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# Family Agathotanaidae Lang, 1971a\*

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#### **Abstract**

The family Agathotanaidae was represented in the trench material by one new species of *Agathotanais*, *A. hadalis*; one new species of *Paragathotanais*, *P. abyssorum* and one previously described species of *Paranarthrura*. The new species are described and both genders of *P. vitjazi* Kudinova-Pasternak, 1970 are re-described. *Paranarthrura zevinae* Kudinova-Pasternak, 1970 is transferred to *Paragathotanais*.

**Key words:** Japan, deep-sea, Kurile-Kamchatka Trench, Japan Trench, Tanaidomorpha, *Agathotanais*, *Paragathotanais*, *Paranarthrura* 

#### Introduction

The family Agathotanaidae was first erected by Lang (1971a) but later synonymized with an enlarged family Anarthruridae by Sieg (1986). Larsen & Wilson (2002) re-erected the family as a result of a phylogenetic analysis and this family seems to be fairly stable and well-defined compared to many other Tanaidacean families. Currently Agathotanaidae includes the following genera: *Agathotanais* Hansen, 1913; *Metagathotanais* Bird & Holdich, 1988; *Paragathotanais* Lang, 1971b; *Paranarthrura* Hansen, 1913; and *Paranarthrurella* Lang, 1971a.

This is a cosmopolitan family and the genera *Agathotanais*, *Paragathotanais*, and *Paranarthrura* can be found in deep-sea samples from any part of the world.

The terminology follows Larsen (2003).

## **Systematics**

Genus Agathotanais Hansen, 1913

Type species. Agathotanais ingolfi Hansen, 1913

Generic remarks. Hansen (1913) erected this genus to accommodate his new species *A. ingolfi* from the Danish Ingolf expedition (by monotypy). Lang (1971b) described the 'second' species of the genus, *A. hanseni*, but was apparently not aware that Kudinova-Pasternak (1970) already had described *A. spendidus* from the Kurile-Kamchatka Trench. Later several additional species were described, primarily from the Indo-Pacific region (Kudinova-Pasternak 1989, 1990; Larsen 1999b).

*Agathotanais* is a cosmopolitan genus to be found in any deep-water samples around the world (Bird & Holdich 1988; Larsen 1999a, b). The most recent key to the genus is given by Larsen (1999b).