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New species of the subterranean genus *Niphargus* Schiödte, 1849 (Amphipoda, Gammaridea, Niphargidae) from Russia, *N. krasnodarus* sp. n. (Contribution to knowledge of Amphipoda 256)

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Summary. A new species from the family Niphargidae (Amphipoda), *Niphargus krasnodarus* sp. n., from subterranean waters of Fanagoriyskaya Cave near Krasnodar (E. of the Black Sea, Russia), is described and figured, and its taxonomical position in relation to known species of the genus *Niphargus* Schiödte, 1849 from the former Soviet Union is analyzed. The absence of *N. krasnodarus* sp. n. females in the collection limited more detailed conclusions about the taxonomical position of *N. krasnodarus* sp. n. within the genus *Niphargus*.

Keywords: Amphipoda, new species, Niphargidae, *Niphargus krasnodarus*, Russia, subterranean fauna, taxonomy.

Introduction

The subterranean freshwater amphipod-crustacean fauna of Russia and the former Soviet Union is very rich, but has only been partially characterized. Numerous subterranean species from various genera of Amphipoda are known from the former Soviet Union: *Amurocrangonyx* Sidorov & Holsinger, 2007 (Sidorov and Holsinger 2007a); *Crangonyx* Bate, 1859 (Munoz 2010), *Pseudocrangonyx* Akatsuma & Komai, 1922 [=*Niphargonyx* Dershavin, 1927] (Sidorov 2011); *Stygobromus* Cope, 1872 (Karaman 1974; Sidorov et al. 2010); *Lyurella* Dershavin, 1939 (Ruffo 1974); *Synurella* Wrzesniowski, 1877 (Karaman 1991); *Procrangonyx* Schellenberg, 1934 (Sidorov and Holsinger 2007b); *Paramoera* (*Ganigamoera*) Sidorov, 2010 (Vader 2010), *Niphargus* Schiödte, 1849 etc. (Dershavin 1945b). Among them, the most numerous are species from the genus *Niphargus* (Fam. Niphargidae), which have been discovered and described by various authors:

Martynov (1931) described *Niphargus pliginskii* from Ful cave in Krym (Ukraine), and the following year (Martynov 1932) described *Niphargus abchasicus* from a spring between Khosta and Kudepsta (Abkhazia).

Birstein (1932) described *Niphargus abricossovi* from the basin of Lake Sevan: a spring 4 km from the lake coast toward the N.- of Shordzha, Zakavkazie, and later (Birstein 1933), *Niphargus borutzkyi* from a cave at the bank of the Zchal-Ziteli River, Rioni (Georgia).

Dershavain (1939) described *Niphargus galena* from a spring near the village Khalfalir, on the bank of the river Biliashchaia, Talish region (Azerbaijan).

Birstein (1940) described *Niphargus ablaskiri* from the Achkhshe-tyz-gua Cave and Novoafonskaya Cave, near Novy Afon (Abkhazia); *Niphargus inermis* from the Nizhne- Shakuranska Cave near Tsebelda (Abkhazia); *Niphargus magnus* from the Golova Atapa Cave in Abkhazia.

Behning (1940) described *Niphargus glontii* from a spring on the Tskhra-Tskaro pass, left of the Bakuriani – Tabistskuri road, Georgia.

Birstein (1941) described *Niphargus iniochus* from a cave near the village Andreevka, Sukhumi region (Abkhazia); *Niphargus gurjanovae* from a spring on Mt. Sataple, near Kutaisi, Georgia.

Dershavin (1945a) described *Niphargus alasonius* from Dumastori spring, on the left bank of the Alazani

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River valley, near the village Dzhokolo, Georgia; *Niphargus kurdus* from a spring in the village Piradzhan, Akera River valley, Azerbaijan; *Niphargus lori* from the spring Sorok Rodnikov near Stepanavan, in the basin of the Dzoraget River, Armenia; *Niphargus inornatus* from the Basin Okhchi--chaia: a spring in the village Shamsuza, Zakavkazie; *Niphargus eugeniae* from a spring of the river Tchernaya near Gudaut, output of a cave, Georgia.

Dershavin also described in the same paper (Dershavin, 1945a) the genus and species *Martynovia submersus*, from a spring in the riverbed of Sochi River near a bridge in the town of Sochi (southwestern Caucasus), later removed to the genus *Niphargus*.

Birstein (1952) described *Niphargus latimanus* from Vorontsovskaya Cave (Kudepstinskaya) near Khosta, W. Caucasus; *Niphargus othericus* from a spring near the village Othary and in Bacha Cave in the same village (reg. Gudauta region, Abkhazia); *Niphargus pseudolatimanus* from the spring in Novayia Peshchera Cave in Predpeshchernaya Bay near Vorontsovskaya, W. Zakavkazie; *Niphargus smirnovi* from Verkhne – Mzymtinskaya Cave near the lower part of the Mzymta River, Sochi region (SW Caucasus); *Niphargus dershavini* from the subterranean waters near the village Olginskaya, Gagra region (Abkhazia).

