



GALBANUM

GALBANUM (Pers. *bārīja*, *bārzad*), a slightly bitter odorous gum resin obtained from several Asian umbelliferous plants (especially the genera *Ferula* L. and *Dorema* Don), for which numerous medicinal uses have been recorded.

History. Galbanum, sometimes confused with similar resins, has been known and used since ancient times. The etymology of the word (< Gk. *khalbánè* < Bibl. Heb. *ḥelběna*, cognate with Syr. *Halběnitā*, Sum. *ḪAL* and Akk. *baluḫū*; see Ebn Maymūn, Meyerhof's comm., no. 339, p. 170, and Levey's note 30 in Kendī, pp. 239-40) rightly points to the Near Eastern and Middle Eastern provenience of galbanum-yielding plants. Galbanum is mentioned in the Bible (Exodus 30.34-35), not as a medicinal drug, but as an ingredient of a sacred incense (also including frankincense, onycha, etc.) destined to be burned in the "Tabernacle of the Congregation." Pliny and Dioscorides refer to ancient Syria as the habitat of the galbanum plant. Galbanum was widely used in ancient Mesopotamia for medicinal purposes (Levey, *ibid.*). There remains no direct evidence of its use in pre-Islamic Persia; however, the Chinese loan-word *p'i-ts'i* (which may be transcribed as **bit-dzi*, *bir-zi* or *bir-zai*) is believed to represent Mid. Pers. *bīrzay* "galbanum," which was imported in Sasanian times to India and thence to China (Laufer, p. 363; cf. Hind. *berīja* < Pers. *bārīja*, still the most common name of this substance in Persia).

Galbanum plants and their distribution. There has been confusion or uncertainty about the nature (color, taste, odor, medicinal properties) of galbanum, about the plants involved, and the latter's habitats. The confusion has resulted mainly from the more or less similarity of galbanum to other



resins yielded by some other umbelliferous plants, e.g., sagapenum (from *Ferula persica* Willd.; *sagbīnaj*), asafetida (from *F. assa-foetida* L.; *ang/jodān* or *anqoza*), opopanax (from *Opopanax chironium* Koch; *gāv-šīr/jāvšīr*), and *komā* (from *F. oopoda* Boiss. et Buhse).

The Dutch physician Johann L. Schlimmer, who practiced and taught medicine for about fifteen years in Persia in the second half of the 19th century, identified the galbanum and its plants in Persia. His authoritative remarks are worth quoting: “Galbanum is known to Persian druggists under the various names *qāsnī*, *bārzad*, *bārīja*, and *vašā*, but under these names are confused two different kinds of galbanum yielded by two very distinct plants: The first three names are synonyms...for the brown product of *Ferula galbaniflua* Buhse [=*F. gummosa* Boiss.] found, among other places, in Deh Gardon [Deh-e Gerdū] (on the road to Shiraz), on the mountains of Sāvoj Bolāg (between Tehran and Qazvīn), of Kāraqān and Sāva (where villagers collect it [i.e., the sap] with the name *bālanbū*), and in Lār valley (in the Alborz [range]); and *vašā*, on the contrary, is the yellowish white product of [the umbelliferous] *Dorema Ancheri* Boiss., which Dr. [J.] Buhse [of Riga] encountered on low mountains near Rašm [in Šāhrūd *šahrestān*]” (Schlimmer, pp. 295-96; for detailed up-to-date geographical distribution of these species of the genera *Ferula* L. and *Dorema* Don in the large floristic area covered by Rechinger’s *Flora Iranica*, including Afghanistan, see Rechinger et al., pp. 379-85, 387-426). As to ancient Syria as the provenience of galbanum in Classical authors, Meyerhof remarks (ibid.) that “most of these [galbanum-yielding] plants grow in central and eastern Persia, in Afghanistan, etc., whence they were imported into Syria and Palestine.”

Persian and vernacular names. In addition to *bārīja*, the typical name, vernacular names such as *qāsnī* (Azeri Turkish) and *bālanbū* are still recorded in modern sources (e.g., Hooper, pp. 118-19, Parsa, p. 81). Older names, now obsolete, include *bārzad* with the variants *bīrzad*, *bīrza(y)* (the author of the *Borhān-e qāṭe’*, ed. Mo’īn, I, p. 334, wrongly declares *bārzad* to be the arabicized form of *bīrzad*).

Medicinal uses. The numerous medicinal uses mentioned for galbanum in the Islamic sources (e.g., Abū Maṣṣūr Mowaffaq Heravī, s.v. *qenna*, p. 256; Ebn Sīnā, bk. 2, pp. 706-707, s.v. *qenna*; Tonokābonī, p. 140) go back mainly to the Greek physician and herbalist Dioscorides (bk. 3, Ar. tr., no. 78, pp. 279-80, Eng. tr., no. 97, pp. 330-31), with some minor additions or explanations. These may be summarized as follows: Used externally (by application, inhaling,



fumigation, etc.), it is an emmenagogue and abortifacient; it is good for epilepsy, hysteria, giddiness, toothache due to caries, furuncles, freckles, serofula, piles; and (by fumigation) it is an insect repellent. Used internally, it is good for chronic cough, dyspnea, asthma, convulsions; (with vinegar and myrrh) as an alexipharmic; (with honey) as a lithontrypic and renal deobstruent; it is also good for weak stomach, liver, and spleen. Substitutes for galbanum are sagapenum (“five times the weight of galbanum”) or opopanax (“1/4 of its weight,” Tonokābonī, p 140).

Modern exploitation and export. In 1364 Š./1985, Ḥasan Karīmī Alīza’ī and Moḥammad-Rezā Maḥjūb pointed out regretfully that “[although] *bārīja* is a tonic/stimulant, anticatarrhal and antispasmodic, nowadays [in Persia] its use in internal medicine has been forgotten.” According to them, galbanum plants are/were used as forage for cattle (“because cattle husbandmen believe that these plants raise the quantity and quality of the cattle’s milk”) and the gum is exported to some foreign countries, where it is employed mainly in perfumery and a little in jewelry (to make a special colorless glue for fixing precious stones).

The gradual decrease in galbanum export (see [Table 1](#)) may be due to the following causes (according to a private communication to the present writer): Stricter governmental control on local irrational exploitation of galbanum plants (incidentally, this irresponsible exploitation has been severely disturbing the ecosystem in the affected areas); exporting galbanum in crude, non-standardized form, thus depriving the government of the economic added value thereof (no factory still exists for processing galbanum and tragacanth); and mismanagement of the leases granted to local people and entrepreneurs for collecting galbanum in specific areas of the country.

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