

**TWO NEW SPECIES OF MITES OF THE GENUS *STERNOSTOMOIDES*
BREGETOVA, 1965 (GAMASOIDEA: RHINONYSSIDAE)**

**ДВА НОВЫХ ВИДА КЛЕЩЕЙ РОДА *STERNOSTOMOIDES* BREGETOVA, 1965
(GAMASOIDEA: RHINONYSSIDAE)**

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Ключевые слова: клещи носовой полости, Rhinonyssidae, *Sternostomoides*, новые виды, птицы, Киргизстан, Гвинея

ABSTRACT

Two new species of mites of the family Rhinonyssidae are described: *Sternostomoides graculi* sp.n. from *Graculus graculus* (L.) (Corvidae, Passeriformes) collected in Kirghizstan and *Sternostomoides numerovi* sp.n. from *Eremopteryx leucotis* (Stanley) (Alaudidae, Passeriformes) collected in Guinea. The species list and differential diagnosis of the genus *Sternostomoides* are given.

РЕЗЮМЕ

В статье приводится описание двух новых видов клещей семейства Rhinonyssidae: *Sternostomoides graculi* sp.n. с *Graculus graculus* (L.) (Corvidae, Passeriformes) из Киргизстана и *Sternostomoides numerovi* sp.n. с *Eremopteryx leucotis* (Stanley) (Alaudidae, Passeriformes) из Гвинеи. Приводится дифференциальный диагноз и список видов рода *Sternostomoides*.

The genus *Sternostomoides* Bregetova, 1965 is most closely related to the genus *Sternostoma* Berlese et Trouessart, 1889. Bregetova [1965] considered the absence of opisthosomal plate both in males and females as the major morphological feature distinguishing two genera. The mites of the genus *Rhinonyssus* Trouessart differ from mites of the genus *Sternostomoides* by the morphology of chelicerae in female that are thin and tapering at tip, with very short chelae.

The following species were primarily included in the genus *Sternostomoides* together with the type species *Sternostomum technaui* Vitzthum, 1935: *Sternostoma turdi* Zumpt et Till, 1955, *S.spatulatum* Furman, 1957, and provisionally, *S.straeleni* Fain, 1958, and *S.sturnicola* Fain, 1956. Presently several other species can be added to this list: *Sternostomoides dumetellae* Pence, 1972, *S.borceanum* Feider et Mironescu, 1968, and *Sternostomoides orlandoi* Dusbabek, 1969.

Passere birds of three families (Mimidae, Sturnidae and Turdidae) were mentioned in the literature as hosts of mites of the genus *Sternostomoides*.

This paper presents description of two new species of the genus: *Sternostomoides graculi* sp.n. and *St.numerovi* sp.n. The birds of the families Corvidae and Alaudidae (Passeriformes) were registered as the hosts of mites of the genus *Sternostomoides* for the first time.

All measurements are given in micrometers (µm). Applied abbreviations follow those of Fain [1962], Pence & Castro [1976].

***Sternostomoides graculi* sp.n.**

Figs. 1–4, 8.

Female. Length of engorged individuals 859, 870, breadth 530, 530.

Dorsum. Podosomal plate large, more or less rhombic in shape, with widely rounded wavy outlines of lateral sides. LPP — 446–474, WPP — 304–308. 8 pairs of hardly discernible microsetae are situated on the plate. Opisthosoma bears two pairs of small, indistinctly outlined additional platelets. 13–14 pairs of very fine setae located on idiosoma dorsum free of sclerites are similar to those situated on podosomal plate.

Ventral region. Sternal plate is not expressed. 3 pairs of sternal setae present. Genital plate rather large, widened and rounded posteriad, bearing a pair of genital setae located close to its posterior margin, length 113, 124; width of 76–90. Anal plate weakly developed. Anal pore small, 30–40. A pair of adanal setae located at the level of posterior edge of the anal pore, the postanal seta present. 5 pairs of opisthosomal setae present, all fine, nipple-like, resembling dorsal setae.

Gnathosoma. Length 122, 133, width at the level of attachments of the palps 101, 108. Length of palps almost equal to length of the basis of gnathosoma, 56, 65.

