

THE ORIGINAL HOME OF *SANTALUM ALBUM* LINN. BY C. E. C. FISCHER.

In Kew Bulletin 1927 p. 193 Messrs. T. A. Sprague and V. S. Summerhayes have discussed the distribution of certain genera of the *Santalaceae* in Malaysia and Polynesia and have re-established the genera *Eucarya* and *Mida*. A diagram (p. 199) shows the peculiar distribution of the genus *Santalum* which, with the exception of a small overlap with *Eucarya* in the south-east of Australia, occupies a quite distinct habitat from that of the other two genera. The area occupied by *Santalum*, with about 15 described species, (excluding those now attributed to *Eucarya* and *Mida*), lies in North and South-East Australia, New Guinea and a number of the Pacific Islands as far north as the Hawaiian Isles. One species only, *Santalum album* Linn., occurs right outside this general habitat, being found only in Southern India and in a group of Malayan islands including the eastern part of Java and some others centering round Timor. It would seem, therefore, that the focus of the genus *Santalum* must be somewhere in the west central portion of the Pacific Islands (especially considering that the Hawaiian Isles are the richest in genera, about 10), and that *Santalum album* is a western outlier.

But the spread of *Santalum album* itself is also extraordinary since it is found in a limited area of South India and also in a limited tract of the Malay Archipelago and nowhere else, the two localities being separated by a distance of about 2500 miles.

At the date it is impossible to give a reply to the question: "What is the actual area in Southern India in which *Santalum album* is indigenous?"; it would be best answered by the further question: "Is *Santalum album* really indigenous in India?"

When Buchanan-Hamilton made his tour through Mysore, Kanara, Malabar and Coimbatore in 1800 he found sandal restricted to a very much smaller area than it now occupies, *viz.*, mainly in the eastern and drier part of Mysore with an outlier in western Salem and hardly any in western Mysore or Coorg. Now its limits have been very greatly extended, especially in the present century by artificial as well as natural (birds) means.

These facts led to the further investigation of the problem when it was ascertained that in the middle of the XVIth. century according to the authors Garcia and Acosta, practically all, if not indeed all, the sandalwood exported from Calicut both inland and outwards

had been first brought by sea from Timor and the adjoining islands by Chinese merchants of whom there was a colony in that neighbourhood. Now if *Santalum album* is truly indigenous in India how are these facts to be accounted for? They are very simply explained if one assumes that the species is not really indigenous in India but was introduced from Timor at some time in the XVIth century or earlier and that after a preliminary period of acclimatisation it thrived in a way comparable to *Lantana Camara* Linn. or *Opuntia Dillenii* DC., both of which are now pests in the same or adjoining tracts to those occupied by sandal. From the commercial standpoint the situation would be parallel to that of *Hevea brasiliensis* Muell.-Arg, the Para rubber.

It would be of very great interest if readers of this journal were to bring forward some definite information from authentic sources, either in support or disproof of this hypothesis. I would, however, point out that evidence of usage of sandalwood in remote epochs in India is of no material value since that is not disputed; indeed, we know that 2000 years before the XVIth century sandalwood was known in Palestine where no one presumes it to have ever been grown. What is required is indisputable evidence that sandal grew indigenously in India before that period and at a date prior to the trading by Chinese adventurers along the coasts of India. In this connexion it must be noted that in the old days (certainly up to the XVIth. century) there was considerable confusion between the white and yellow sandalwoods (true *Santalum*) on the one hand and red sandalwood (Redsanders, *Pterocarpus santalinus* Linn f.) on the other.

Any one desiring further particulars is advised to read the article in the Kew Bulletin referred to at the head of this note.

THE HERBARIUM KEW,
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