

The discovery of the genus *Terromermis* Artyukhovsky et Lisikova, 1977 (Nematoda, Mermithidae) in southeastern Kazakhstan

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The morphological description of two mermithid species of the genus *Terromermis* – *T. brevis* and *T. brevisoides* for the first time found out on Acridoidea in Kazakhstan is presented.

The genus *Terromermis* was allocated into independent group *brevis* of the genus *Hexamermis* Steiner, 1924 (Artyukhovsky, Lisikova, 1977) and subsequently referred to the tribe *Terromermithini* Gafurov, 1977 subfamily *Mesomermithinae* (Rubzov, 1978), Gafurov, 1997 (Gafurov, 1997).

Diagnosis of the *Terromermis* species (general morphology): small, rather thick nematodes, the anterior end of a body in comparison with tail is appreciably narrowed. Cuticle with a precise layer of crisscross fibers. A head is homocephalic and made thinner conical. The mouth aperture is terminal. There are six head papillae which are located hexagonally. Amphids are of the average size. The quantity of hypodermal chords is six. Vagina is of mace view, bent across a body. Vulva looks like a straight line. Spicules are in pair, bent a little bit. A tail is short, blunt-rounded.

The hosts: Chrysomelidae, Acridoidea and other ground insects.

In the description of species below, all measurements are given in micrometers, if the size does not exceed 1000 micrometers.

Terromermis brevis Hagmeier, 1912 (fig.1)

Female (n = 1). L = 9.4 mm; a = 70; b = ?; V = 49%.

Males (n = 3). L = 13.5 mm; a = 79 (73-87); b = ?; c = 94 (86-100).

Nematodes are of white color. The diameter of a body of male is equal: 52 (50-57) at a level of head papillae; 107 (90-120) at a level of nerve ring; 166 (150-180) at a level of a middle part of body; 140 (130-147) at a level of anus. The distance from a head up to a nerve ring is 227 (200-240). There are two separate spicules of 101 (90-110) length. The length of a tail is 139 (130-152). Females' bodies have the diameter 50 at a level of head papillae, and 135 at a level of vulva. The distance from a head up to a nerve ring is 170, up to vulva is 4.6 mm. Vulva is short with the extended anterior part.

Hosts: Acridoidea.

Distribution: Germany, European part of Russia. It is found out in Almaty area, Ili district (near of Chemolgan station) of Kazakhstan.

Material: one female and three males.

Terromermis brevisoides Artyukhovsky et Lisikova, 1977 (fig.2)

Females (n = 3). L = 14.8 (13.4-16.8) mm; a = 81 (71-93); b = 4.2; V = 49.8%.

Males (n = 2). L = 13.2-16.7 mm; a = 78-98; b = ?; c = 88-118.

Nematodes are of white color, rather thick. The diameter of females' and males' body is equal 45-50 and 60-65 at a level of head papillae; 110-130 and 110-120 at a level of nerve ring; 170-200 and 170 at a level of a middle of body accordingly. The diameter of the posterior end of a body is 90-150 at a level of trophosoma, and 140-147 at a level of anus. The distance of females' and males' body is 214-250 and 250-280 from head up to nerve ring accordingly. The distance is 7.4 mm from head up to vulva. Vagina is short and thick. The tail end is rounded. There are two equal bent slightly spicules with hollowed bases; the length is 110-112. The diameter of spicules' bases is 12-15. The length of a tail makes up 142-150.

Hosts: Acridoidea.

Distribution: Uzbekistan (Surkhan-Darya and Kushkah-Darya area). It is found out in Almaty area, Ili district (near Chemolgan railway station) of Kazakhstan.

Material: Three females and two males.

References

Artyukhovsky A.K., Lisikova E.A., 1977. Mermithids (Mermithida, Nematodes) of Uzbekistan and their economic meaning. *Voronezh, Forest-Technical Institute. Dep. in VINITI 01.11.77. N. 4174. P.1-84 (in Russian).*

Gafurov A.K., 1997. Mermithids (systematics, biology, phylogeny, practical meaning). *Dushanbe, 381 p. (in Russian).*