Birstein (1954) described *Niphargus potamophilus* from a water reservoir in the basin of the lower part of the Don River near Rostov-na-Donu; *Niphargus cubanicus* from fish ponds near the village Goryachiy Klyuch near Krasnodar (Western Caucasus).

Later, Birstein (1961) described *Niphargus dimorphus* from a spring near the village Sorokino, Crimea; *Niphargus vadimi* from Skelska Cave, Crimea.

Birstein (1964) described *Niphargus tauricus* from a spring near Tchertovaya Lestnitsa, on the Yalta – Sevastopol road (Crimea).

Levushkin (in Gilyarov et al. 1974) described *Niphargus talikadzei* from soil between Rioni River and Lake Paleostomi, E. of Poti (Shavi-Gele, Georgia). We assume that there were some subterranean waters in the vicinity. We found a similar situation in the village of Dolovo (Pančevo region, Serbia), where we collected *Niphargus valachicus* Dobreanu & Manolache, 1933, also from soil near subterranean water.

Karaman (1982) described *Niphargus pseudocaspius* from Kendyrli Bay, depth 32-36 m, Caspian Sea, and *Niphargus caelestis* from Ushchelnaya Cave near Vorontsovka, Khosta region, W. Transcaucasia.

Recently we obtained one very interesting sample of *Niphargus* from Fanagoriyskaya Cave near Krasnodar (E. of the Black Sea, Russian Caucasus) from Dr. M. Daneliya (Finnish Museum of Natural History in Helsinki, Finland) After examination, it was established that the specimens belonged to a new species, named here as *Niphargus krasnodarus*, sp. n.

Niphargus krasnodarus, sp. n.

Figs. 1-7

Material examined. Russia: Fanagoriyskaya Cave near the city of Krasnodar, E. of the Black Sea (Russian Caucasus), 44°28N 38°58´E, 3 specimens (adult male and 2 juveniles), 17.4.2000 (leg. G. Bakhtadze) [S-7108]. Holotype was deposited in KARAMAN`s Collection in Podgorica, Crna Gora, number S-7108.

Diagnosis. (partially, males only). Slender, mid-sized specimens. Metasomal segments with several short dorsomarginal setae only; urosomite 1 with dorsolateral setae only, and with one ventroposterior spine near basis of uropod 1.

Maxilla 1 inner plate with 3 setae, outer plate with 7 spines (6 of them with one lateral tooth only). Coxae short. Gnathopods 1-2 mid-sized, palm inclined, dactylus with a row of several setae along outer margin. Dactylus of pereopods 3-7 relatively slender, at inner margin with one spine or seta near the basis of the nail. Article 2 of pereopods 5-7, narrow, unlobed. Epimeral plates 2-3 subangular, with obtuse ventroposterior corner and slightly convex posterior margins. Pleopods with an elevated number of retinacula (7-10); peduncle of pleopod 2 naked. Uropods 1-2 with straight rami; Uropod 1 outer ramus slightly longer than the inner ramus; Uropod 2 with inner ramus longer than the outer one. Uropod 3 elongated, second article of outer ramus long. Telson short, deeply incised, each lobe with 4-5 long distal spines and 0-1 outer marginal spine, facial spines absent. Coxal gills relatively short.

Description. Male 11.5 mm (Holotype). Body slender and long, head without strong rostrum and with subrounded lateral cephalic lobes and excavated ventroanterior sinus (Fig. 1A), eyes absent.

