

similar fate seems to be overtaking the Capuchin tree (*Northia seychellarum*) of the Seychelles, where the dying trees of this species are one of the most striking features in the landscape.

With regard to the fact of no seedlings appearing after the whole of the growing generation had been killed or had died off naturally, it may be accounted for in a variety of ways, though the real cause may be overlooked. If Gay's statement that the trees were all killed in one year be correct, the circumstance of not a single seedling surviving in any part of the island is indeed quite inexplicable; for, assuming the goats to be very fond of this particular plant in a young state, there are surely nooks inaccessible even to goats. But the extinction of the Juan Fernandez sandalwood was probably due to another cause. Many of the Santalaceæ are known to be root-parasites at an early stage of their existence, if not throughout life, and it is very likely that future investigations will prove that most, if not all, of the members of this order are of the same nature. Dr G. King, superintendent of the Calcutta Botanic Garden, assures us, from his own observation, that *Santalum album* is sometimes, at least, parasitic on the roots of other plants when young. This assertion is borne out by the frequent failure of cultivators to raise seedlings of this plant when its seeds are sown alone, and also by the fact that its usual habitat in a wild state is in hedges and thickets. Dr Brandis¹ mentions that it grows in gardens in various parts of India, and he adds that it is mainly spread through the agency of birds, and springs up abundantly in hedges and in the midst of shrubs. But that it is not always so is evident from the fact that germinating seeds sent from Ceylon to Mauritius in 1877 have since grown and fruited twice a year. On the other hand, as we learn from an article in the current volume of the Indian Forester, decaying vegetable matter is necessary for the successful raising of seedling sandalwood. The editor of the serial named inserts the following note (p. 205) on this subject:—"Colonel Doveton, conservator of forests, found sandal seedlings growing as a root-parasite on the wild date palm (*Phœnix sylvestris*); and such seedlings were more vigorous than others rooted independently in the soil." Nadeaud states that the Tahitian Sandal wood (*Santalum insulare*, Bertero) is parasitic on the roots of other trees, usually on *Commersonia eclimata* or *Alphitonia ziziphoides*.²

At Kew seedlings are frequently raised, but they are always very slender, and after reaching about a foot in height they die. A few years ago, however, a plant of considerable size existed in the gardens, the history of which we have not been able to ascertain. It would be interesting to have the life-history of *Santalum album* thoroughly investigated.

To return to the sandalwood of Juan Fernandez. The most probable cause of its extinction was the absence of the conditions necessary for its reproduction from seed. The enormous flocks of goats may have indirectly contributed to the destruction of the sandalwood by consuming the nurse plant. Root-parasites, speaking generally, seem to be able to

¹ Forest Flora of North-West and Central India, p. 399.

² Énumération des Plantes Indigènes de l'Île de Tahiti, p. 47.