



BĪD II. THE TREE

ii. The Tree

A great confusion or indetermination reigns in the taxonomy of *Salix* L. in Iran. The following inventory is based on Ṭābetī's detailed account (1976, "Salix," pp. 662-81), with some synonyms, local names, habitats, etc., also taken from Mobayyen, II, pp. 20-28, Djavanshir, pp. 156-57, etc.

1. *Salix acmophylla* Boiss.; habitat: some specified localities in the southern Alborz slopes area (where it is called *bīd-e zard/zard-bīd*, lit. "yellow willow"), Gilān, Kurdistan, Kermānšāh, Lorestān, Bakṭiārī, Fārs, Yazd, Kermān, Sistān, Baluchistan, etc.; also reported in Bādḡīs (Afghanistan), Turkmenistan, Caucasus, etc. 2. *S. aegyptiaca* L. (= *S. caprea* [auct. non L., according to Ṭābetī], *S. Medmeii* Boiss., etc.); habitat: Caspian lowland forests from Mīnūdašt (in Gorgān) to Ardabīl and Arasbārān, Qom, Isfahan, Fārs, Kermān, Yazd, etc.; also found in Caucasus, Turkmenistan, and Afghanistan; common name: *bīd-mešk/mošk* or *mešk/mošk-bīd* (lit. "musk willow"); local names: *mešg-fīk* (in Katūl, Gorgān), *sūgūt* (in Mīnūdašt, Gorgān), *meš-bed* (in Gorgān), *pīš(ī)pīšī* (in Arasbārān), *dār-fešfeša* (in Sardašt), etc. (see also its older names and medicinal uses below). 3. *S. alba* L. (= *S. micans* Anders., etc.); habitat: most areas in Iran, especially Caspian plain forests from Gorgān to Arasbārān and western Azarbaijan, Lorestān, Kurdistan, Kermānšāh, and Hamadān; also reported in Afghanistan, Turkmenistan, and Caucasus; common name: *bīd* (or variants thereof); local names: *fīk* or *fek(-dār)* (in many places in Māzandarān), *bāmešī-fek* (in Āmol; lit. "pussy willow"), etc. 4. *S. babylonica* L. (= *S. pendula* Moench); common designation: *bīd-e majnūn* (lit. "the mad willow," perhaps



alluding to Majnūn, the demented lover of Laylā, who is often depicted under a willow), *bīd-e mowalla*, or, sometimes, *bīd-e mo'allaq* (lit. “the hanging willow”), all alluding to its drooping, apparently disheveled, foliage and branches (cf. its English name “weeping/mourning willow;” see also its older, obsolete names below); planted as an ornamental tree (usually grafted on *S. excelsa*, etc.) in many places in Iran; also reported as native to Soviet Azarbaijan. 5. *S. carmanica* Bornm.; habitat: Urmia, Kermānšāh, Isfahan, Yazd, Kermān; also growing in Afghanistan; common (?) name: *bīd-e marjān(i)* (lit. “coral willow”). 6. *S. daphnoides* Vill.; habitat: Čālūs valley, Waliābād and Siāh-biša in Māzandarān, etc; local names: *bīd-derra* (in Čālūs valley and Waliābād), *vī* (?). 7. *S. elbursensis* Boiss. (= *S. purpurea* L. var. *pallescens/virescens* Anders.); habitat: Čālūs and Karaj valleys, Rūdbār, Kermānšāh, etc.; also found in Anatolia and Caucasus; common name: *bīd(-e) sork/sork-bīd* (lit. “red willow”); local name: *morvār* (?). 8. *S. excelsa* Gmel.; habitat: Caspian forests from Mīnūdašt to Āstārdā, Zagros region from Arasbārān down to Fārs, Kermān, Yazd, northern Khorasan, southern Alborz slopes, etc.; also reported in Afghanistan; local name (in Karaj, etc.) for this species (and the variety *Rodinii* Skvortsov found in Bandar-e Gaz, Khorasan, and Tall-e Kōsravī in Fārs): *bīd(-e) siā(h)* or *siā(h)-bīd* (lit. “black willow”). 9. *S. fragilis* L.; habitat: Caspian Plain forests, some places in the southern Alborz region (e.g., Karaj, Ṭālaqān, Jovestān, Šahrīār); common name: (*bīd(-e) bīdkeštī* (lit. “the willow yielding the *bīdkešt* manna;” see below); local names: *fek(-dār)* (in Māzandarān), *fūkā/fokā* (in Rāmsar and Šahsavār), *vī(-dar)* (in Gīlān), *bīd-e mahnāzī* (?). 10. *S. pycnostachya* Anders. (= *S. iranica* Bornm., *S. ferganensis* Nazarov, *S. pamirica* Drobov, etc.); habitat: some localities in Kermān, northern Khorasan, and Gorgān; also found in Afghanistan; no particular local name(s) recorded for it in our sources. 11. *S. songarica* Anders.; habitat: Harīrūd valley in Sīstān, eastern Khorasan; local name (recorded by Djavanshir): *bīd-e sork*. 12. *S. triandra* L. (= *S. amygdalina* L., *S. armena* Schshk., etc.); habitat: Baluchistan, Gorgān, Azarbaijan, Kurdistan; local name: (*dār-)**fešfeša* (in Kurdistan). 13. *S. wilhelmsiana* M. B. (= *S. angustifolia* Willd., *S. rosmarinifolia* L., etc.); habitat: Karaj and Čālūs valleys, Arasbārān, Urmia, some localities in Luristan, Baḳtīārī, Fārs, etc.; local name: *jar-bīd* (in Fārs). 14. *S. zygostemon* Boiss. (= the hybrid *S. aegyptiaca* x *S. elbursensis*, etc.); habitat: some southern Alborz valleys (e.g. Karaj valley), Arāk, Hamadān, Baḳtīārī, Mt. Taftān slopes, etc.; local name in most places: (*bīd(-e)*)*jowdānak* (lit. “barley-grain willow”).

