

admits that it is unknown what the *hu ma* spoken of in the *Pen-ts'ao* literature really is.

I have also prepared a translation of Li Ši-čen's text on the subject, which Bretschneider refrained from translating; but, as there are several difficult botanical points which I am unable to elucidate, I prefer to leave this subject to a competent botanist. In substance Li Ši-čen understands by *hu ma* the sesame, as follows from his use of the modern term *či ma* 脂麻. He says that there are two crops, an early and a late one,<sup>1</sup> with black, white, or red seeds; but how he can state that the stems are all square is unintelligible. The criticism of the statements of his predecessors occupies much space, but I do not see that it enlightens us much. The best way out of this difficulty seems to me Stuart's suggestion that the Chinese account confounds *Sesamum*, *Linum*, and *Mulgedium*. The Japanese naturalist Ono Ranzan<sup>2</sup> is of the same opinion. He says that there is no variety of sesame with red seed, as asserted by Li Ši-čen (save that the black seeds of sesame are reddish in the immature stage), and infers that this is a species of *Linum* which always produces red seeds exclusively. Ono also states that there is a close correlation between the color of the seeds and the angles of the capsules: a white variety will always produce two or four-angled capsules, while hexangular and octangular capsules invariably contain only black seeds. Whether or in how far this is correct I do not know. The confusion of *Sesamum* and *Linum* arose from the common name *hu ma*, but unfortunately proves that the Chinese botanists, or rather pharmacists, were bookworms to a much higher degree than observers; for it is almost beyond comprehension how such radically distinct plants can be confounded by any one who has even once seen them. In view of this disconsolate situation, the historian can only beg to be excused.

7. It is a point of great culture-historical interest that the Chinese have never utilized the flax-fibre in the manufacture of textiles, but that hemp has always occupied this place from the time of their earliest antiquity.<sup>3</sup> This is one of the points of fundamental diversity between East-Asiatic and Mediterranean civilizations,—there hemp, and here flax, as material for clothing. There are, further, two important facts to be considered in this connection,—first, that the Aryans

<sup>1</sup> In S. COULING's *Encyclopædia Sinica* (p. 504) it is stated that in China there is only one crop, but late and early varieties exist.

<sup>2</sup> *Honzō kōmoku keimō*, Ch. 18, p. 2.

<sup>3</sup> In a subsequent study on the plants and agriculture of the Indo-Chinese, I hope to demonstrate that the Indo-Chinese nations, especially the Chinese and Tibetans, possess a common designation for "hemp," and that hemp has been cultivated by them in a prehistoric age. There also the history of hemp will be discussed.