

The Botany of Jaagi Island, Santa Isabel

E. J. H. Corner

Phil. Trans. R. Soc. Lond. B 1969 255, 571-573

doi: 10.1098/rstb.1969.0027

Email alerting service

Receive free email alerts when new articles cite this article - sign up in the box at the top right-hand corner of the article or click **here**

To subscribe to Phil. Trans. R. Soc. Lond. B go to: http://rstb.royalsocietypublishing.org/subscriptions

「 571]

The botany of Jaagi Island, Santa Isabel

By E. J. H. Corner, F.R.S.

Botany School, University of Cambridge

This brief account of the island is a record for future comparison. I visited it for a short time with Morton in 1964 and I spent the whole day, 30 September, there in 1965. The island is in a sense 'tambu', or forbidden, and bears no sign of recent human intervention, unless for the digging of megapode eggs. It is, therefore, a natural reserve which, it is to be hoped, will be maintained. The south side, however, is being eroded though there is some building of a sandy beach at the west end.

Jaagi is situated about 2 miles from the south entrance to Tatamba Bay. It is an elliptic sand-bank, roughly 700×250 yards (640×230 m) with the long axis east and west. It is raised about 1 m above high tide and is surrounded by a fringing reef broadest towards the eastern, seaward end; to judge from the aerial photograph, this reef measures, over-all, 1 mi $\times \frac{1}{2}$ mi. The island is covered almost entirely by high forest, many trees reaching 30 m or more. At the east end there is an eroding sand-spit with dead fallen trunks, mainly Casuarina, behind which a small area has been planted with coconuts. The west end has a higher and growing sand-bank without, at the time of my visit, Casuarina seedlings. The south side is undercut and its trees, living and dead, are falling into the sea. The north side consists of typical strand-forest of Barringtonia, Calophyllum, Hernandia, Terminalia and so on, with a narrow beach in front. In 1964 we found a 5 ft. shark stranded on this steep beach, very recently dead. The interior of the island is flat sandy soil, moist, and with a thin layer of humus, but with many fallen trunks and branches, many seedlings and saplings, and in places dense undergrowth. There are also a large number of mounds and hollows excavated by the megapodes near the edge of the forest, mainly at the north-east. There is no growing spit with young plants of Casuarina equisetifolia, but there are small trees of it among the coconuts at the east end, and there are many large, old trees in the forest, as well as dead fallen trunks and stumps. The early Casuarina phase seems to be over. It can be seen on Nalignago Island, 4 miles east of Jaagi where, in 1964, young Casuarina was in great abundance, some saplings up to 5 m high, with seedlings of the Barringtonia-Terminalia association sprouting beneath. Nalignago was used for target practice, I am told, during the war by American bombers.

At the west end there is a thicket of *Cordia subcordata* in front of the tall forest. It is difficult to see how this has happened unless a freak wave threw up its very buoyant fruits as the new sandbank had been started. The general impression is that the forest on the island is becoming stabilized, that the initial *Casuarina* forest has been replaced by the *Barringtonia–Terminalia* forest, and that this in turn is being replaced by inland trees, climbers, and herbs brought by wind, birds, and bats from the mainland. The white cockatoo is very abundant.

E. J. H. CORNER

List of plants on Jaagi, 1965

Allophyllus cobbe L., abundant.

Apocynaceous climber, scattered (not collected, sterile).

Araliaceae, pinnate leaf, sterile, frequent in the forest.

Archidendron sp., sterile, locally common, many saplings; small leaflets.

Asplenium nidus L., common, epiphytic and on the ground.

Barringtonia asiatica (L.) Kurz, common on the shore, especially along the south coast where many are falling into the sea.

Boerlagiodendron sp., frequent in the forest.

Brassaia sp.?, one plant with four stems in the forest.

Calophyllum inophyllum L., common, with the usual coastal epiphytes (Ophioglossum and other ferns, Dendrobium, Sarcanthus, Grammatophyllum, Dischidia).

Canavalia sp., scattered coastal climber.

Caryota rumphiana Bl., few, 4 to 5 m high in the forest, as the only palm except for the coconuts.

Casuarina equisetifolia Forst., big trees all over the island and some young ones among the coconuts at the east end.

Celtis sp., a few large trees.

Cerbera manghas L., mainly on the north shore.

Colubrina asiatica (L.) Brongn., frequent on the coast.

Cordia subcordata Lamk., peripheral, common at the west end and on the north shore.

Cycas rumphii Miq., few.

Dendrocnide sp., frequent, up to 13 m high.

Diospyros spp., two kinds (large and small leaf), up to 20 m, common.

Dracaena sp., common, sterile, in the forest.

Dysoxylum sp., common in the forest, up to 20 m, with many saplings.

Elaeocarpus sp., a frequent tree with broad-toothed leaf.

Eugenia sp., cauliflorous, frequent.

Eugenia spp., two to three other kinds, one as a frequent tree up to 30 m.

Ficus austrina Corner, common.

F. drupacea Thunb., frequent.

F. glandifera Summerh., frequent.

F. obliqua Forst., few.

F. polyantha Warb., one tree 23 m, towards the east end.

F. subulata Bl., common.

F. virens Ait., few, coastal.

Flagellaria indica L., common.

Gnetum sp., common large climber.

Guettarda speciosa L., very common all over the island, up to 13 m.

Guioa sp. (RSS 2822). scattered small tree.

Hernandia peltata Meissn., common, trees up to 20 m or more in the forest.

Horsfieldia sp., common in the forest.

Hoya spp., a few kinds, not common.

BOTANY OF JAAGI ISLAND, SANTA ISABEL

Inocarpus fagiferus (Park.) Fosb., frequent.

Intsia bijuga (Colebr.) O.K., frequent large tree up to 30 m.

Ipomaea sp., scattered climber, white flower.

Messerschmidia argentea (L.) Johnst., scarce.

Micromelum minutum (Forst. f.) W. et A. few, small trees.

Morinda citrifolia L., scattered on the shore.

Ochrosia sp., common.

Pandanus dubius Spr. the common coastal kind with big green compound nuts, up to 13 m, common.

Pandanus sp., 'nyehe', scattered.

Pandanus capitellatus Merr. et Perry, 'poporro', frequent; the narrow-leafed, tufted, coastal species.

Phaseolus sp. ?. frequent climber.

Piper spp., two common kinds of climber in the forest.

Planchonella spp., two kinds (large and small leaf), common, up to 30 m, with many seedlings.

Pongamia pinnata (L.) Pierre, common, up to 25 m.

Pometia pinnata Forst., common, up to 33 m, many seedlings.

Premna corymbosa (Burm. f.) R. v. W., common small tree.

Rubiaceae, scattered small tree with red fruit.

Sapindaceae, tree up to 15 m, doubly pinnate leaf, many saplings and seedlings.

Scaevola sericea (Mill.) Krause, common sea-shore bush.

Smilax sp., common climber (thorny stem, leaf oblong, 3-veined).

Sterculia sp., frequent tree up to 20 m, large leaf.

Tacca leontopetaloides (L.) O.K., common on east and south shores.

Terminalia catappa L., few.

Thespesia populnea (L.) Sol., common (no Hibiscus tiliaceus).

Zingiberaceae, the common 'torch ginger'.

Unidentified, RSS.2827.

573