

Carlo Luigi Giuseppe Bertero (1789 – 1831)

Carlo Bertero was born in Santa Vittoria d'Alba, near Turin, in Piedmont, Italy, on 14 October 1789, the son of Giuseppe Bertero and Anna Maria Abrigo. He had one brother and one sister. Although he was still a boy when he lost his father, his mother's initiative and good management enabled him to attend senior high school in Alba, where he was a pupil of scholar, philosopher, physician and physicist Giuseppe Gardini. A close friendship developed between them, and as well as scientific learning, Carlo imbibed from him a love of truth and justice. After meeting Gardini's nephew and protégé Giuseppe Camisola, later author of *Flora Astese* (1854), Bertero, too, became passionate about plants. At the faculty of medicine, University of Turin, he studied botany under Giovanni Balbis,

graduating at the age of 22 with a thesis on the properties and potential of the Piedmont flora for medicinal use. He then devoted himself to botany, and for the next four years collected locally.

He began his travels abroad in 1816 when he was appointed ship's surgeon on a voyage to the West Indies. After collecting in Guadeloupe, St Thomas, Santo Domingo, Haiti and Puerto Rico, he spent a year in Colombia before returning to Italy in 1821. He set off again in 1827 and settled in Chile, where he travelled through the province of Aconcagua and to the north, going back to his base in Valparaiso in 1829. The next year he undertook exploration of Juan Fernandez Archipelago with Alexander Caldcleugh, a British diplomat, travel writer and plant collector, who later wrote to William Hooker that Bertero "collected with great zeal, and found many interesting things, and some new genera". Bertero returned to Valparaiso for three months to arrange and dispatch his plants to Paris, but couldn't resist the offer of passage to Tahiti. He collected in the Pacific islands for ten weeks and in April 1831 boarded a new Tahitian schooner bound for Valparaiso. It was not heard of again, and Caldcleugh had the unenviable task of informing botanists in Europe of Bertero's fate.

A catalogue of Bertero's botanical findings was published in the *Mercurio Chilena* in 1829. His collections from the West Indies were distributed to subscribers by Balbis, whose name is sometimes the only one on the labels. In 1836 Luigi Aloysius Colla published a study of the Chilean collections in *Memoirs of the Turin Academy*. Interestingly, it contains the first publication of the genus name *Tecophilaea*, used by Bertero and described by Colla in honour of his daughter Tecophila Billotti-Colla, an accomplished botanical artist. Now almost extinct in the wild, the two species of this small blue-flowered Chilean "crocus" are cultivated by specialist growers in New Zealand and elsewhere. A number of flowering plants and lichens are named in honour of Carlo Luigi Giuseppe Bertero, also the liverwort *Marchantia berteroana*, originally described in 1834 from plants collected in Juan Fernandez, but now known to have spread widely in southern regions, including New Zealand.



Marchantia berteroana

The name "liverwort" was given to a group of hepatics that consist of a flat, more or less lobed sheet (thallus) used by mediaeval herbalists as a cure for diseases of the liver. The genus *Marchantia*, which is found worldwide, is especially rich in species in the tropics. The three species occurring in New Zealand are confined to the Southern Hemisphere. *Marchantia berteroana* is the commonest of our species, making a leathery green cover on open wettish ground after burns, on bogs, banks and the sides of streams. It is recognised in the field by its rather light green colour and the many splash-cups containing flat round gemmae, each capable of growing into a new plant. Underneath, myriads of threads (rhizoids) tie the thallus firmly to the soil.