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A Revision of the New Zealand and Subantarctic  
Athoracophoridae

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*Abstract*

A systematic account of the Athoracophoridae of New Zealand and the subantarctic islands is given, together with diagnoses of the family and genera. The account is based on the study of a total of 241 specimens, which comprise four genera, including *Reflectopallium* n. gen. and *Palliopodex* n. gen., and twenty-two species, including *Pseudaneitea maculata*, *P. graviscalca*, *P. campbellensis*, *P. powelli*, *P. multistriata*, *P. johnsi*, *P. aspera*, *Athoracophorus maculosus*, *Reflectopallium pseudophyllum*, *R. papillatum*, and *R. delli*, n. sp. The genus *Amphiconophora* Suter, 1897, is reduced to synonymy with *Pseudaneitea* Cockerell, 1891, and the genus *Vomanus* Iredale, 1915, is reduced to synonymy with *Athoracophorus* Gould, 1852. The subspecies *Athoracophorus bitentaculatus rufovenosus* Suter, 1909, is synonymised with *Athoracophorus bitentaculatus* (Quoy and Gaimard, 1832). The distribution of members of the group in New Zealand and the subantarctic islands is discussed, as also is the ultimate derivation of the group.

INTRODUCTION

SINCE the publication of Suter's "Manual of the New Zealand Mollusca" in 1913, the Athoracophoridae of New Zealand and the subantarctic islands have been neglected, apart from the description of one new species by Powell in 1955. However, extensive collecting has been carried out over the last fifteen years, and many specimens from areas not previously covered are available for study.

The New Zealand and subantarctic slugs are superficially diverse, but show no great diversity in anatomy. The most distinctive character of the family is the possession of a dorsal tracheate lung, consisting of a pulmonary cavity from the floor of which thin-walled pulmonary diverticula radiate to form the roof of a dorsal blood sinus. Thiele (1931, 1935) groups all pulmonates with this feature into one superfamily, the Tracheopulmonata. This group has representatives in the Admiralty Islands, New Britain, New Hebrides, New Caledonia, and on the eastern coast of Australia.

Much confusion has arisen in the past through inaccurate observation and description, and reliance on colour as a systematic criterion. Some species, apparently erected on the basis of colour alone, have later had to be grouped together under one specific name.