

Viktor Ferdinand Brotherus (1849 – 1929)

Viktor Ferdinand Brotherus was born in the market town of Skarpan in Sund parish on Åland Island on 28 October 1849, when Finland was under Russian rule. His parents, Alexander Brotherus and Helena Tauserus, were officers of the commissariat, and he had thirteen brothers and sisters, six of whom died at a young age. His mother was Swedish and although Swedish was Viktor's mother tongue, he always considered himself a Finn. At the end of the 1850s the family moved to the city of Håmeenlinna on the Finnish mainland where Viktor attended the local school. After graduating at 16 he studied at the Imperial Alexander University (now the University of Helsinki) under Sextus Otto Lindberg, the professor of botany and zoology, and a renowned bryologist. His candidate of philosophy degree in 1870 enabled Brotherus to study medicine, but his training was cut short when he contracted blood poisoning during surgical practice. He took up teaching instead, from 1871 at a Swedish girls' school in Vaas city and from 1878 at Helsinki, where he taught natural history and mathematics. In 1879 he married Aline Mathilde Sandman (born 1853), the daughter of a Justice in the Court of Appeal, and they had four children. She died in 1894, but he continued teaching until his retirement in 1917.

Concurrently he pursued his interest in bryology, which began with university expeditions in Finland with Lindberg. After graduation he travelled further afield; his treatment of the Caucasus moss flora became his doctoral thesis (1884) and his first published major work (with Saelan) was on the moss flora of the Kola Peninsula (1890). His most extensive expedition, in 1896, was to four countries of central Asia, almost to the Chinese border.

In addition, as his expertise was recognised worldwide, he received specimens from abroad, and between 1888 and 1894 published bryofloras for Turkmenistan, Madagascar, Australia, Brazil, São Tomé and Príncipe (an island nation in the African Gulf of Guinea), North America and New Guinea. From 1900, in collaboration with the German botanist Adolf Engler, he set himself the ambitious task of including in the latter's *Die Naturlichen Pflanzenfamilien* all known mosses down to species level, including information on their distributions. The work was completed in 1909 and a second edition in 1924–25. At the same time he compiled a moss flora for the Finnish natural history society, and during the last years of his life he worked on a collection of mosses from China, which was published the year of his death.

Towards the end of his life Brotherus suffered from bronchitis and he died of pneumonia on 9 February 1929. His school colleagues at the funeral were amazed at the huge congregation of overseas botanists there, lauding his achievements – apparently his fame as a bryologist was completely unknown at his school. His collection of 120,000 specimens of mosses is now housed in the University of Helsinki.

In 1898 the New Zealand bryologist Robert Brown described and named in his honour the endemic moss now known as *Ditrichum brotherusii*.

Ditrichum brotherusii

Mosses in the genus *Ditrichum* are small tufted plants, yellowish or pale green in colour. The leaf tapers from a broad base to a narrow apical portion, which is usually much longer than the leaf base. *Ditrichum brotherusii* is densely tufted, yellowish-brown and darker below, and grows on earth. The stems, .5-2 cm high, are usually tufted, with the narrow apical portion of the leaf not much longer than the leaf base. Endemic and confined to the South Island, it has been recorded from Arthur's Pass, Mt Ida and Mt Burns, and is quite rare.



Coprosma atropurpurea in a nest of golden moss
Mt Luxmore, Fiordland, 2011