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CAMEL THORN

CAMEL THORN (*Alhagi* Adans. spp.), common name for wild thorny suffrutescent plants of the Papilionaceae family, called *šotor-ḵār* and *ḵār-e šotor* (lit. "camel's thorn") in Persian.

Rechinger (1984, pp. 470-75), following the botanical interpretation and terminology of B. A. Keller and K. K. Shaparenko (1933), reports (for the area covered by the *Flora Iranica*) five species of *Alhagi* of which the following three (plus a hybrid) occur in Persia: 1. *A. mannifera* Desv. (= *Hedysarum alhagi* L., now discarded because taxonomically inappropriate, *A. maurorum* Fisch.); it is abundant especially in western and southern Iran (including the island of Qešm); it is also indigenous to north Africa, Palestine, Syria, Arabia, and Iraq. 2. *A. persarum* Boiss. & Buhse (= *A. camelorum* Fisch., etc.); it grows almost everywhere in Iran (see also Ghahreman, VII, no. 755, with details in color); it is also found in eastern Anatolia, Iraq, Turkmenistan, and Afghanistan. (The hybrid *A. mannifera* x *persarum* has been reported from Fārs.) 3. *A. pseudalhagi* (M. B.) Desv. (= *Hedysarum pseudalhagi* M. B., *A. camelorum* Fisch. var. *turcorum* Boiss., etc.); abundant almost everywhere in Persia; also found in Asia Minor, the Caucasus, Transcaucasia, Afghanistan, central Asia, and Pakistan.

Alhagi species typically grow in barrens and arid lands, for they can endure the most unfavorable ecological conditions (they occur even in soils covered with a salt crust). In search of underground humidity, they may develop roots up to 5-6 m deep (Hāšemī, p. 3; cf. Bešr b. ʿAbd-al-Wahhāb Fazārī, quoted by Bīrūnī [Ar. text, p. 146], saying that the roots of *al-ḥāj* [> Eng. alhagi] may go

down “two hundred cubits” [45-55 m]). Whereas they are often a very importunate weed in cultivated fields and in fallow lands, they constitute a valuable food for the local livestock in desert or semidesert areas of Persia and adjacent territories (cf. Abū Ḥanīfa Dīnavarī [3rd/9th cent.] who reports [p. 120, no. 249] from the Bedouin Abū Zīād that “*al-ḥāj* . . . is liked by domestic quadrupeds [*al-māšīa*] better than the *yanbūt* [*Anagyris foetida* L.]”).

Alhagis seem to be sought for and relished particularly by camels (cf. the *Šaraf-nāma-ye monīrī*, quoted by Dehḵodā, s.v. *oštor-ḵār*: “it fattens up the camel”),—hence the several Persian names compounded with *šotor* or (archaic) *oštor*: *ḵār-e oštor*, *oštor-gīā* (lit. “camel grass”), and *oštor-ḵār* (see, e.g., the *Borhān-e qāṭeʿ*, ed. Moʿīn, s.vv.; the last name, however, should not be confused with its doublet *oštor-ḡāz*, arabicized from obsolete Pers. *oštor-ḡāž*, also lit. “camel thorn,” which probably designated the asafetida plant; see asafetida in the Supplement). Other, obsolete local names include *tar* in Khorasan, *arūd* in Fārs, and *oštor* in Isfahan, all three quoted by Bīrūnī (p. 113, on the authority of Ḥamza Eṣfahānī), and *ārū* (cf. *arūd*), quoted by Kaempfer (p. 725), according to whom Persian herbalists called camel thorn “sweet *ārū*” (different from “bitter *ārū*”) because in Kermān its leaves were collected for their excellent manna, called *taran-jobīn*. The dialects of Baluchistan, where the *ḵār-e šotor* is plentiful and camels and goats are preferred to much more demanding livestock, are particularly rich in names for it (Parsa, 1327 Š., pp. 431-32, has recorded twelve names, including *šotor-ḵār*, *ḵār-e boz* [lit. “goat’s thorn”], and *šīnz*).