Chelicerae typical for the genus *Sternostomoides*, a little extended and tapering at the tip. LCH — 115, WCH — 22. Movable digit of chelae is about 1/15 the total length of chelicerae. Gnathosomal and hypostomal setae are hardly discernible.

Legs are rather strong, their length I to IV is 400, 375, 385, 415 (pretarsi omitted). Coxae bear

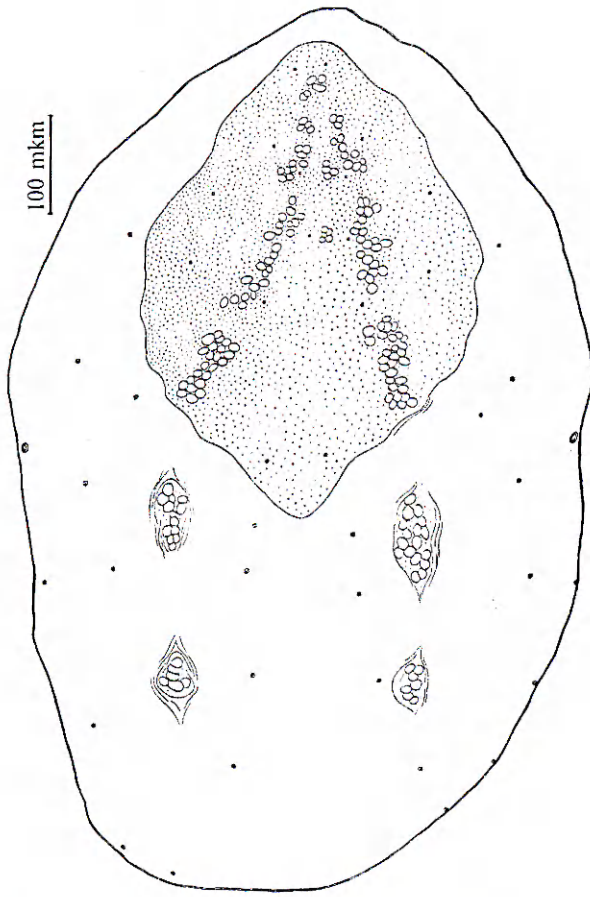


Fig. 1. *Sternostomoides graculi* sp.n., female, dorsal view.
Рис. 1. *Sternostomoides graculi* sp.n., самка дорсально.

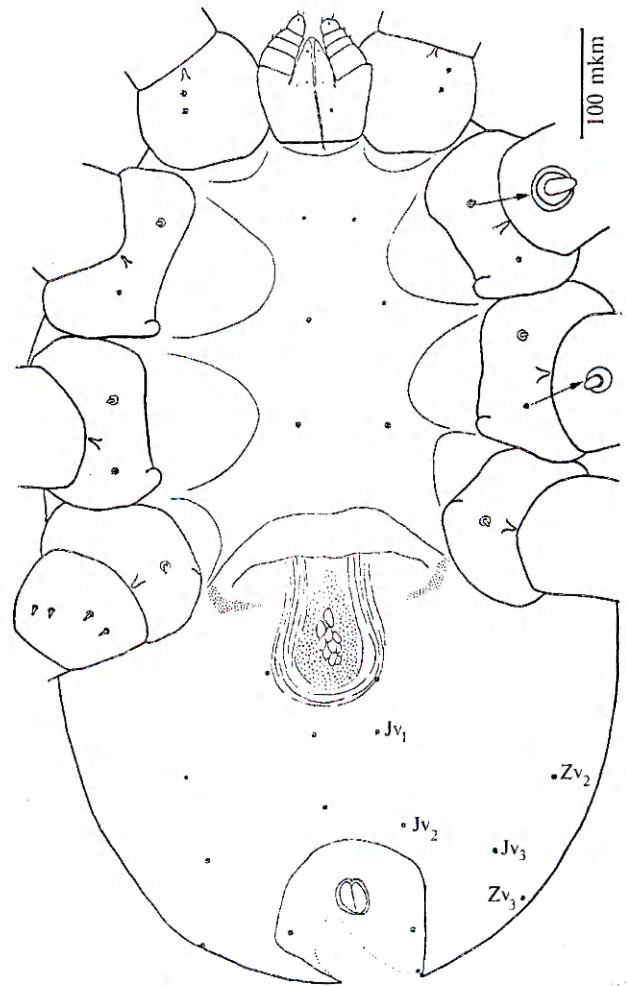


Fig. 2. *Sternostomoides graculi* sp.n., female, ventral view.
Рис. 2. *Sternostomoides graculi* sp.n., самка вентрально.

