis), 2.5 × 1.7 cm (non 5 × 3 cm), obtusis (non acutis), glabris (non velutinis) differt.

Arbor usque ad 6 m alta subspinescens, brachyblastis brevibus numerosis. Ramuli glabri, primum virides, demum brunnei, teretes. Rami grisei. Folia anguste-ovata, ovato-lanceolata vel ovata, usque ad 1.5-5 × 0.5-1.7 cm, apiculata, basi angustata, glabra, margine serrulata et glandulosa. Petioli 6-12 mm longi, glanduli 0-2. Pedicelli usque 2-3 mm longi. Flores majusculi usque ad 4 cm diametro. Petala alba vel rosea, obtusa, glabra, 1-2 cm longa. Stamina 27-35. Drupa ovoidea, compressa, glabra, atrovirens, 25 × 17-18 × 13-14 mm. Putamina sparse foveolata, carinata, interdum cum 4-5 sulcis longis inconspicuis secus carinam. Fl. Feb.-Mart.

Typus. Israel, Central Negev Highlands, Nahal Eliav, 4 km SW of Har Ramon, 34°39'E/30°38'N, banks of wadi with loessial alluvium, 16 iv 1979, *Danin* (holo. HJ; iso. E, K).

ISRAEL. Negev, Wadi Horasha, 16 xii 1965, *D'Angelis* (HJ); Nahal Elot, 25 ii 1967, *Danin* (HJ); Nahal Eliav, type locality, 16 ii 1980, *Danin* (HJ).

Unarmed to subspinescent trees, to 6 m, short thorny shoots numerous; young shoots glabrous, terete, green at first, becoming brown later. Branches grey. Leaves apiculate, narrowly ovate to ovate-lanceolate, rarely ovate; blade 1.5-5 × 0.5-1.7 cm, dentate-serrate, glandular on margin, entirely glabrous; petioles 6-12 mm, glands 0-2. Pedicels 2-3 mm. Flowers large, to 4 cm diam. Petals white or pink, obtuse, 1-2 cm long. Stamens 27-35. Drupe ovoid, compressed, 25 × 17-18 × 13-14 mm, dark green, entirely glabrous; stone pitted, sometimes with 4-5 inconspicuous grooves near the keel. Fl. February-March.

In crevices of smooth-faced outcrops of hard limestone and in wadis draining slopes with such rock outcrops. Endemic to the Central Negev Highlands, 700-900 m.

This species was recorded from the Negev Highlands by D. Zohary & D'Angelis (1952) as *A. communis*, by Danin (1967) and by M. Zohary (1972, p. 22) as *A. korschinskii* (Hand.-Mazz.) Bornm. However, *A.*

