

*pie šwo* about A.D. 1090, says, "A-wei is classed among trees. People of Kiañ-su and Če-kiañ have now planted it. The odor of the branches and leaves is the same, but they are tasteless and yield no sap." The above K'un-lun refers to the K'un-lun of the Southern Sea;<sup>1</sup> and Li Ši-čen comments that "this tree grows in Sumatra and Siam, and that it is not very high. The natives take a bamboo tube and stick it into the tree; the tube gradually becomes filled with the sap of the tree, and during the winter months they smash the tube and obtain the sap." Then he goes on to tell the curious tale of the sheep, in the same manner as Čao Žu-kwa.<sup>2</sup>

Čao Žu-kwa's notice that the resin is gathered and packed in skin bags is correct; for GARCIA DA ORTA<sup>3</sup> reports that the gum, obtained by making cuts in the tree, is kept in bullock's hides, first anointed with blood, and then mixed with wheat flour. It is more difficult to account for the tradition given by the Chinese author, that, in order to neutralize the poison of the plant, a sheep is tied to the base of the tree and shot with arrows, whereupon the poison filters into the sheep that is doomed to death, and its carcass forms the asafoetida. This bit of folk-lore was certainly transmitted by Indian, Persian, or Arabic navigators, but any corresponding Western tradition has not yet been traced. Hobeich Ibn el-Hacen, quoted by Ibn al-Baiṭār,<sup>4</sup> insists on the poisonous action of the plant, and says that the harvests succeed in Sind only when asa is packed in a cloth and suspended at the mouth of water-courses, where the odor spread by the harvest will kill water-dogs and worms. Here we likewise meet the notion that the poisonous properties of the plant are capable of killing animals, and the sheep of the Chinese tradition is obviously suggested by the simile of white sheep-fat and the white vegetable fat of asa. In reality, sheep and goats are fond of the plant and fatten on it.<sup>5</sup> The asa ascribed to the country Ts'eñ-t'an in the *Sun šī*<sup>6</sup> was surely an imported article.

<sup>1</sup> Not to the K'un-lun mountains, as assumed by STUART (Chinese Materia Medica, p. 173).

<sup>2</sup> Needless to say, this Malayan asafoetida can have been but a substitute; but to what plant it refers, I am unable to say. The *Tuñ si yañ k'ao* (Ch. 2, p. 18; 3, p. 6 b), published in 1618, mentions *a-wei* as product of Siam and Java. T'an Ts'ui 檀萃, in his *Tien hai yü heñ ċi*, written in 1799 (Ch. 3, p. 4, ed. of *Wen yin lou yü ti ts'un šu*), states that the *a-wei* of Yün-nan is produced in Siam, being imported from Siam to Burma and brought from Burma up the Kin-ša kiañ.

<sup>3</sup> C. MARKHAM, *Colloquies*, p. 47.

<sup>4</sup> LECLERC, *Traité des simples*, Vol. I, p. 447.

<sup>5</sup> E. KAEMPFER, *Amoenitates exoticæ*, p. 540; C. JORET, *Plantes dans l'antiquité*, Vol. II, p. 100.

<sup>6</sup> Ch. 490; cf. HIRTH, *Chao Ju-kua*, p. 127. I am not convinced that Ts'eñ-t'an is identical with Ts'eñ-pa or Zanguebar.