



## Some new and previously unrecorded Scyphomedusae (Cnidaria: Scyphozoa) from southern Australian coastal waters

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### Abstract

A preliminary study of the scyphomedusae of southern Australian waters revealed the presence of several species new to science and some species previously unrecorded from the region (south of 30°S). *Atolla wyvillei* is confirmed as belonging to the southern Australian fauna and *A. vanhoeffeni* and the genera *Paraphyllina* and *Periphylla* are recorded as new for the Australian region. Four species are described as new to science; *Chrysaora kynthia*, **sp. nov.**, *C. southcotti*, **sp. nov.**, *C. wurlerra*, **sp. nov.**, and *Desmonema scoresbyanna*, **sp. nov.**

**Key words:** Southern Australia, scyphomedusae, *Atolla*, *Paraphyllina*, *Periphylla*, *Chrysaora*, *Pelagia*, *Desmonema*, new records, new species, taxonomy, nomenclature

### Introduction

The pelagic coelenterates of Australia are poorly known, especially those of temperate regions. The waters of southern Australia are known for high rates of endemism (Wilson 1987), yet even large and conspicuous medusae are often identified as species originally described from the Northern Hemisphere.

Despite their conspicuous appearance and sometimes pestilent occurrences, the scyphomedusae of southern Australia have been only rarely studied. Southcott (1982) provided the most recent summary of them, based mainly on previous literature records. Of nine species treated by him none is regarded as new to the region, although two (*Atolla wyvillei* and *Pseudorhiza haeckeli*) are new records for southwestern Australia. Since the new records of Southcott, only one species, *Chrysaora* sp., has been added to the fauna of southern Australia (Marsh 1986).

During the last few years we have made collections of jellyfish along the entire Australian coastline with a view to revising the systematics of the Australian fauna. Our preliminary studies of this material have revealed many new records and species new to science. It became apparent that a comprehensive review of the fauna would be an enormous undertaking that could not be achieved in the near future. In view of ongoing studies and a renewed interest by others in the jellyfish fauna of Australia we thought it prudent to present some of our findings now. The purpose of this paper is to describe some of the new species of Scyphozoa from southern Australia and to document new distribution records prior to undertaking major taxonomic revisions of the group. We have arbitrarily restricted ourselves to the region south of 30°S because this readily excludes most of the tropical fauna found in northern Australia.

The southern Australian coast contains a unique mix of Pacific Ocean waters along the eastern seaboard,