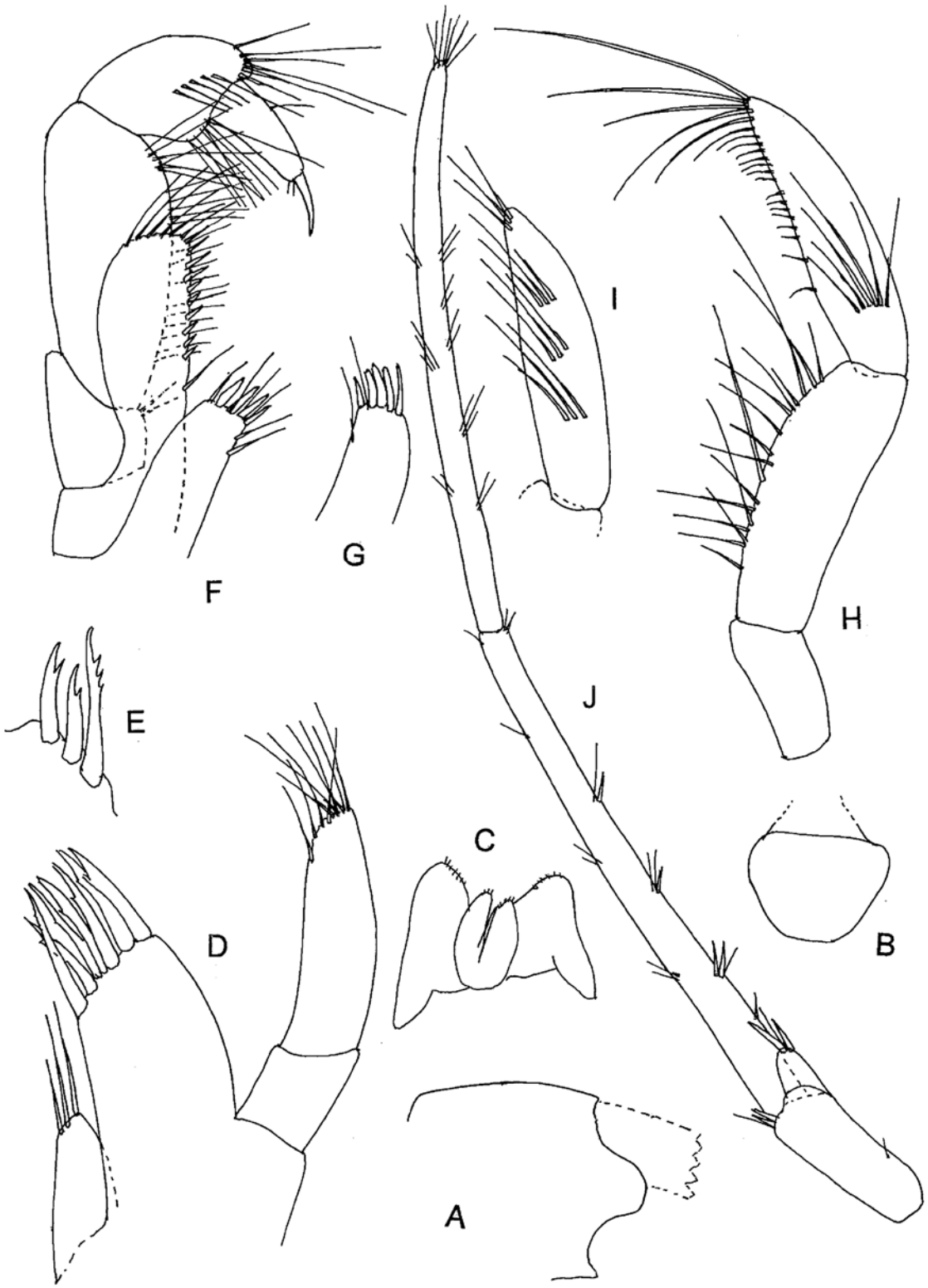

Figure 1. *Niphargus krasnodarus*, sp. n., Fanagoriyskaya Cave, male 11.5 mm, Holotype: **A**, head; **B**, labrum; **C**, labium; **D**, maxilla 1; **E**, tip of outer plate of maxilla 1; **F**, left maxilliped; **G**, inner plate of right maxilliped; **H**, palp of mandible, outer face; **I**, distal tip of mandible palp, inner face; **J**, uropod 3.