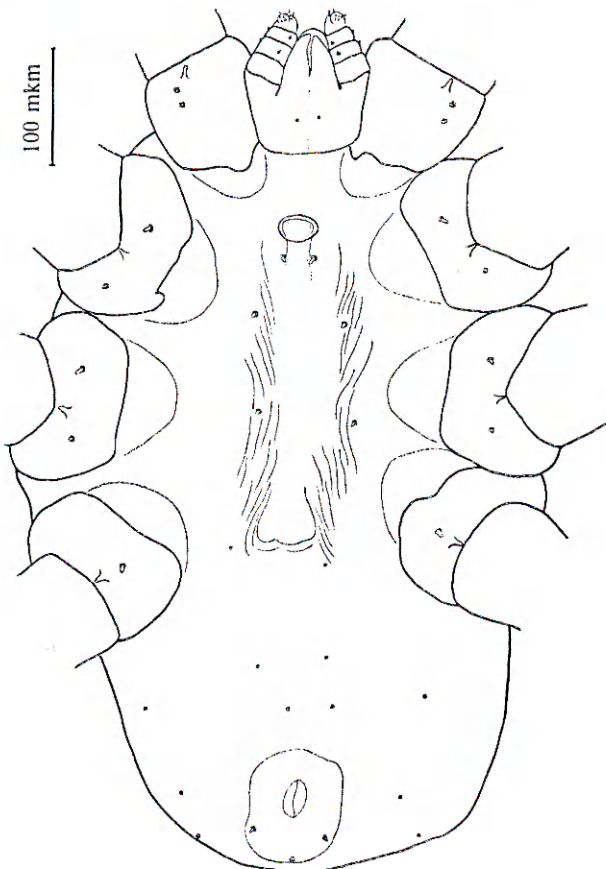


Fig. 3. *Sternostomoides graculi* sp.n., male, ventral view.
Рис. 3. *Sternostomoides graculi* sp.n., самец вентрально.

ing fine stick-like setae, the largest of them (about 8) being located on coxae IV. Trochanters bear setae of same shape and length. Other leg segments bear conical setae, up to 10. Setiform setae present at the tip of tarsi, about 30.

Male. LId — 668, WId — 452. One large triangular shaped podosomal plate with an indistinctly outlined contour present on the dorsum of the body.

Ventral region. Genitosternal plate is not expressed. It is substituted by the area of integument deprived of wrinkles. This area is rather precisely limited by the level of coxae IV posteriad. First pair of sternal setae, 8, located directly behind the genital orifice. Setae St_2 and St_3 nipple-like, distinctly shorter than St_1 . As in females, 5 pairs of microsetae present on the ventral side of opisthosoma. Anal plate weakly sclerotized, with small anal opening located in its anterior half. LAP — 97, WAP — 77. Longitudinal diameter of the anal pore 32, transversal 22. Adanal setae stick-like, about 3, situated behind the anal opening like the nipple-like postanal seta. Coxal setae av_2 , av_3 , pv_4 of the same form and size as the anterior sternal setae. Coxal setae av_1 , pv_1 — pv_3 distinctly shorter, nipple-like.

