Sacculina nectocarcini, a new species of rhizocephalan (Cirripedia: Rhizocephala) parasitising the red rock crab Nectocarcinus integrifrons (Decapoda: Brachyura: Portunidae)

ROBERT H. GURNEY^{1,2} ALEXEY V. RYBAKOV³, JENS T. HØEG⁴ & ARMAND M. KURIS⁵

¹CSIRO Marine and Atmospheric Research, GPO Box 1538, Hobart, Tasmania, 7001.

Abstract

The parasitic barnacles, Rhizocephala, are a little known group within Australia with only seven described species from a coastline stretching approximately 59763 km. This study describes a new species of Rhizocephala, *Sacculina nectocarcini*. The description is based on a unique combination of features pertaining to the structure of the mantle papillae, the retinaculae and the male receptacles. Biological notes, prevalence and intensity of infection are reported for this rhizocephalan, infesting the red rock crab, *Nectocarcinus integrifrons*, collected from Western Port, Victoria, Australia.

Key words: retinaculae, externa, parasitic castration, cyprid, Rhizocephala, parasitic barnacle

Introduction

Nectocarcinus integrifrons (Latreille, 1825) is a common low intertidal and subtidal portunid crab endemic to Australia's temperate coastline, from Port Jackson, New South Wales, to Victoria, Tasmania, South Australia and Western Australia, (N to Fremantle) (Poore 2004). Specimens collected from Western Port, Victoria in 1997, were parasitised by an unknown rhizocephalan. This barnacle parasite may have been first recorded by Haswell (1888) who recognised the 'firm but soft brown body' beneath the abdomen of N.

²School of Aquaculture, Tasmanian Aquaculture and Fisheries Institute, University of Tasmania, Launceston, Tasmania, 7250

³Institute of Marine Biology, Russian Academy of Sciences, Vladivostok 690041, Russia

⁴Institute of Biology, University of Copenhagen, Copenhagen, Denmark

⁵Department of Ecology, Evolution and Marine Biology and Marine Science Institute, University of California, Santa Barbara, CA 93106, USA