



Rediscovery of the sea cucumber “*Toxodora*” *pacifica* Ohshima, 1915 (Echinodermata: Holothuroidea: Apodida)

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Abstract

The apodous holothurian species originally described by Ohshima (1915) as *Toxodora pacifica* has been rediscovered, and its known geographic range extended from Suruga Bay, Japan to the western side of the Yellow Sea, China. As the genus name *Toxodora* is no longer available, a new genus name, *Neotoxodora* Liao, Pawson, and Wei, is proposed. The type material of *Neotoxodora pacifica* is lost, and a Neotype is named for this species.

Key words: *Toxodora*, *Neotoxodora pacifica*, Holothuroidea, Apodida, Yellow Sea

Introduction

A.E. Verrill (1882) described a new genus and species of apodous holothurian, *Toxodora ferruginea*, from off the northeastern coast of the USA. The genus was placed in the Family Chiridotidae, and it was easily distinguished from *Chiridota* Eschscholtz, 1829, because it appeared to lack the characteristic six-spoked *Chiridota* wheels. Théel (1886) adopted an unnecessarily broad interpretation of the genus *Chiridota*, and he referred *Toxodora ferruginea* to the genus *Chiridota*. H.L. Clark (1908) reinstated *Toxodora* as a genus, and reaffirmed his decision some years later (Clark, 1921). Deichmann (1940) discovered, upon further examination of syntype specimens of *Toxodora ferruginea*, that these animals indeed possess typical *Chiridota* wheels in the posterior part of the body; she transferred *ferruginea* to *Chiridota*. Apparently Verrill (1882) had not found the wheels when he described this species. Today, *Toxodora ferruginea* is known as *Chiridota ferruginea* (Verrill), and the genus *Toxodora* is a subjective junior synonym of *Chiridota*.

Ohshima (1915) described *Toxodora pacifica* on the basis of a distinctive single specimen and fragments collected in Suruga Bay, Japan, during the 1906 cruise of the US Fish Commission Steamer *Albatross*. This species was well characterized by Ohshima, and it complied with the original diagnosis of *Toxodora* in lacking wheels from the body wall. Unfortunately, the type specimens of most of the new species described by Ohshima in his 1915 paper are no longer in existence; a few survive, and are deposited in the National Museum of Natural History (NMNH), Smithsonian Institution, in Washington DC, USA. Regrettably, the majority of the type specimens disappeared before they could be added to the collections of the NMNH. As a result, most of the 46 new taxa described by Ohshima are not represented by type material. The unsuccessful search for Ohshima’s type specimens is fully described in O’Loughlin and Ahearn (2005). No type specimens exist for the species *pacifica*. Additional material (one specimen) of what is unquestionably the species *pacifica* has been collected from the Yellow Sea, and it is described below. The specimen is deposited in the Insti-