Material. Holotype (female) and paratypes (3 females, 1 male) collected from nasal cavity of

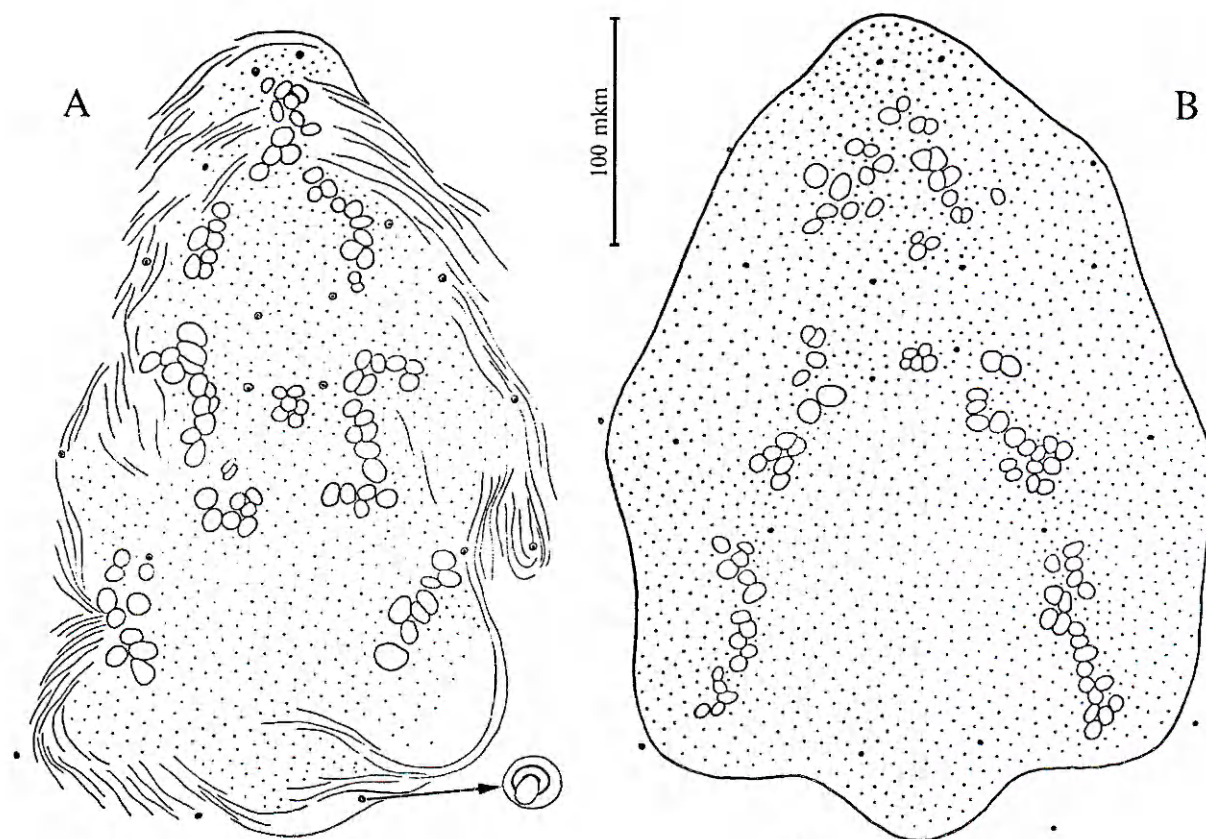


Fig. 4. Dorsal plates, males: A — *Sternostomoides graculi*, B — *Sternostomoides numerovi*.

Рис. 4. Дорсальные щитки самцов: А — *Sternostomoides graculi*, В — *Sternostomoides numerovi*.

Graculus graculus (L.) (Corvidae, Passeriformes), Kirgizstan, Central Asia, 6.09.1977; 1 female and 1 male collected from the nasal cavity of *G. graculus* from the same locality, 12.08.1977. Coll. S.K. Sartbaev. The type material is deposited in the collection of Oka Biosphere State Reserve (OBSR), Rjazan Prov., Russia.

DIFFERENTIAL DIAGNOSIS

The new species is readily distinguishable from the other known species of the genus by rhomb-like shape of podosomal plate and very small nipple-like setae of the venter of idiosoma.

Sternostomoides numerovi sp.n.

Figs. 5–8.

Female. LI_d — 780, WI_d — 463.

