

New records of little known deep-sea Echinothambematidae (Crustacea: Isopoda: Asellota) with redescription of *Vemathambema elongata* Menzies, 1962 and description of a new species from the Argentina Basin[‡]

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Abstract

The family Echinothambematidae and the genus *Vemathambema* Menzies, 1962 are rediagnosed. A redescription of *Vemathambema elongata* Menzies, 1962 from the Angola Basin and the description of *Vemathambema argentinensis* sp. nov. from the Argentina Basin of the South Atlantic are presented. The new species can easily be distinguished from *Vemathambema elongata* by its larger opercular pleopods and deeper constrictions of pereonites two to four.

Family Echinothambematidae Menzies, 1956

Vemathambema elongata Menzies, 1962 (Fig. 1a, b)

New material examined: German expedition "DIVA 1" (RV "Meteor" cruise 48/1): 22.7.2000, St. 338, 18°19.4'S 04°39.7'E, depth 5397 m, 1 female, 3.5 mm long; St. 340, 18°18.3'S, 04°41.3'E, depth 5395 m 1 female, 3.2 mm long; 28.7.2000, St. 348, 16°18.1'S 05°27.2'E, depth 5390 m, 1 juvenile female, 1.8 mm long. Russian Expedition RV "Akademik Kurchatov" (cruise 43): 13.1.1986, St. 4912, 26°45.1'S, 06°54.6'E, depth 4910 m, posterior part of male.

Vemathambema argentinensis sp. nov. (Fig. 1c, d)

Material examined: Russian expedition RV "Akademik Kurchatov" (cruise 43): 26.12.1985, St. 4893, 36°12'S 49°09'W, depth 4630 m. Holotype: male, 4.6 mm long, (Zoological Museum of Moscow University, ZMMU Mc 1322a). Paratypes: female allotype with oostegites on first pereopods, 4.7 mm long; 1 female, 4.2 mm; 2 adult males, 4.7 and 4.3 mm; 2 immature males in stage IV, 3.2 and 3.1 mm (see Wolff 1962); pleotelson of a male (ZMMU Mc 1322b-c).

Description: All segments free. Body length more than 5 times width of pleotelson, more than 10 times width of narrowest part of pereon, anterior parts of tergites 3 and 4 about twice as wide as narrowest middle parts. Male pereopod 1 carposubchelate, length 0.25 of body length, carpus larger than ischium, propodus as long and half as wide as carpus. Operculum of female broad oval, 1.4 times as long as wide, 0.83 of pleotelson length. Male pleopod 1 length 0.9 of pleotelson length, 3 times as long as narrowest width, 2.6 times proximal width, and 2.1 times broadest distal sagittal part width; distolateral lobes bent dorsally, reaching 0.15 of total pleopod length, ventral and lateral margins with sparse setules. Male pleopod 2 protopod 3 times as long as wide in ventral view, truncated apically, proximomedial lobe length 0.15 of protopod length and 0.75 of protopod width; endite proximal article subequal in width to distal article, stylet very thin, curved, longer than protopod; exopod situated distally, longer than wide, covered apically with hair-like setae. Uropods uniramous, 0.4 of body length, tapering distally.

Diagnosis: The new species is very similar to *V. elongata*, but can easily be distinguished by the relatively large operculum in both sexes. In a male of *V. argentinensis* sp. nov. it occupies almost the whole ventral area of the pleotelson, in *V. elongata* it covers only nearly 70% of the ventral area. Male pleopods 1 of the new species are more slender, distolateral lobes are less curved dorsally. All parts of pleopod 2 are more

[‡] Results from the "DIVA 1" expedition (RV "Meteor" cruise M48/1)

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slender. The new species is distinguished also by a thinner body, pereonites 1–4 with more pronounced anterolateral projections which in pereonite 2 have the same shape as in the two following pereonites, without tubercles. The central constriction on pereonites 3 and 4 is narrower in the new species. Pereopod 1 is stouter, but we could examine it only in a male whereas for *V. elongata* the pereopod 1 is known only for a female, the difference could be due to sexual dimorphism. The epipod of the maxilliped in *V. argentinensis* sp. nov. is longer than in *V. elongata* in relation to the basis. The two first articles of antenna 1 are somewhat stouter in the new species. In males with the same size of pleotelson the uropods are shorter in the new species (the uropod/pleotelson length ratio is 2.2 in *V. argentinensis* sp. nov. and 2.9 in *V. elongata*).