Historically, some information—also very confused—about salices and their names is available in Arabic and Persian sources of the Islamic era. They have



dealt with the willow under the “standard” heading *kelāf*; however, some other controversial (Arabic or arabicized) names such as *ṣafṣāf* are also found. That confusion is reflected in the synonymy given by Ebn Maymūn, (d. a.d. 1204), *Šarḥ asmāʾ*, no. 393 (*kelāf* = *ṣafṣāf* = *sendār* = *ḡarab* = *sawḥar* = *sālej*) and no. 64, where he confuses *bahrāmej* (*S. aegyptiaca*) with clematis. As quoted by Ebn al-Bayṭār (II, p. 68), Ġāfeqī (1st half of the 6th/12th century) says: “*Kelāf* is of numerous kinds, including *ṣafṣāf* (with two varieties, red and white) and *bādāmak*.” The physician-botanist Abū ‘Abd-Allāh Moḥammad Tamīmī (d. 380/990), in his *Ketāb al-moršed* (as quoted by Ebn al-Bayṭār, *ibid.*), expatiates on the difference between *kelāf* and *ṣafṣāf*, leading us to the conclusion that *kelāf*, with its fragrant catkins having medicinal properties, corresponded to *S. aegyptiaca*, whereas *ṣafṣāf*, which used to be applied to the allied genus *Populus* (poplar), too, might be identified with *S. Safsaf* Forsk. or *S. alba* L. (cf., *Toḥfa*, nos. 412 and 433, and Ebn Maymūn, p. 197). Ebn Sīnā (d. 428/1037; II, pp. 282, 344) equates *ṣafṣāf* with *kelāf*;

so does Bīrūnī (on the authority of Bešr b. ‘Abd-al-Wahhāb Fazārī, *Ketāb al-ṣaydana*, pp. 183-84 of Ar. text), adding that “it is *bīd-e sepīd* [lit. white willow] in Persian.” Ebn Sīnā (p. 93), however, has a very short article under *bahrāmaj* (= *bīd-mešk*). Ebn al-Bayṭār (d. 646/1248; p. 122, s.v. *bahrāmaj*) says it is the same as *al-ḡelāf al-balkī* (lit. the willow native to Balk) having “two varieties . . . both of which are sweet-smelling.” Anṭakī (d. 1008/1599; I, p. 124) also equates *kelāf* with *ṣafṣāf* “in all its varieties,” but mentions “*bahrāmaj* known as *al-balkī*,” and “the bitter *ṣafṣāf*,” for which he indicates medicinal properties. According to the 11th/17th-century author Tonokābonī (physician to the Safavid Shah Solaymān; pp. 354-55), “*kelāf* comprises *bīd-mešk* = *kelāf-e balkī*, *bīd-e barrī* [lit. “wild/common willow”] = *ṣafṣāf*, and *bīd-e mowallah* [lit. “love-mad/disheveled willow,” i.e., *S. babylonica*].” The lexicographer Moḥammad Pādšāh, in his *Ānand Rāj* (comp. 1306/1888; I, p. 826), on the authority of a certain Majd-al-Dīn ‘Alī Qawsī, reports “seventeen kinds” of willow, of which he mentions only the following species and synonymous names: 1. *bīd-mošk*/*mošk-bīd* = *gorba-bīd*/*bīd-e gorba* (lit. cat willow) = *bīd-mūš* (lit. mouse willow, probably a corruption of *bīd-mošk*) = *bīd-e balkī*; 2. *sork-bīd*; 3. *sīāh-bīd*; 4. *bīd-e mowallah* = *bīd-e majnūn* = *bīd-e ṭabarī* (lit. the willow native to Ṭabarestān; but he explains, p. 828, s.v. *bīd-e ṭabarī*, that this is equated by some with *bīd-mošk*).