Dorsum. Podosomal plate large, extendly triangular shaped, weakly sclerotized. Its lateral outlines slightly wavy. Short widely rounded ledge present on the posterior part of the plate. LPP — 442, 446, WPP — 322, 322. 8 pairs of microsetae present on the plate. A pair of additional small and weakly developed platelets located behind the podosomal plate. 10 pairs of fine setae originated on free of sclerites surface similar to those located on podosomal plate.

Ventral region. Sternal plate absent. 3 pairs of short, thick, nipple-like sternal setae located at the level of coxae II–III, 4, 5–9. St_2 and St_3 stronger than St_1 . Genital plate rather large. LGP — 101,

101, WGP — 50, 56. Central part of the plate heavily sclerotized. A pair of nipple-like genital setae originated beyond the plate the level of its back one third. Anal plate rounded, weakly sclerotized (WAP — 67). Anal opening: longitudinal diameter 27, transversal — 20. Adanal setae stick-like, located at both sides of anal opening, 7. The postanal seta much shorter. 5 pairs of stick-like setae originated posterior to the genital plate. Iv_1 and Iv_2 rather thick, 5–9; Iv_3 and Zv_2 thin, shorter; Zv_3 — shprtest of the series. Coxal setae nipple-like; av_1 and pv_1 (4.5) shorter than setae located on coxae III and IV (6–9). Front coxae not larger than the other.

Gnathosoma wide, short. LG — 117, 119; WG — 104, 110. Gnathosomal basis length is less than its width. Palps short, 54, with thick segments. LCH — 122, WCH — 20. Gnathosomal and hypostomal setae very fine, with well outlined bases.

Male. LI_d — 433, LPP — 373, WPP — 276. Podosomal plate large, shield-like, with widely rounded posterior middle ledge.

Ventral region. Genitosternal plate is presented by elongated non-wrinkled structure, limited posterior. The anterior pair of sternal setae located directly behind the genital orifice. All sternal setae similar in shape and size, length — 4.5, width — 3. A pair of genital setae of same length as sternal, originated beyond the plate. Anal plate rounded, weakly sclerotized, length 61, width 79. Anal opening large. Its longitudinal distance is about

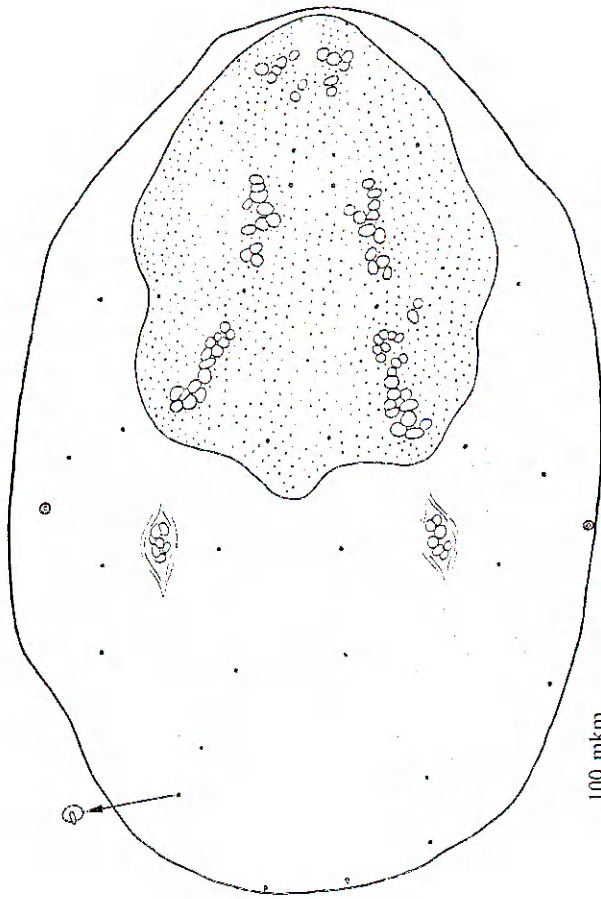


Fig. 5. *Sternostomoides numerovi* sp.n., female, dorsal view.
Рис. 5. *Sternostomoides numerovi* sp.n., самка дорсально.

