

ON THE  
VEGETABLE DRIFT, AND ON THE DISPERSAL OF FRUITS AND SEEDS IN  
THE ISLANDS OF BOUGAINVILLE STRAITS, IN THE SOLOMON GROUP.

COMPILED FROM THE NOTES AND COLLECTIONS MADE BY H. B. GUPPY, M.B., F.G.S., DURING 1883 AND 1884,  
WHILE SERVING ON BOARD H.M.S. "LARK."

Just as we were on the point of finishing the examination of the collections of drift seeds, &c., made by Mr Moseley and others, Dr H. B. Guppy, R.N., arrived in England from the Solomon Islands, bringing with him considerable botanical collections, which he has presented to Kew. Among other things is a quantity of drift seeds and seed-vessels, and also others taken from the crops of carpophagous birds, shot by Lieutenant T. H. Heming and Lieutenant A. Leeper of H.M.S. "Lark." As this collection affords additional evidence of the influence of oceanic currents and birds in the dissemination of plants, a brief review of it follows, together with Dr Guppy's observations made on the spot, which he kindly communicated, with his permission and wish that any information they contained might be embodied in this Report. The names of the plants are substituted for the numbers cited by Dr Guppy, and two or three other slight alterations have been made. A list of the seeds and seed-vessels identified follows:—

*Vegetable Drift.*—Lines of vegetable drift, intermingled with floating pumice, are frequently observable whilst cruising among the islands of the Solomon group. Amongst the floating fruits, those of *Barringtonia speciosa* and *Calophyllum inophyllum* are commonly found; and on more than one occasion, solitary fruits of the former were noticed at sea at a distance of 130 to 150 miles to the southward of the group, being probably derived from one of the islands of the New Hebrides to the eastward. Other fruits occurring frequently in the drift are those of *Nipa fruticans*, and of two or more species of *Pandanus*; numerous beans (species of *Mucuna*, *Canavalia*, *Dioclea*), the long germinated seeds of mangrove (*Rhizophora*), an occasional cocoa-nut, the cones of *Casuarina equisetifolia*, which is a common sea-shore tree, *Terminalia* spp., &c. On a small, bare, sandy islet or sand-key situated on a reef in Bougainville Straits, I observed thirty different kinds of seeds and fruits, which are only washed over the bank at spring tides. These belong to characteristic littoral plants, such as *Heritiera littoralis*, *Barringtonia speciosa*, *Pandanus* spp., *Calophyllum inophyllum*, *Nipa fruticans*, and *Cocos nucifera*.

*The Trees of a Coral Islet.*—In order to connect my notes on the dispersal of plants in this region, I will take the case of a small wooded islet, not more than a few hundred yards across, and formed on a coral reef from materials heaped up by the waves to a height of two or three feet above the usual high-tide level. On the weather margin of