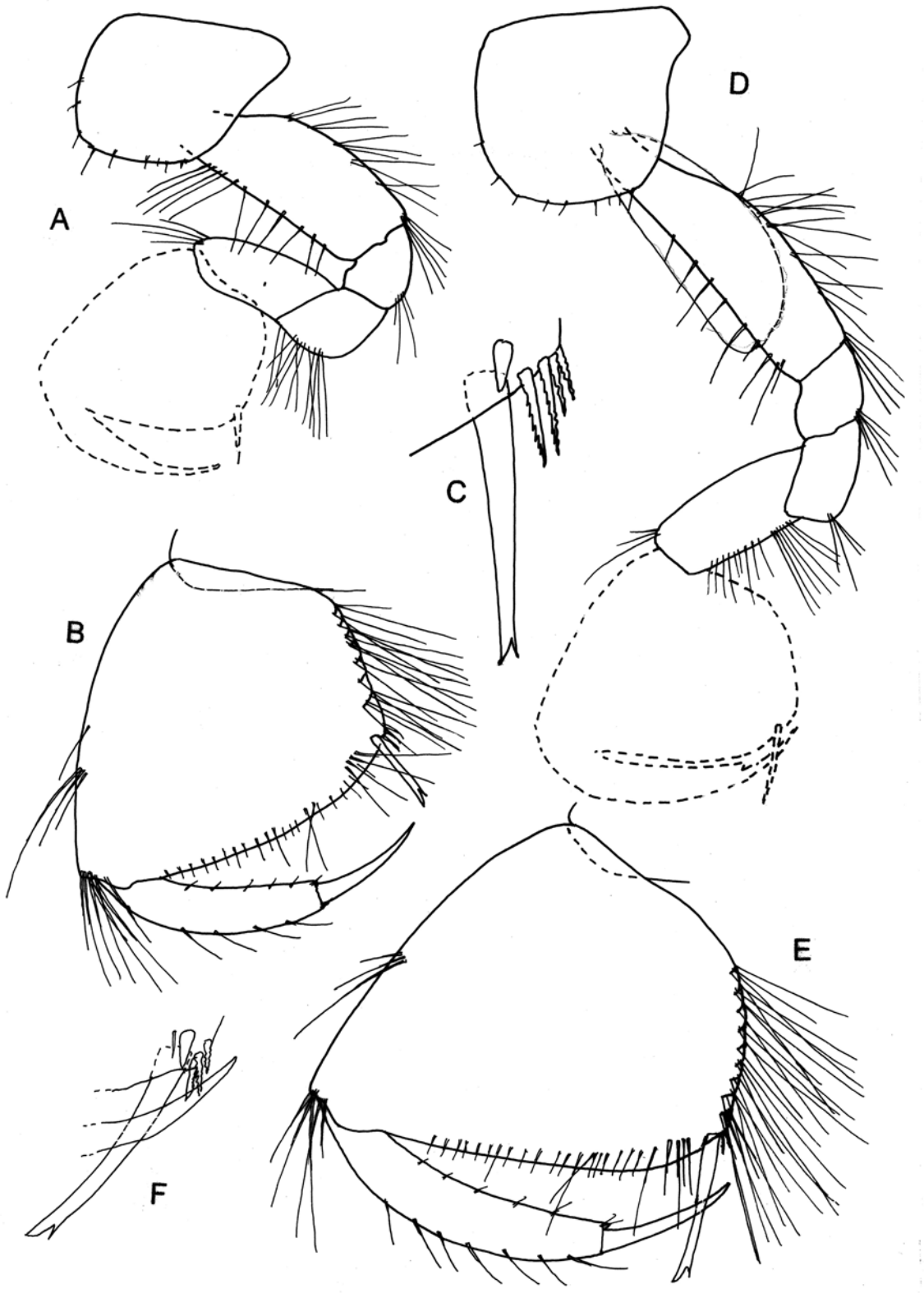

Figure 2. *Niphargus krasnodarus*, sp. n., Fanagoriyskaya Cave, male 11.5 mm, Holotype: **A**-**C**, gnathopod 1; **D**-**F**, gnathopod 2.