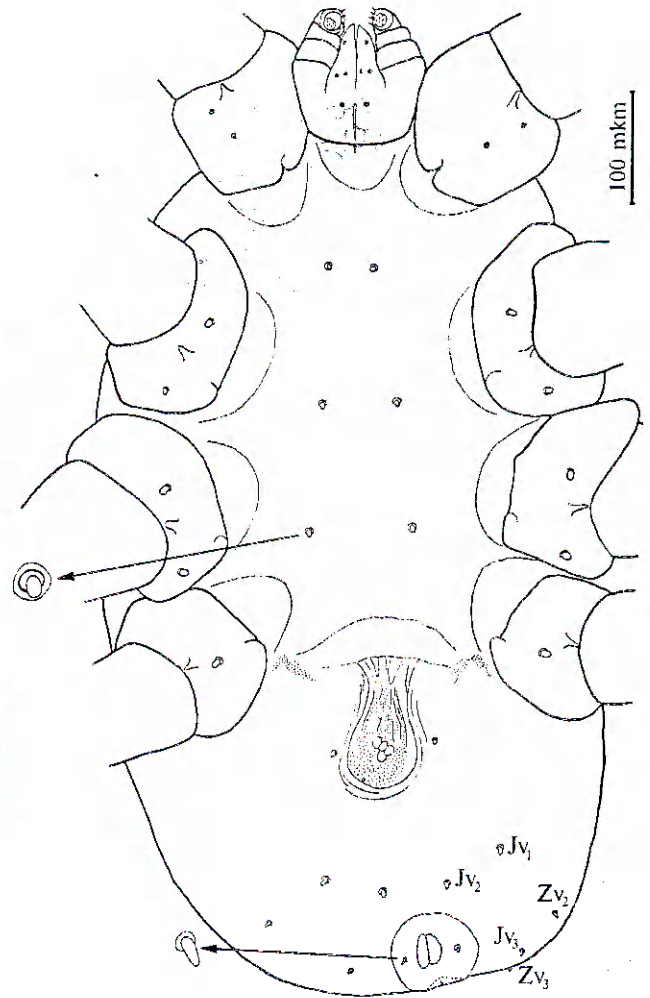


Fig. 6. *Sternostomoides numerovi* sp.n., female, ventral view.
Рис. 6. *Sternostomoides numerovi* sp.n., самка вентрально.

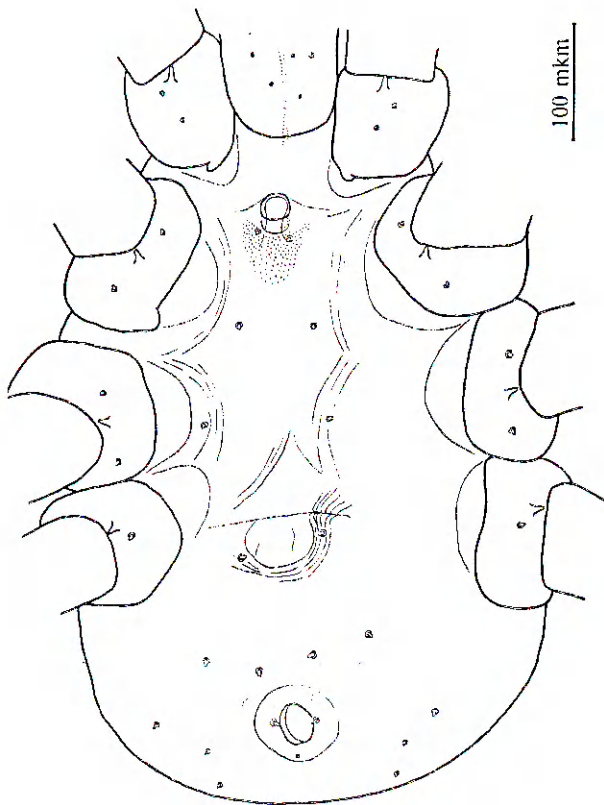


Fig. 7. *Sternostomoides numerovi* sp.n., male, ventral view.
Рис. 7. *Sternostomoides numerovi* sp.n., самец вентрально.

equal to the half of the total length of the plate. Adanal setae located laterad to the anal opening. Postanal setae much smaller than adanal setae. 5 pairs of setae present on opisthosomal. As in females, setae Iv_3 and Zv_3 shorter than the other. All ventral idiosomal setae as well as coxal setae nipple-like or short strick-like, 4.5–7.

