



First records of the giant barnacles, *Austromegabalanus nigrescens* (Lamarck, 1818) and *A. psittacus* (Molina, 1782) (Cirripedia: Balanidae) from New Zealand, with a key to New Zealand Balanidae

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Abstract

The shallow water barnacles, *Austromegabalanus nigrescens* and *A. psittacus*, are reported from New Zealand waters for the first time. Moreover, these are the first known introductions of *Austromegabalanus*. Nearly 70 specimens of *A. nigrescens* were collected from the Taharoa Ironsands Terminal and a single conjoined group of *A. psittacus* was collected in Port Wellington. We also report *A. nigrescens* from North West Cape, the northernmost record for the species in Western Australia. A key to the Balanidae known from New Zealand is provided.

Key words: Crustacea, Cirripedia, Balanidae, barnacle, *Austromegabalanus*, New Zealand, introduction

Introduction

Species with the capacity to encrust and colonize hard substrates such as vessel hulls are ideal candidates for maritime translocation. In this context, barnacles are paradigmatic. Worldwide transportation of barnacles on ship hulls has been long recognised (Otani *et al.* 2007) and numerous undescribed species have been first recognized from hull fouling, for example *Amphibalanus improvisus* (Darwin, 1854). Records of exotic barnacles in hull fouling are numerous, but known cases of successful translocations are surprisingly few. Documented barnacle translocations include *Notomegabalanus algicola* (Pilsbry, 1916) introduced from South Africa to Australia (Allen 1953), *Austrominius modestus* (Darwin, 1854) introduced from Australasia to the northeastern Atlantic (Bishop 1947, as *Elminius modestus*), and introduction of the tropical Indo-Pacific *Striatobalanus amaryllis* (Darwin, 1854) to Brazil (Young 1989, as *Chirona amaryllis*). Surveys of ports and harbours over the past few years conducted by the National Institute of Water and Atmospheric Research (NIWA), funded by Biosecurity New Zealand, have resulted in large collections of marine species, including non-native barnacles. Here, we report the first records of two species of giant barnacles, *Austromegabalanus psittacus* (Molina, 1782) and *A. nigrescens* (Lamarck, 1818). Specimens are deposited at the National Institute of Water and Atmospheric Research, Wellington, New Zealand (NIWA).

Taxonomy

Balanidae Leach, 1817

Austromegabalanus Newman, 1979