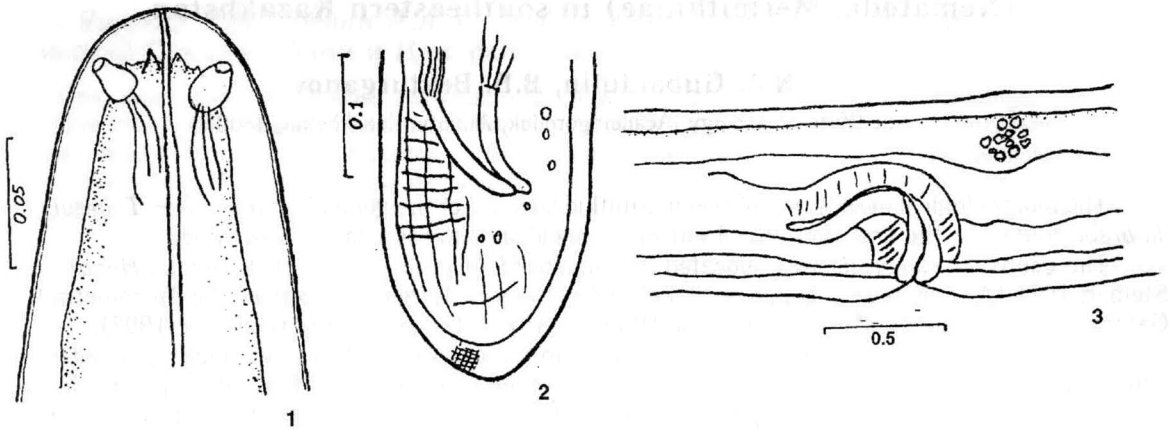


Fig. 1. *Terromermis brevis* Hagmeier, 1912: 1 – head end of female; 2 – tail end of male; 3 – region of vulva.

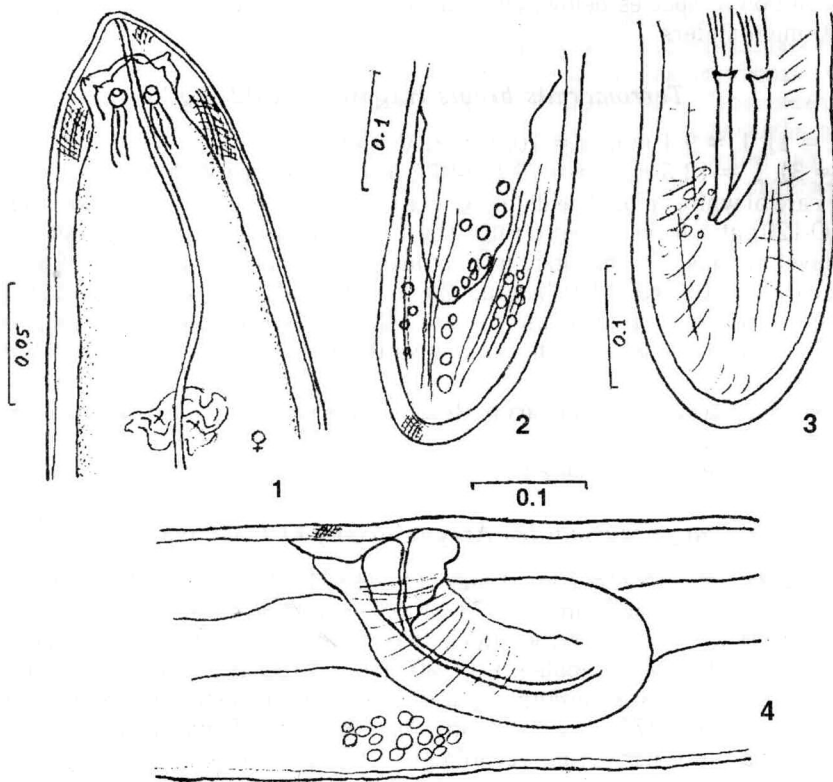


Fig. 2. *Terromermis brevisoides* Artyukhovsky et Lisikova, 1977: 1 – head end of female; 2 – tail end of female; 3 – tail end of male; 4 – region of vulva.

Резюме

Губайдулин Н.А., Бектурганов Б.Б. Обнаружение мермитид рода *Terromermis* Artyukhovsky et Lisikova, 1977 на юго-востоке Казахстана.

Приводится морфология ранее описанных видов мермитид - *Terromermis brevis* Hagmeier, 1912 и *T. brevisoides* Artyukhovsky et Lisikova, 1977, впервые обнаруженных у саранчовых в Казахстане.