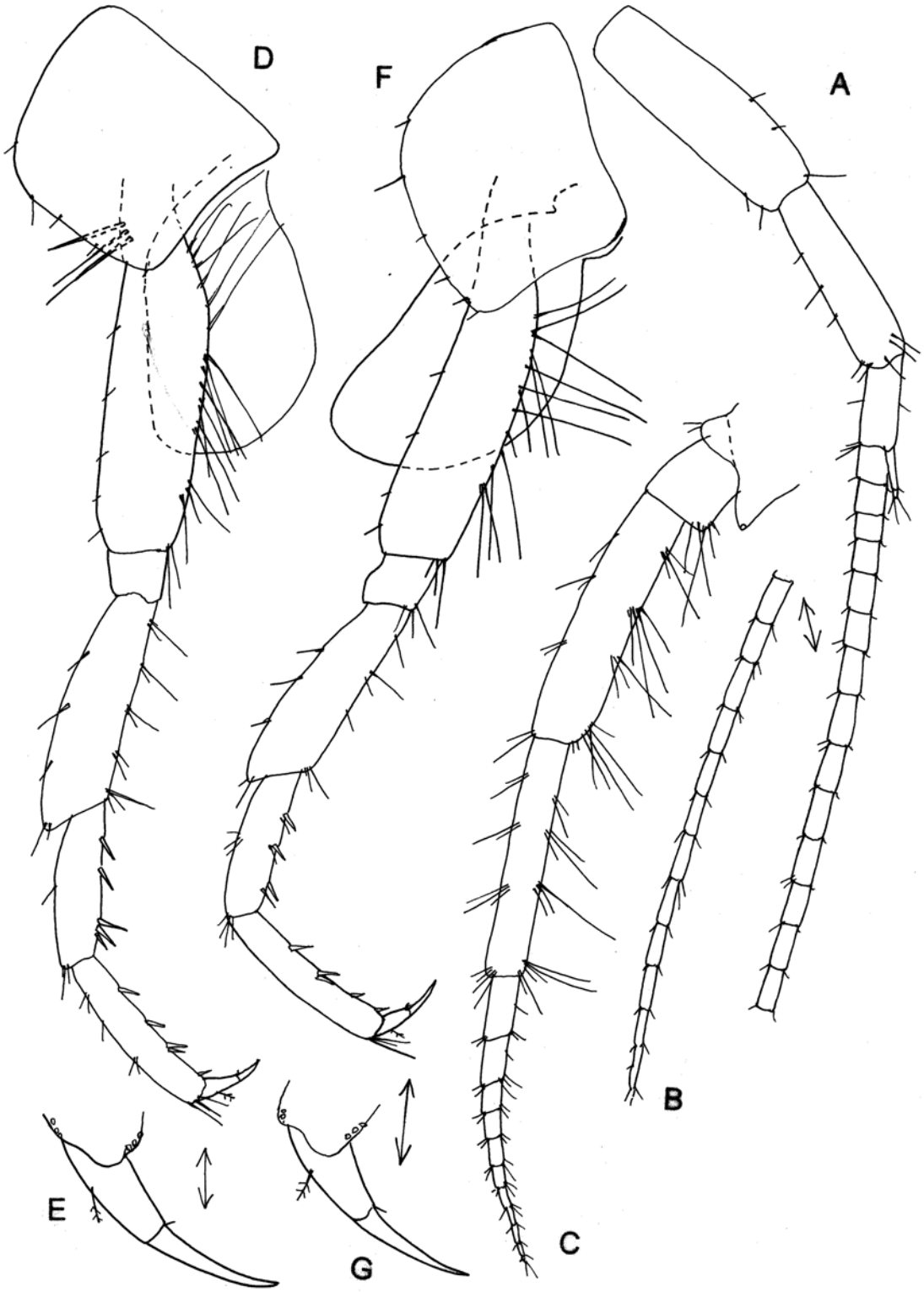

Figure 3. *Niphargus krasnodarus*, sp. n., Fanagoriyskaya Cave, male 11.5 mm, Holotype: **A**-**B**, antenna 1; **C**, antenna 2; **D**-**E**, pereopod 3; **F**-**G**, pereopod 4.

Mesosomal segments smooth. Metasomal segments 1-3 with several short dorsoposterior marginal setae each (Fig. 5B).

Coxae 1-4 moderately large, with short ventromarginal setae: coxa 1 broader than long, with subrounded ventroanterior corner (Fig. 2A); coxa 2 nearly as long as broad (Fig. 2D); coxae 3-4 broader than long (Figs. 3D, F); coxae 5-7 shorter than coxa 4 (Figs. 4A, C, E), coxa 6 with 3 setae on anterior, and 2 setae at posterior lobe.

Epimeral plate 1 without ventrofacial setae, but with convex posterior margin bearing 3-4 short marginal setae, and subrounded ventroposterior corner marked with one strong seta (Fig. 5B). Epimeral plate 2 with slightly convex ventral and posterior margin and angular ventroposterior corner marked with one strong seta, as well as with 3 subventral spines (Fig. 5B) Epimeral plate 3 subangular, with poorly convex posterior margin bearing several short setae, and with marked ventroposterior corner with one strong corner seta (Fig. 5B); 4 subventral spines appear on the epimeral plate 3.

Urosomite 1 with one seta on each dorsolateral side (Fig. 5G), and with one ventroposterior spine near the basis of uropod 1 (Fig. 5G). Urosomite 2 with 2 setae on each dorsolateral side; urosomite 3 smooth.

Antenna 1 slender, nearly reaching half of the body (7.3:11.5); peduncular articles moderately slender, progressively shorter (ratio: 63:60:25) (Fig. 3A); peduncular article 3 nearly half of peduncular article 2, all articles poorly setose (Fig. 3A); main flagellum consisting of 26 articles, most of them with one short aesthetasc each (Fig. 3A, B). Accessory flagellum short, 2-articulate (Fig. 3A).

Antenna 2 moderately slender, peduncular article 5 slightly shorter than 4, both articles along the ventral margin with 4 bunches of setae as long as or longer than the diameter of the articles themselves; setae at the dorsal margin are shorter than those at the inner ones. Flagellum relatively slender, consisting of 10-11 setae bearing relatively short setae (Fig. 3C).

Mouthparts: labrum entire, broader than long (Fig. 1B). Labium with entire outer lobes and developed inner lobes exceeding half of the outer lobes (Fig. 1C).

Mandibles: incisor and pars incisiva like other *Niphargus* species: left incisor with 5 teeth, lacinia mobiis with 4 teeth; right mandible: incisor with 4 teeth, lacinia mobilis bifurcate, pluritoothed. Mandibular palp 3-articulate: article 1 smooth; article 2 with 17 setae (Fig. 1H), palp article 3 subfalciform, barely longer than article 2, with 15-16 marginal D-setae and 5 long distal E-setae (Fig. 1H); on the outer face appears one group of 6 A-setae, on the inner face with 3-4 groups of B-setae (Fig. 1I), C-setae absent.