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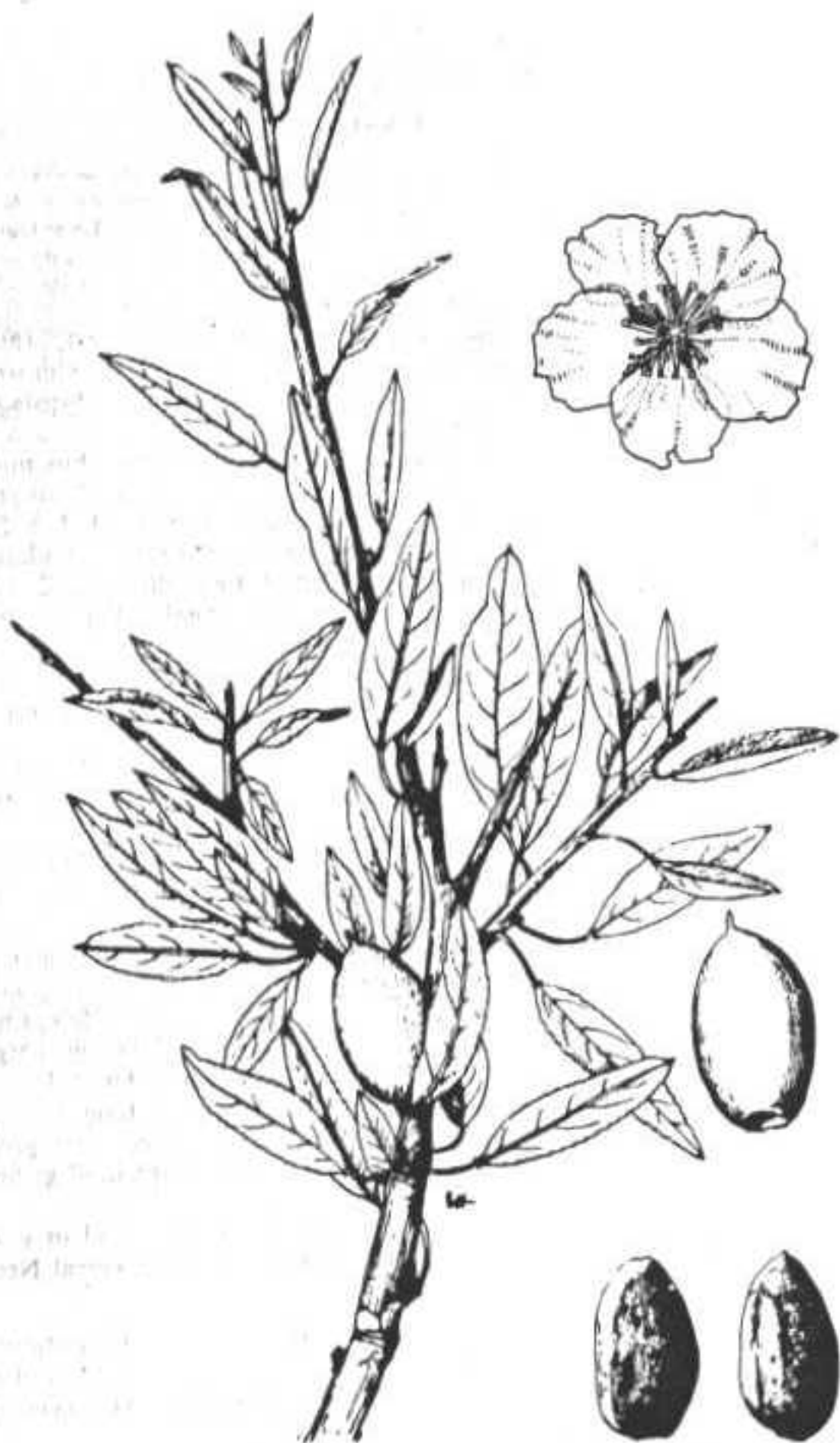


FIG. 1. *Amygdalus ramonensis* Danin: fruiting branch, flower, drupe and stones \times approx. 1.

ramonensis is a tree with a glabrous drupe whereas *A. korschinskii* is a shrub with a hairy drupe.

A. ramonensis grows in a steppe area (with mean annual rainfall of 80–100 mm) where *Artemisia herba-alba* is dominant (Danin *et al.*, 1975). It is confined to habitats where additional water is accumulated through run-off. Such habitats are, (a) the crevices of smooth-faced limestone outcrops (from which there is much run-off), (b) the foot of these outcrops, and (c) wadis draining their slopes. In these habitats there is an approximate total population of 100–200 specimens of *A. ramonensis*. Specimens growing in the crevice habitat are of shrub size whereas those in wadis are much larger—the same size variation is shown by *Pistacia atlantica* Desf. which grows in the same habitats (Danin & Orshan, 1970).

The specimens in rock outcrops belong to the *Verthemia iphionoides*-*Pistacia atlantica* association. This association also includes rare desert plants such as the endemic *Origanum ramonense* Danin and *Ferula negevensis* Zoh. as well as the Mediterranean relicts *Sternbergia clusiana* (Ker-Gawler) Spreng., *Prasium majus* L. and many others (Danin, 1972; Danin *et al.*, 1975).

A. ramonensis trees in wadis may reach a height of 3 to 6 m. However, since the trunks are cut by bedouin for fuel and the branches are grazed by goats and camels, many specimens look like shrubs rather than trees.

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REFERENCES

- DANIN, A. (1967). A new *Origanum* from Israel, *Origanum ramonense* sp. n. *Israel J. Bot.* 16:101–103.
- (1972). Mediterranean elements in rocks of the Negev and Sinai deserts. *Notes R.B.G. Edinb.* 31:437–440.
- & ORSHAN, G. (1970). Distribution of indigenous trees in the northern and central Negev Highlands. *La-Yaaran* 20:115–120.
- , — & ZOHARY, M. (1975). The vegetation of the northern Negev and the Judean Desert of Israel. *Israel J. Bot.* 24:118–172.
- ZOHARY, M. (1972). *Flora Palaestina*, Part II. The Israeli Academy of Sciences and Humanities, Jerusalem.
- & D'ANGELIS, J. (1952). Plants new to Palestine. IV. *Palest. J. Bot. (Jerusalem ser.)* 5:248.