

Reinstatement of *Sigambra hanaokai* (Kitamori, 1960) (Polychaeta, Pilargidae), with an overview of the literature on the genus

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Abstract

Sigambra hanaokai (Kitamori 1960), originally described from Japan, was regarded as a junior synonym of *S. tentaculata* (Treadwell 1941), described from the Northwestern Atlantic Ocean. We studied Japanese materials and compared them with a recent redescription of *S. tentaculata* and with *S. phuketensis* Licher and Westheide, 1997, another similar species. The validity of *S. hanaokai* is confirmed. In order to avoid any further confusion, we redescribe the species based on topotype specimens collected in Hiroshima, Seto Inland Sea, Japan, the type locality of the species. Additionally, we emphasize the differences between *S. hanaokai* and *S. phuketensis*, particularly in regard to the relative length of the median antenna. Lastly, we summarize the recent systematic status of all species of the genus, and provide a table summarizing taxonomic characters.

Key words: Polychaeta, Taxonomy, Pilargidae, *Sigambra*, Japan

Introduction

The members of the Pilargidae are uncommon nereidiforms, free-living, surface sediment dwellers (Glasby 2000). The systematic position of the family is complicated and still unclear at several taxonomic levels: clade (Rouse & Fauchald 1997), order (Fauchald 1977), superfamily (George & Hartmann-Schröder 1985; Glasby 1993; Rouse & Fauchald 1997; Pleijel & Dahlgren 1998), family (Pettibone 1966; Licher & Westheide 1994), and subfamily (Salazar-Vallejo 1986; Salazar-Vallejo & Orensanz 1991). The systematic position of the family was changed from the original description by Saint-Joseph (1899) to being included in Hesionidae or Syliliidae, and recently to an independent family (Fauchald 1977; Glasby 1993; Rouse & Pleijel 2002). Some authors have done cladistic analyses and suggest a phylogenetic position near Hesionidae, but pilargids are not hesionids (e.g., Licher 1994; Licher & Westheide 1994; Pleijel & Dahlgren 1998). The family also includes questionable higher level taxa, which need to be confirmed in the future.

Some genera are well-studied taxonomically, and some systematic research has appeared in some papers. Species of the genus *Sigambra* are widely distributed, well studied, and sometimes occur as dominant species in shallow waters. Recently, a new species was described in the deep sea of the Atlantic Ocean (Paterson & Glover 2000), in abundances of 4–32 individuals per m². The relative importance of this taxon or genus is