Maxilla 1: inner plate with 3 distal setae, outer plate with 7 spines (6 spines with one strong lateral tooth each, one spine (inner one) with 2-3 small lateral teeth) (Fig. 1D, E); palp 2 articulate, distal article with 9-10 setae (Fig. 1D).

Maxilla 2: both lobes with distolateral setae only (Fig. 5A).

Maxilliped: inner plates short, left plate with 4 distal simple spines (Fig. 1F), right plate with 5 spines (Fig. 1G); outer plate reaching 2/3 of palp article 2, with row of inner lateral spines; palp 4-articulate, nail shorter than pedestal (Fig. 1F).

Gnathopods 1-2 moderately large, with segment 6 slightly larger than corresponding coxae (Fig. 2A, D). Gnathopod 1: article 3 with one posterior median group of setae (Fig. 2A); article 5 shorter than article 6; article 6 (propodus) large, nearly as long as broad, trapezoid, with 7 groups of posterior marginal setae (Fig. 2B); palm poorly convex, inclined slightly over half of the propodus-length, defined on the outer face by one strong corner spine accompanied laterally by 4 short serrate small spines and one facial group of 3 long setae; on the inner face by one short subcorner spine (Fig. 2C); dactylus reaching the posterior margin of article 6, bearing along the outer margin one row of 4 single setae (Fig. 2B).

Gnathopod 2 barely larger than gnathopod 1; article 3 along posterior margin with one median group of setae (Fig. 2D); article 5 shorter than article 6 (Fig. 2D); article 6 (propodus) large, subtrapezoid, nearly as long as broad, with 9 groups of posterior marginal setae; palm poorly convex, oblique almost 2/3 of propodus length, defined on outer face by one long strong corner spine accompanied laterally by 3 slender short serrate spines (Fig. 2E); on inner face is defined by one short subcorner spine (Fig. 2F); dactylus reaching the posterior margin of segment 6, bearing along the outer margin one row of 7 single setae (Fig. 2E).

