



***Knightjonesia*, a new genus (Polychaeta: Spirorbidae) with a winged opercular peduncle, and its taxonomy**

T. GOTTFRIED PILLAI

Zoology Department, Natural History Museum, Cromwell Road, London SW7 5BD, UK. E-mail: g.pillai@nhm.ac.uk

Abstract

It had hitherto been assumed in publications on serpulimorph systematics that spirorbids are characterized by an operculum borne on a wingless peduncle. However, while examining various spirorbid collections in the Natural History Museum, London, it was found that the type specimens of *Helicosiphon platyspira* Knight-Jones, 1978 possess a winged opercular peduncle, a character that had hitherto been used to distinguish between other serpulimorph genera. Accordingly, *Helicosiphon platyspira* is transferred to a new genus, *Knightjonesia*, in which the opercular peduncle is winged, in contrast with *Helicosiphon* in which it is wingless.

Key words: Taxonomy, Spirorbidae, Romanchellinae

Introduction

Fauvel (1927), whilst classifying all spirorbids under the sub-family *Spirorbinae* Chamberlin, and under the single genus *Spirorbis* Daudin, defined the subfamily as consisting of taxa possessing less than 5 thoracic chaetigers, a pinnule-free operculum, and a tube that is either dextrally or sinistrally coiled. He also stated, under the generic definition of *Spirorbis*, that the body is asymmetrical, and that the operculum is calcareous and is borne on a pinnule-free and wingless peduncle. Zibrowius (1968) includes an additional important character relating to opercular insertion, i.e., that it is borne on the second radiole of the concave side.

Pillai (1970: 130–34) did not deal with the character relating to peduncular wings, since no spirorbid with a winged opercular peduncle had been reported till then. Indeed, a winged opercular peduncle had not been reported in any of the numerous species of spirorbids described since then, the first such instance being that described below.

Material and methods

The following description is based on the type specimens of *H. platyspira* deposited in the collections of the Natural History Museum, London. They were compared with *Helicosiphon biscoensis*, in BM (NH) 1930.10.8.2984, Discovery Expedition, St. 175, 200 m, South Shetlands, type species of the genus *Helicosiphon* mentioned later on. Drawings were made with attachments to low-power stereo as well as high-power microscopes.