The camel thorn is also stored away locally as winter reserve fodder. In view of its relatively remarkable food value for cattle, which, according to Hāšemī (p. 1), is comparable with that of clover and alfalfa, it is systematically propagated (in barrens and steppes), harvested, and siloed in countries such as Uzbekistan, Turkmenistan, and Kazakhstan (idem, pp. 8, 16). A similar methodical propagation and exploitation in Iran was strongly suggested at an agricultural seminar in Yāsūj in 1364 Š./1985 (see Hāšemī) with the double objective of obtaining more food for the livestock in arid regions and of providing a minimal vegetable undergrowth in saxaul (*tāḡ*) and tamarisk (*gaz*) associations developed in areas with unstable soils and quicksands. Camel thorn bushes are also used as a fuel by nomads and semidesert dwellers (shepherds, cameleers, etc.). Until a few decades ago it was used as fuel in bakeries (See bread). The traditional fire made on the eve of Čahāršanba-sūrī is fuelled mainly by dried camel thorn bushes brought and sold in towns

for that occasion (Jazāyerī, p. 167).

To the common people, however, the camel thorn is important for a kind of manna (commonly called *taranjabīn*; see below) yielded by some of its species, namely the *Alhagi mannifera* and the *A. persarum* (see Rechinger, loc. cit.). Yet these species do not yield *taranjabīn* everywhere they grow. This phenomenon, as noted by Bīrūnī (p. 146), seems to be connected with certain temperature and soil conditions (Schlimmer, p. 357). Already Ebn Sīnā (I, bk. 2, p. 443) remarks that "this dew (*ṭall*) falls mostly in Khorasan and in Transoxiana, and [that] in our region it occurs most frequently on the *ḥāj*." Some 19th-century authors have also remarked that "the alhagi does not yield any kind of sugary exudation in Arabia, India, and Egypt, whereas this product is rather abundant in Persia and Bukhara" (Baillon, pp. 1-2, s.v. *Alhage*; see also Balfour, I, p. 72, s.v. *Alhagi maurorum*, who adds that "Kandahar, Herat, Persia, and Bokhara seem its proper districts, thence the turunjabin is imported into India"). Concerning Persia proper, Schlimmer (loc. cit.) specifies that the *Alhagi* yields manna only in certain areas such as Khorasan, Tabrīz, Ṭabas, Zarand, Ṭeḡerūd near Qom, and the seaport of Būšehr, and only during the hot season. Then he adds that, whereas allegedly in Lebanon the *Hedysarum alhagi* yields manna only after the goats have grazed its leaves and buds, in Persia natives of those regions where *taranjabīn* is harvested had told him that, on the contrary, the shepherds are bound by communal institutions to keep their herds away from the plains where the manna-producing species is abundant, because the sheep and goats would not fail to spoil the manna harvest.

Taranjabīn (colloq. *taranjebīn*; arabicized also as *taranjobīn/ṭaranjobīn*, etc., from Pers. *tar-angobīn*, lit. "moist/fresh honey"; cf. the incorrect literal meanings "dew honey" [*ʿasal al-nadā*] given by Esḥāq b. ʿEmrān [d. ca. 292/901], apud Ebn al-Bayṭār, pt. 1. p. 137, s.v., and "honey of the rose" given by Levey, in Samarqandī p. 202 n. 248; Bīrūnī, p. 113, quotes oft *oštorangobīn*, lit. "camel honey," from Ḥamza as current in Isfahan) is not "a dew falling from the sky" (Esḥāq b. ʿEmrān, ibid.), but a semiliquid resinous compound substance exuded by the leaves and branches of the manna-yielding alhagis "toward the close of the summer during the night, and [which] must be gathered during the early hours of the morning" (Laufer, p. 345, on the authority of Vámbéry, p. 189). It hardens in the form of white granules. It is gathered by shaking it from the dried cut-off bushes into a large cloth (Hāšemī, p. 20), and then by winnowing the grosser leaves, thorns, etc., from it (that is