Key words: Crustacea, Isopoda, Asellota, Echinothambematidae, Taxonomy, deep-sea, *Vemathambema argentina* n.sp., South Atlantic

Full article at: <http://www.senckenberg.uni-frankfurt.de/odes/01-06.htm>

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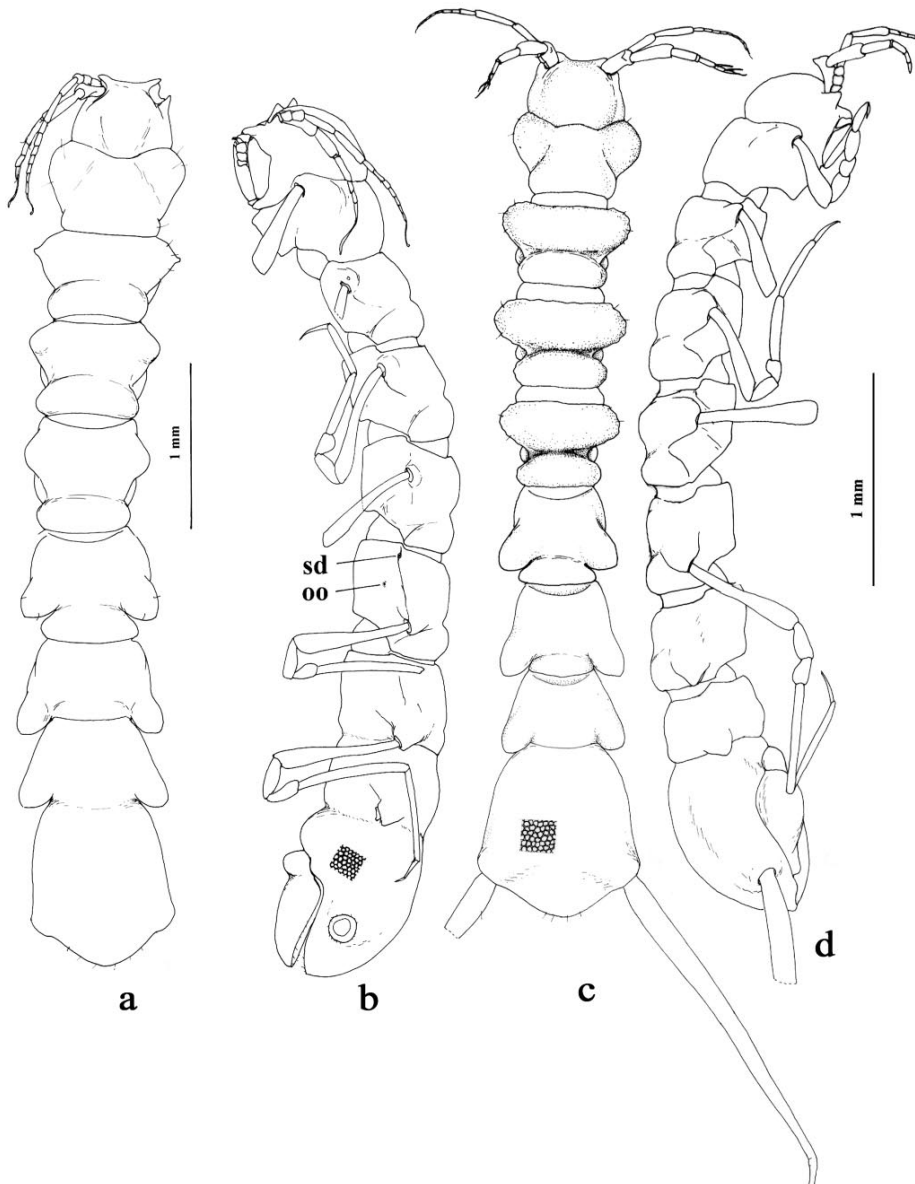


Fig. 1. a, b: *Vemathambema elongata* Menzies, 1962, female holotype (a: dorsal, b: lateral view); oo: oopore, sd: spermathecal duct. c, d: *V. argentinensis* sp. nov., male holotype (c: dorsal, d: lateral view). Texture of cuticle indicated on pleotelson in Figs 1b, c.