

William Grant Milne (1829 – 1866)

Scottish plant collector William Grant Milne's early life is little known. Recent research suggests he was born at Banff on 11 May 1829, the second child and first son of James Milne, a merchant, and his wife Agnes Grant, who had married there on 23 July 1825. After the death of James in 1840, twelve year-old William appeared in the 1841 census as an agricultural labourer, with another William Milne who was ten, in the Afforsk (Banffshire) household of Ann Bartlet. Dr Garden Milne of Banff, an Edinburgh-trained Royal Navy surgeon, was probably an uncle and may have been the catalyst for the boy's future botanical exploits.

William Grant Milne was employed as a gardener at the Royal Botanic Garden Edinburgh when Captain Henry Mangles Denham was making final preparations for an extensive surveying voyage to Australia and the southwest Pacific. Several scientists were required, and on the recommendation of Sir William Hooker, director of the Royal Botanic Gardens, Kew, John MacGillivray, son of noted ornithologist William MacGillivray of Aberdeen, was appointed naturalist. On 29 March 1852 William Milne was employed as his assistant and botanical collector, to be paid £70 a year (largely funded by Kew) and provided with botanical equipment, including Wardian cases, paper, microscopes, books and gardening tools.

HMS *Herald* sailed on 9 June 1852, and Milne went ashore at every opportunity, collecting with enthusiasm. He kept a journal of his observations, and his specimens and quaintly spelt letters to Hooker were dispatched to England. Eventually a course was set for New Zealand, and on 7 June 1854 Denham anchored in the Hauraki Gulf.

MacGillivray, Milne and surgeon Frederick Rayner explored the island of Pakatoa, and found New Zealand flax, tree ferns and mosses before rain and hail "as cold as in a Scottish highlands winter" forced them back. The next day at Man o' War Bay on Waiheke Island, Milne saw kauri being felled by Māori for trading, and found lichens and ferns, but landings at Raoul Island (2–24 July) were restricted by appalling weather. He grieved when Fleetwood Denham, the captain's crippled 15-year-old son, died of a fever on 8 July. After the funeral the next day Milne collected a few plants, and on a rare fine day ashore with surveyor Joseph Smith and artist Glen Wilson, the naturalists collected mosses, lichens and fungi. Milne later got a few more specimens on Meyer Island. Their total collection of 41 species was described in a paper by J D Hooker published by the Linnean Society in 1856, the first scientific work on the flora of the Kermadec Islands.

Milne testified at a court of enquiry in Sydney (1855) that dismissed MacGillivray for misconduct, but was sorry to lose his friend and colleague. Milne remained with the *Herald* until 1859, when he resigned after Hooker criticised the output and quality of his work. Returning to Edinburgh, he attended Dr Balfour's botany classes and went on local field trips. He was re-employed by the Royal Botanic Garden Edinburgh, and in 1863 was sent to West Africa as a plant collector. Like many Europeans in that part of the world, his health failed and he died of dysentery at Creek Town, Old Calabar (Nigeria) on 30 July 1866. Plants named after him include *Freycinetia milnei* from Fiji, *Stenocarpus milnei* from New Caledonia, *Asplenium milnei* from Lord Howe Island, and two Raoul Island ferns, *Cyathea milnei* and *Doodia milnei*.

Blechnum kermadecense

In 2014 researchers recommended the transfer of *Doodia* species to the genus *Blechnum*, and the new name *Blechnum kermadecense* for the fern known for nearly 150 years as *Doodia milnei*. *Doodia*, pukupuku or rasp ferns are terrestrial ferns occurring in New Zealand, Australia and the Pacific, and characterised by harsh, pinnate, pink-tinted fronds with the sori elongated in rows parallel to the midribs. *Blechnum kermadecense* is very similar to *Blechnum parrisiae* (was *Doodia australis*) and they grow together on the Kermadec Islands, the former generally having longer pinnae and softer, sparsely hairy fronds, never tinged pink in the spring. Endemic, it is found among rocks in clearings and in dry pohutakawa forest on Raoul and Macauley islands.