why the *taranjabīn* on the market is usually mixed more or less with such impurities). Whatever manna still adheres to the bushes is separated by dissolving it in water, straining this water, and then evaporating it to consistency; this kind of *taranjabīn*, which occurs in small agglutinated masses, is, however, considered an inferior quality (see ʿAqīlī Ḵorāsānī, p. 270, s.v., and Dymock et al., I, p. 419). It is sweet (because of its saccharose content according to Zargarī, I, 2nd ed., pp. 448-49, 3rd ed., p. 472, on the basis of the analysis by Moghadam). The sweetness and nutritional value of *taranjabīn* have led some authors (e.g., see Bīrūnī, p. 114, quoting Moḥammad Sūqābāḏī) to believe it to be the miraculous manna which sustained the Israelites during forty years of journeying in the wilderness of Sinai (cf. the taxonomically incorrect name *Manna hebraica* formerly applied by D. Don to the *Alhagi mannifera*; see also Dehḵodā, s.v. *ḥāj*); but because reportedly the camel thorn does not produce any sugary substance in Egypt and Palestine (see also Baillon, loc. cit., and Laufer, p. 346 n. 3) and for other reasons, this identification is incongruous (*gaz-angabīn*, the manna yielded by the *Tamarix mannifera* Ehr., may be a likelier substance for the identification of the Biblical manna; see gaz and manna).

In the Islamic period the earliest description of the *ḥāj* as the source of *taranjabīn*, and of the medicinal properties of the latter is probably that by Esḥāq b. ʿEmrān (loc. cit.): “It is a dew resembling honey, solid and granulateḍ . . . It occurs oftenest on the *ḥāj*, and that is the *ʿāqūl* which grows in Syria and Khorasan. This plant has green leaves, red blossoms, and does not bear fruit. The choicest *taranjabīn* is the white one from Khorasan. It is moderate (in hotness and coldness), laxative, useful against acute fevers, pectoral, and when dissolved in pear and jujube juice beneficial to hot-tempered (*maḥrūr*) persons.” Additional medicinal data quoted by Ebn al-Bayṭār (ibid.) are: “it is more detersive (*jālī*) than sugar, alleviates the burning sensation in acute fevers, quenches the thirst, is aperient, and antitussive” (Ḥobayš b. Ḥasan, 3rd/9th century). “It is mildly cholagogic” (Ebn Sīnā, d. 428/1037). “Dosage: from 10 to 20 *meṭqāl*s [as per temperaments]” (Ebn Māsūya, ca. 160-243/ca. 777-857). In our times, although Schlimmer (loc. cit.) classes *taranjabīn* only as an indigenous laxative or purgative—which is indeed the property to which *taranjabīn* owes its reputation in the East—it is also used as a demulcent in coughs. As an aperient, however, it is usually mixed as a sweetener and additive with another purgative having an unpleasant taste (e.g., senna and the purging cassia; see Baillon, p. 2, Schlimmer, pp. 357-58, Pārsā, *Gīāhān* I, p. 223, and Dehḵodā, s.v. *ḥāj*). According to Thompson (p. 270), it is sometimes

used as a substitute for sugar in Bukhara and Basra. *Taranjabīn* still constitutes an export article of Iran. The latest official statistics indicates that in 1365 Š./1986-87, 54,000 kg were exported to Austria for a total value of Rls 10.8 mill (see Gomrok-e Īrān, pt. 2, "*Ṣāderāt*," p. 25).

Medicinal virtues have also been attributed to the camel thorn itself. Ebn al-Bayṭār (pt. 2, p. 3, s.v. *ḥāj*) quotes the following from his teacher Abu'l-ʿAbbās Nabātī (the herbalist/botanist): "Some natives of Mosul have told me that [in their country] the *ḥāj* extract is used [as an eye-salve] to cure corneal leucoma (*bayāż al-ʿayn*), corneal opacity (*ẓolmat al-ʿayn*), and cold humors (*borūdāt*) in the eye." In modern times, Parsa (1948, loc. cit.) reports that in Baluchistan "a decoction of the root of the *Alhagi camelorum* is applied on the skin to cure abscesses," and Hāšemī (p. 4) says that "in folk medicine a ptisan of the *ḵār-e šotor* is used to cure rheumatism, belly ache, etc." Nowadays in Iran a distillate of the camel thorn is commercialized under the name of *ʿaraq-e ḵār-e šotor*, and publicized as "a strong diuretic, a blood purifier, a kidney detersive," and a cure "for whooping-cough, renal and vesical calculi, and hot or intermittent fevers."

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