

Christian Ferdinand Krauss (1812 – 1890)

Christian Ferdinand Friedrich Krauss was born in Stuttgart, Germany, on 9 July 1812. After serving an apothecary apprenticeship, he worked for a short time as a pharmacist before studying mineralogy, zoology and chemistry at Tübingen and Heidelberg universities. Excelling academically, he was awarded a PhD *summa cum laude* (with highest distinction) in 1836.

The following year he received an invitation from Baron von Ludwig to return with him to South Africa. They sailed from Portsmouth on *La Belle Alliance* and 81 days later, on 7 May 1838, arrived in Cape Town. Krauss started collecting and studying the local geology, flora and fauna, including molluscs and crustaceans, marine algae and fish. He then set off for the interior, with an ox-waggon, fourteen oxen, a horse and two assistants. Across rivers and over mountain passes, through forests and farmland and touching on coasts, sometimes staying with missionaries and farmers, he travelled until his exhausted oxen had to be replaced, and when grazing became too poor, sold.

On 2 June 1839, with two other naturalists, he sailed on an eight-day voyage from Port Elizabeth to Port Natal for what was to be the first significant zoological exploration of Natal and its adjacent territories. He was delighted with the variety of coastal species he encountered, many of which he

later described. He then collected in the hills around Pietermaritzburg and at the mouth of the Umlaas River, and visited coalfields near Karkloof before leaving Pietermaritzburg for Cape Town on 5 February 1840. Again enjoying the hospitality of Baron von Ludwig, he made short day trips into the nearby mountains, but an offer of employment in Stuttgart could not be ignored. With his collections filling 16 crates, he left Cape Town on 22 April 1840 and back in England sold 500 of his plant specimens to the British Museum.

He was appointed to the Natural History Museum at Stuttgart, became director in 1856 and in 1880 was honoured with a doctorate. His publications, especially those describing the Zulus and their way of life, were considered reliable and accurate records of conditions in the Cape. Some of his collections were worked on and published by experts in their various fields, including clergyman and naturalist Christian Ferdinand Hochstetter, whose son's name is well known in New Zealand. Of the 2308 flora species (mostly flowering plants) collected by Krauss, 340 species and 34 genera were new to science. Many, including the sea rush *Juncus kraussii* var. *australiensis*, which is indigenous to New Zealand, were named for him.

He died in Stuttgart on 15 September 1890, at the age of 78.



Juncus kraussii* var. *australiensis

Sea rush, *Juncus kraussii* var. *australiensis* is mainly coastal, from Te Pahi south to Okarito and Dunedin, but is also found inland at Rotorua and the headwaters of the Rangitata River. It is common, usually dominant, in salt marshes, brackish stream, lagoon and river margins. Flowering September-December, it may be distinguished from similar introduced species by its open rather than densely compact inflorescence; flowers in small rather than large compact clusters; and dark brown rather than red-brown capsules. In Natal, *Juncus kraussii* is harvested for its fibre. Rushes and rush-like plants, known as wī, wīwī or kōpungāwhā to the Māori, were used for the outer thatching of their houses, and for