

## MANNA

21. The word "manna," of Semitic origin (Hebrew *mān*, Arabic *mann*), has been transmitted to us through the medium of Greek *μάρνα* in the translation of the Septuaginta and the New Testament. Manna is a saccharine product discharged from the bark or leaves of a number of plants under certain conditions, either through the puncture of insects or by making incisions in the trunk and branches. Thus there are mannas of various nature and origin. The best-known manna is the exudation of *Fraxinus ornus* (or *Ornus europaea*), the so-called manna-ash, occurring in the Mediterranean region and Asia Minor.<sup>1</sup> The chief constituent of manna is manna-sugar or mannite, which occurs in many other plants besides *Fraxinus*.

The Annals of the Sui Dynasty ascribe to the region of Kao-č'añ 高昌 (Turfan) a plant, styled *yañ ts'e* 羊刺 ("sheep-thorn"), the upper part of which produces honey of very excellent taste.<sup>2</sup>

Č'en Ts'añ-k'i, who wrote in the first part of the eighth century, states that in the sand of Kiao-ho 交河 (Yarkhoto) there is a plant with hair on its top, and that in this hair honey is produced; it is styled by the Hu (Iranians) 結敦 (= 勃) 羅 *k'ie-p'o-lo*, \**k'it(k'ir)-bwuδ-la*.<sup>3</sup> The first element apparently corresponds to Persian *xār* ("thorn") or the dialectic form *γār*;<sup>4</sup> the second, to Persian *burra* or *bura* ("lamb"),<sup>5</sup> so that the Chinese term *yañ ts'e* presents itself as a literal rendering of the Persian (or rather a Middle-Persian or Sogdian) expression. In New Persian the term *xar-i-šutur* ("camel-thorn") is used, and, according to AITCHISON, also *xar-i-buzi* ("goat's thorn").<sup>6</sup>

It is noteworthy that the Chinese have preserved a Middle-Persian word for "manna," which has not yet been traced in an Iranian source. The plant (*Hedysarum alhagi*), widely diffused over all the arid lowlands

<sup>1</sup> Cf. the excellent investigation of D. HANBURY, Science Papers, pp. 355-368.

<sup>2</sup> *Sui šu*, Ch. 83, p. 3 b. The same text is also found in the *Wei šu* and *Pei šu*; in the *T'ai p'in hwan yü ki* (Ch. 180, p. 11 b) it is placed among the products of Kū-ši 車師 in Turfan.

<sup>3</sup> STUART (Chinese Materia Medica, p. 258) erroneously writes the first character 給. He has not been able to identify the plant in question.

<sup>4</sup> P. HORN, Grundriss der iranischen Philologie, Vol. I, pt. 2, p. 70.

<sup>5</sup> In dialects of northern Persia also *varre*, *varra*, and *werk* (J. DE MORGAN, Mission en Perse, Vol. V, p. 208).

<sup>6</sup> Cf. D. HOOPER, *Journal As. Soc. Bengal*, Vol. V, 1909, p. 33.