Gnathosoma as in females. LG — 124, WG — 106, LP — 59, LCH — 104, LCh — 43.

Material. Holotype (female) and paratypes (3 females, 1 male, 2 deutonymphs) from the nasal cavity of *Eremopteryx leucotis* (Stanley) (Alaudidae, Passeriformes), 27.04.85, Guinea People's Republic, West Africa. Coll. A.D. Numerov. The type material is deposited in the collection of OBSR.

DIFFERENTIAL DIAGNOSIS

The new species is most closely related to *Sternostomoides straeleni* (Fain) and differs from the latter by the large size of genital plate and shorter chelicerae also by their shape.

ETYMOLOGY

The species is named for A.D. Numerov, who collected the type material in W. Africa.

Two new species of the genus *Sternostomoides*

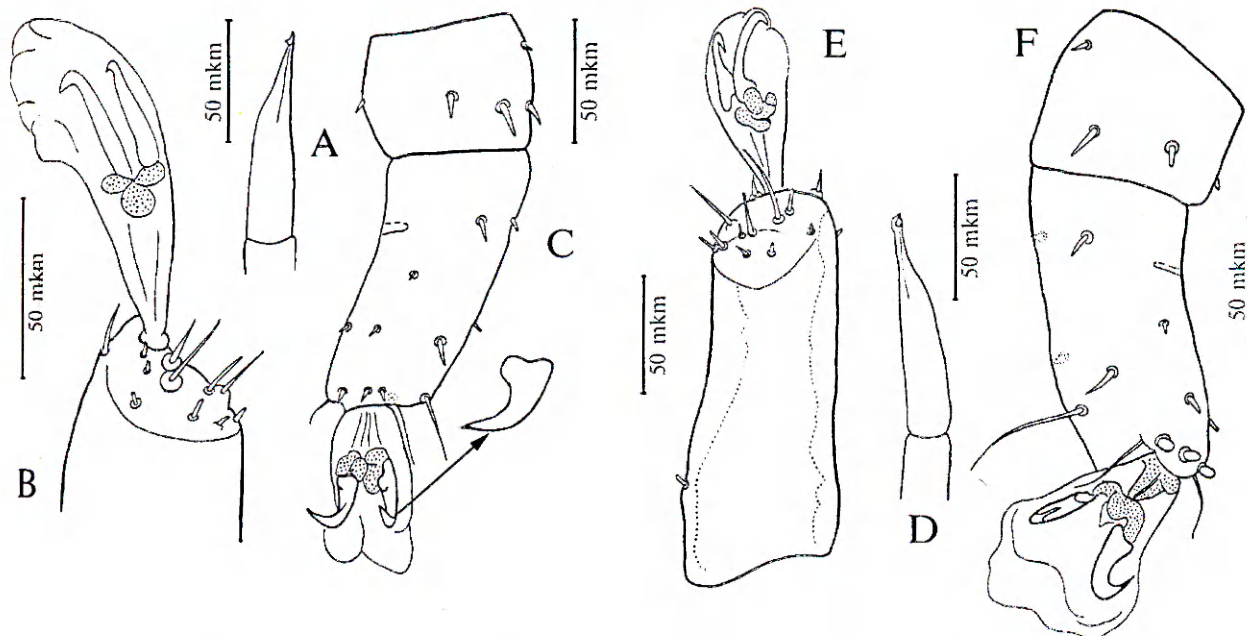


Fig.8. *Sternostomoides graculi*, female: A — chelicera, B — tarsus I, C — tarsus IV. *Sternostomoides numerovi*, female: D — chelicera, E — tarsus I, F — tarsus IV.

Рис.8. *Sternostomoides graculi*, самка: А — хелицера, В — лапка I, С — лапка IV. *Sternostomoides numerovi*, самка: D — хелицера, E — лапка I, F — лапка IV.

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