Following is a short account of the medicinal properties of the willow as indicated by some physicians-pharmacologists of the Islamic era. Concerning



its pharmacodynamic “nature,” Abū Bakr Kāsānī, in his Persian adaptation and expansion (1st half of the 8th/14th century) of Bīrūnī’s *Ṣaydana* (I, pp. 281-83), when mentioning a view about the origin of the appellation *kelāf* (in Arabic also meaning “opposite, contrary”), says: “Anything bitter is warm by nature, save *bīd*, which is bitter but cold in nature; that is why it has been called *kelāf* in Arabic” (see Levey in Samarqandī, pp. 227-28, for the Sumerian and Akkadian cognates of the Ar. *kelāf* “willow”). Then (II, p. 848), on the authority of Abū Zayd Arrajānī (fl. 4th/10th cent.), he states that both the *bīd* and its blossoms are cold in the first degree, and dry in the second. According to Tamīmī (loc. cit.) inhaling the sweet smell of *kelāf* (= *S. aegyptiaca*) flowers is beneficial to hot-tempered people, because it moistens (i.e. refreshes) their brains and alleviates the violent bilious headaches to which they are susceptible (*dohn al-ḳelāf*, i.e., its “oil,” has the same virtues). Aḳawaynī Boḳārī (d. ca. 373/983?), author of the oldest extant medical treatise in Persian, *Hedāyat al-mota’allemīn*, prescribes the use of the leaves of the willow (to which he always refers as *bēd/bīd*) and of the willow oil (*rowḡan-e bīd*) in some cases and ways which seem to derive from his personal experience (cf. Ebn Sīnā’s therapeutic description, loc. cit., which follows that of Dioscorides closely). He recommends willow leaves as follows: as part of a mixture to be applied on the head in case of cephalgia (p. 223); with vinegar and rosewater in a poultice (on the abdomen) in splenitis accompanied by fever and mouth dryness (p. 473); in a *moraṭṭeb* (moistening, refreshing) sitzbath (a decoction of willow leaves, violets, and nenuphars) for a kind of quotidian fever (p. 652); in summer the dwelling of a person sick of hectic fever should be cool and strewn with willow leaves and nenuphars (p. 665); a person affected by smallpox should be laid on a bed of willow leaves (p. 737); similarly a person sick of choleric fever should lie down or sleep in a cool place strewn with willow leaves, and as a prophylactic measure against pestilence the place should be fumigated with willow leaves, apple leaves, sandalwood, and camphor (p. 764). The uses of willow oil: in an ointment (also containing nenuphar oil, vinegar, etc.) to be applied on the head against a kind of cephalgia (p. 223); in another ointment (on the head) against *sar-sām* (phrenitis, brain fever) (p. 236); in case of *tašannoj* (convulsions) the body should be “moistened/refreshed” with a “cold” oil such as willow oil or nenuphar oil (p. 266). Aḳawaynī also uses “willow water” in one case: a cataplasm of pounded *bāqelā* (broad beans) soaked in fresh willow water as a remedy against *entešār* (pathological pupillary dilatation) (p. 284). Of course, the willow supposedly had medicinal uses more varied than those few mentioned by the Persian author. For example, Anṭākī (loc. cit.), who considers



“the bitter willow . . . occurring mostly near streams and in cold regions” to be “cold in the second degree, moist in the second or in the first, and dry,” states that, as such, it is a hepatic deobstruent, that it curbs the heart palpitation, thirst, ardor, as well as the stomachal weakness caused by bodily heat and agues. Further, according to him, an ointment of its leaves cures itch and scabies and dissolves edemas; and its “gum” (see *bīd-kešt* below) sharpens the eyesight.

Of all those old therapeutic uses of different salices only a few have practically persisted through modern times in Iran. The following are the important ones.

Bīd-kešt. Also called *bīd-angabīn/angobīn* (lit. willow nectar), it is a whitish, sweetish dried manna that exudes, according to Polak (p. 287, Pers. tr. p. 460), from the twigs or leaves of *S. fragilis* L. (*bīd-e bīdkeštī*, etc.; see above). Just like their Roman and Greek predecessors who knew about it, the few authors of the Islamic era who have mentioned it do not seem to have been particularly attracted by it (cf., e.g., Ebn Sīnā, loc. cit.). Bīrūnī, (loc. cit.) says (on the authority of Rāzī and Ṭabarī): “The “milk” of *ṣafṣāf* causes the hair to fall. Some people nick the bark of the willow and collect a gum or milk from it; some people obtain it from its leaves when the tree is in bloom.” Classified by Schlimmer (p. 359) in the group of pectoral and demulcent mannas of Iran, it is still sometimes administered in popular medicine mainly as a *konakī* (a cooling agent, Galenically speaking) in typhoid, in febrile labial herpes, and the like.

