

AUSTRALIAN PYCNOGONIDA

By W. C. CLARK

Entomology Division, Department of Scientific and Industrial Research, Nelson,
New Zealand

(Figs 1-38)

Manuscript received 15.7.62

ABSTRACT

A large collection of Pycnogonida from the Australian Museum has been examined. Of the 42 species represented 22 are new, and many others belong to species hitherto known from single specimens, or from one sex only. The following new species are described and figured: *Nymphon molleri* n. sp., *N. novaehollandiae* n. sp., *N. bunyipi* n. sp., *Oropallene minor* n. sp., *Parapallene obtusirostris* n. sp., *Pseudopallene dubia* n. sp., *Stylopallene cheilorhynchus* n. gen. et sp., *S. dorsospinum* n. sp., *S. tubirostris* n. sp., *Pallenopsis macneilli* n. sp., *Anoplodactylus evansi* n. sp., *A. simplex* n. sp., *Ascorhynchus compactum* n. sp., *Ammothella stocki* n. sp., *A. thetidis* n. sp., *Cilunculus australiensis* n. sp., *C. hirsutus* n. sp., *Pycnogonum torresi* n. sp., *P. tuberculatum* n. sp. Two new species of *Anoplodactylus* are described but not named (females only), and a new form of *Callipallene* is also described, but because of the confused state of the taxonomy of this genus in Australian waters it has not been named.

A check-list of all 62 species recorded from the Australian region is included.

INTRODUCTION

Studies on the Pycnogonid fauna of Australia have been few and sporadic. The majority of studies have been undertaken by workers outside Australia, and as a result all studies have been purely systematic. No information is available on the biology of Australian species. The first work of any note was that of Hoek (1881), which resulted from the Challenger Expedition and which also provided the inspiration for Haswell's paper of 1884. Nothing further was done until Flynn's series of papers (1919a, 1919b, 1920, 1929). After Flynn left Australia, material continued to be sent to him and this was described by his colleague Williams (1933, 1940, 1941). There have also been short papers by Loman (1923) and Hedgepeth (1944). The most important paper of recent times is Stock's (1954) report on the material collected by the Mortensen Expedition.

The present study is based on a large collection of Pycnogonida in the Australian Museum which was made available to me by the kindness of the Director, Dr. J. W. Evans. This collection has been amassed over the past 80 years, and the excellent state of preservation of the collection as a whole says much for the curation it has received.

The Australian Museum collection I have examined consists of 808 specimens referable to 42 species belonging to 18 genera. Of these, 22 species are new to science, and many represent species hitherto known from a single specimen or from specimens of one sex. This abundant material has permitted me to re-describe many species and to provide more detailed figures of a number of others. Even with this large collection it is still not possible to confidently delimit some species, especially in the genera *Callipallene* and *Achelia*. Larger collections of these genera are desirable.

The bulk of the material is from the New South Wales coast, the region which is already best known in this respect. Even so, this collection has increased the number of known Australian species from 40 to 62. Figure 1 shows all the localities in Australia from which these animals have been recorded. South-eastern Australia