

Cryptic speciation in Southern Ocean *Aequiyoldia eightsii* (Jay, 1839):

Mio-Pliocene trans-Drake Passage separation and diversification

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© 2018 Elsevier Ltd The species of the genus *Aequiyoldia* Soot-Ryen, 1951, previously known as *Yoldia*, are common, soft-substratum, saredtid bivalves. In the Southern Ocean, *Aequiyoldia eightsii* (Jay, 1839) was originally described from the Antarctic Peninsula and has also been reported in southern South America. The species *A. woodwardi* (Hanley, 1960) was reported for the Falkland/Malvinas Islands and Tierra del Fuego, but this taxon has been recently synonymised within the broadly distributed *A. eightsii*. *Aequiyoldia* has received little attention across its distribution in the Southern Ocean, and although its taxonomy and systematics remain uncertain, all the species have been grouped under a single and broadly distributed unit: *A. eightsii*. Nevertheless, preliminary mtDNA comparisons demonstrated a marked genetic divergence (>7%) between *A. eightsii* populations from South America and Antarctic Peninsula. In order to further understand the diversity and biogeography of *Aequiyoldia*, we