The ‘*araq* (distillate) of *bīd-mešk*. Historically, “willow water” (*āb-e bīd, mā’ al-keḷāf*) has been mentioned by a few Islamic authors (Aḳawaynī’s particular prescription was indicated above). Ebn Sīnā (loc. cit.) recommends “*keḷāf* blossoms and water” as cephalic; Kāsānī (loc. cit.) reports that “*bīd* water unclogs liver occlusions and helps against jaundice.” However, not only the kind of the willow and the part(s) involved have not been specified, the nature of the “water” in question is not determined, either. But in modern times the *bīd-mešk* species and specifically the distillate obtained from its fragrant catkins have been emphasized. Earlier also known as *šāh-bīd* (lit. king willow), *bahrāma* (arabicized as *bahrāmaj/bahrāmej*), etc., *bīd-mešk* is usually identified with *S. aegyptiaca* L. (lit. Egyptian willow), which, despite its misleading Linnean designation, had its origin in southwest Asia and especially in Iran (see Meyerhof in Ebn Maymūm, p. 197, and Ṭābetī, 1326, pp. 23-24, both on the authority of Björn Floderus). Some authors, however, have dealt with it as *S. caprea* L. (e.g., Dymock et al., III, p. 364) and even as *S. zygostemon* Boiss., (e.g.,



Schlimmer, p. 497; for an explanation of the confusion of these closely allied species, see Tābetī, loc. cit.). Anyhow, *bīd-mešk* distillate, added to sugared water, is nowadays widely consumed in Iran just as a refreshing drink or as a *konakī* in fevers and febrile diseases. The commercialized *‘araq-e bīd-mešk* is vaunted as a cordial (*mofarreh*) and nervine. Outside Iran, Dymock et al. (p. 366) remark that “the Persian settlers in India have introduced the flowers . . . and the distilled water . . . of *S. Caprea*, both of which are used by the upper classes of Mahometans and Parsees, who consider them to be cephalic and cardiacal, and use them as domestic remedies in almost every kind of slight ailment.”

Bīd as an antipyretic. Some willow species are rich in salicin, an antipyretic discovered only in 1825. As mentioned above, some older authors have noticed the efficacy of various uses of the willow in some fevers or febrile ailments. Until the introduction of the acetyl-salicylic acid (aspirin, etc.) and quinine into Iran in modern times and still nowadays in areas where local popular medicine prevails, an infusion of the bark of the young branches of some willow species (e.g., *S. alba* and *S. triandra*) was/is used as a remedy for malarial and choleric fever, rheumatic pains, and as a general febrifuge. As prescribed long ago by Akawaynī (see above), where willows are available, the practice still persists to lay the patients having a fit of typhoid or malarial fever on a bed of willow twigs and leaves.

Apart from the curative benefits of *Salix*, some willows are planted all over Iran as ornamental or shade trees, most especially *bīd-e majnūn*, the weeping willow, which can develop a majestic stature. As such the *bīd* is often mentioned in Persian poetry in descriptions of the spring. In addition, the pliant, purple or brown, twigs of some species, especially *S. alba*, *S. elbursensis*, *S. pycnostachya*, *S. triandra*, and *S. wilhelmsiana*, are used in basketry as a limited, local industry. Further, willow wood is—generally speaking—used in the humid Caspian provinces for fence stakes (because it withstands rot) and in most places in the steppelands as fire-wood.

Despite all those benefits, because willows are dioecious plants without showy flowers or edible fruit, many Persian poets have referred to *bīd* as a symbol of unfruitfulness, uselessness, and, by extension, unproductive ignorance—as typified in this distich of Sa’dī: “Every tree has a fruit, everybody a *honar* (talent, craft); but, poor me, I am hopeless and indigent like the willow.” Similarly, some oneirocritics have interpreted the willow as a decaying old man unable to have any offspring, or, in the case of women, as a pretty lady



without any possession (see *Kvābgozārī*, p. 171). Another “foible” of the *bīd*, most probably the weeping willow with long flexible drooping twigs that flutter in the slightest breeze, has been used in Persian language and literature to form similes such as “to shiver like the willow” and “trembling like the willow,” indicating the intensity of somebody’s frailty and fright (for literary quotations, see Dehḡodā, *Loġat-nāma*, s.v. *bīd*, cf. also the current Persian proverbial expression *bīd-ī nīst ke az īn bādhā belaržad* “(such and such a person) is not a willow to tremble at these winds,” i.e., he/she is too hardy to be frightened/upset by these trifles).

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