Pereopods 3-4 are quite similar to each other, with

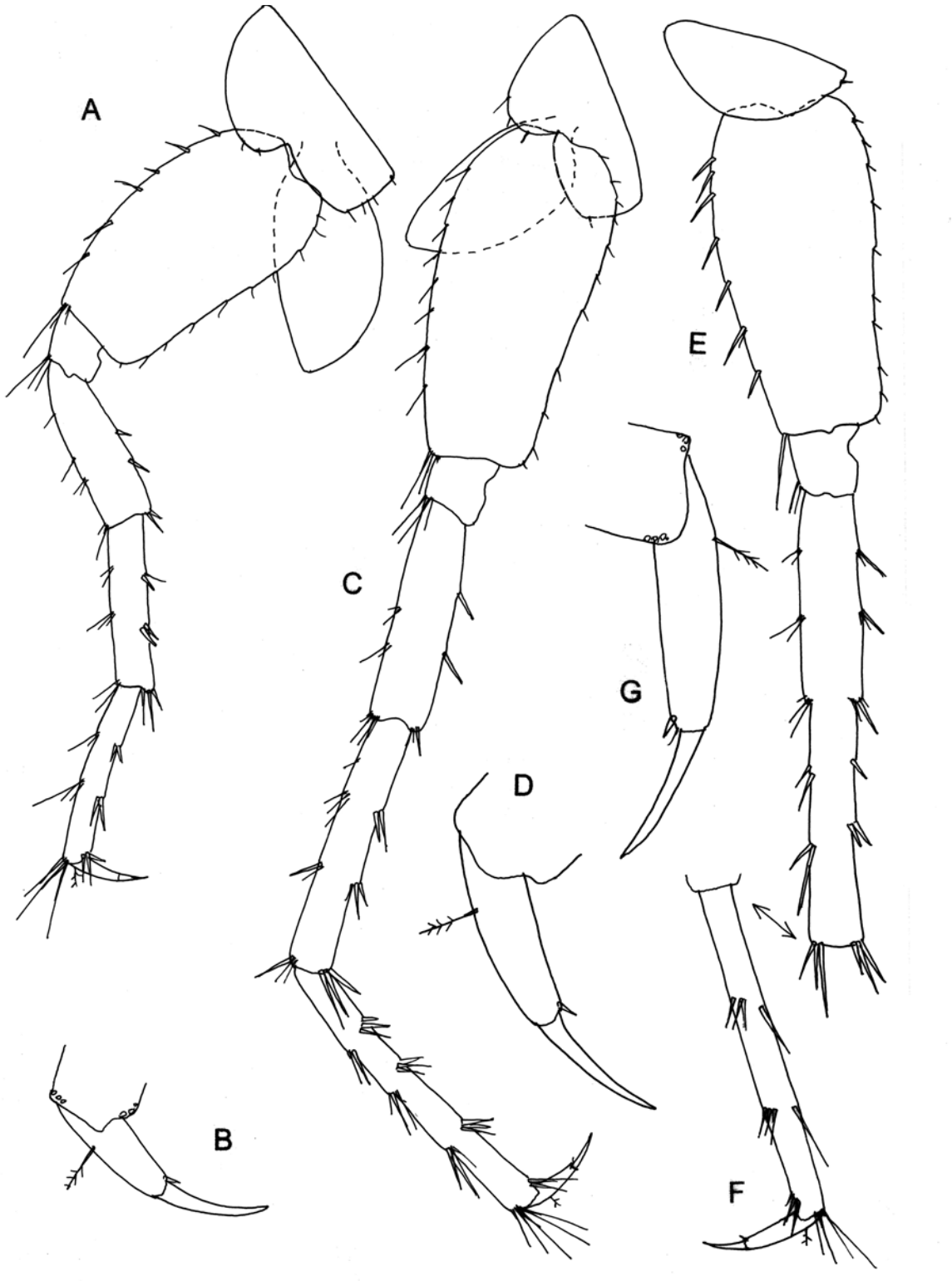

Figure 4. *Niphargus krasnodarus*, sp. n., Fanagoriyskaya Cave, male 11.5 mm, Holotype: **A**-**B**, pereopod 5; **C**-**D**, pereopod 6; **E**-**G**, pereopod 7.

