



A new species of *Scolelepis* (Polychaeta: Spionidae) from sandy beaches in China, with a review of Chinese *Scolelepis* species

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Abstract

A new species of Spionidae, *Scolelepis* (*Scolelepis*) *daphoinos* **sp. nov.**, is described and illustrated from northern China seas. The species was frequently encountered and highly abundant on sand beaches, but rarely found in subtidal areas. It was formerly misidentified as *S. (S.) squamata* (Müller, 1806) in China but differed from the latter species in several details in morphology, including the presence of obvious reddish pigmentation patches and the absence of unidentate hooded hooks. Another two *Scolelepis* species, *S. (S.) lingulata* Imajima, 1992 and *S. (S.) variegata* Imajima, 1992, are reported for the first time from Chinese waters. Two species of *Scolelepis*, *S. (S.) globosa* Wu & Chen, 1964 and *S. (S.) lefebvrei* (Gravier, 1905), were reported previously; therefore, five species in this genus are known from China in total. A key to all *Scolelepis* species from Chinese waters is provided.

Key words: systematics, morphology, Spionidae, *Scolelepis*, Chinese waters

Introduction

The Spionidae represents one of the largest and most common polychaete families in both littoral and sublittoral areas in Chinese waters; however, this family is poorly known in China. So far, only 12 genera and approximately 14 species in this family have been documented. Some previous records lack detailed morphological descriptions and illustrations; thus, a few available records are confused and sometimes may be the result of misidentification (e.g., Yang & Sun 1988; Wu *et al.* 1990; Sun 1990). In order to clarify the species diversity of Spionidae in Chinese coastal waters, we have been systematically studying the taxonomy of this family and, as a result, some genera such as *Paraprionospio* and the *Prionospio* complex in China have been revised (Zhou *et al.* 2008; Zhou & Li 2009).

The genus *Scolelepis* is mainly characterized by a pointed prostomium and branchiae occurring from setiger 2 and fused with the postsetal lamellae. Maciolek (1987) provided an important revision of this genus and divided it into two subgenera, *Scolelepis* and *Parascolelepis*, based on the morphology of the hooded hooks and notches of postsetal lamellae. This division has been followed by various subsequent authors (e.g., Imajima 1992; Blake 1996; Delgado-Blas 2006; Williams 2007).

In the northwest Pacific, the *Scolelepis* fauna is not evenly known: the fauna of Japan is better known than that of other regions. This is mainly due to the studies of Okuda (1935), Imajima & Hartman (1964), and Imajima (1959, 1992). Up to the present, only three *Scolelepis* species have been previously reported in China. They are *S. (S.) globosa* Wu & Chen, 1964, *S. (S.) lefebvrei* (Gravier, 1905), and *S. (S.) squamata* (Müller, 1806). *Scolelepis (S.) globosa* Wu & Chen, 1964 was originally described based on material from the