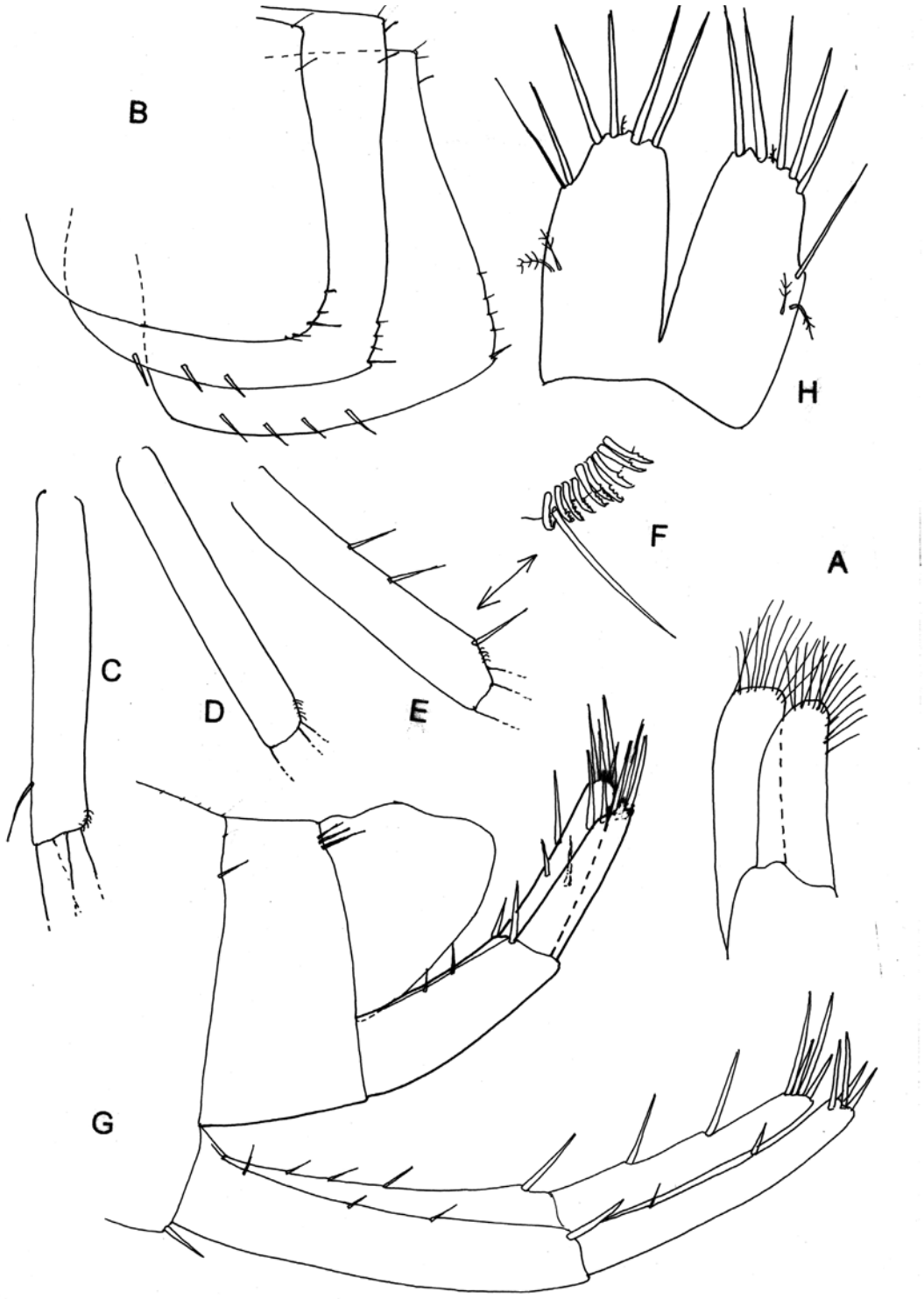

Figure 5. *Niphargus krasnodarus*, sp. n., Fanagoriyskaya Cave, male 11.5 mm, Holotype: **A**, maxilla 2; **B**, epimeral plates 1-3; **C**, peduncle of pleopod 1; **D**, peduncle of pleopod 2; **E**, peduncle of pleopod 3; **F**, retinacula of pleopod 3; **G**, urosome with uropods 1-2; **H**, telson.

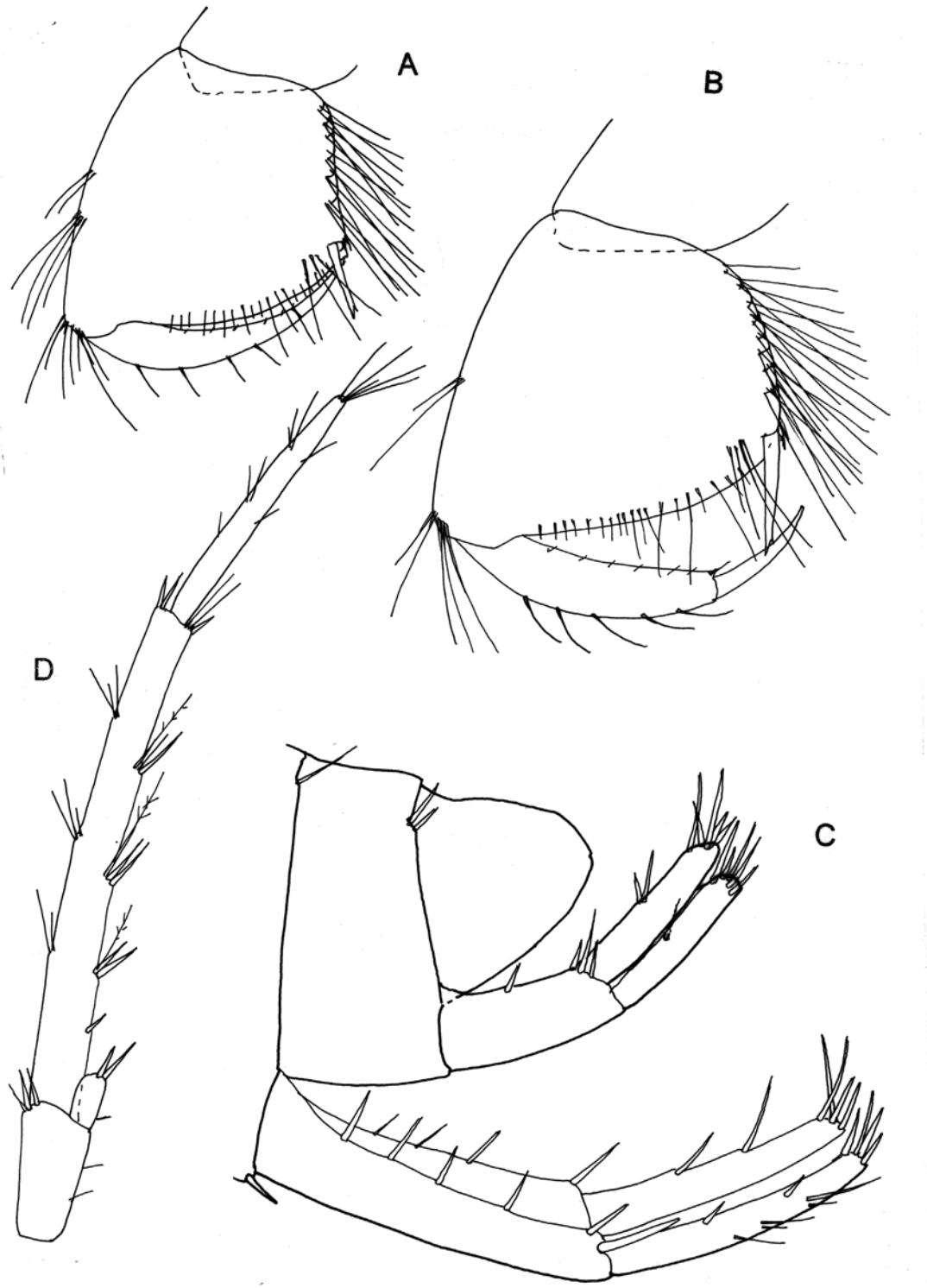

Figure 6. *Niphargus krasnodarus*, sp. n., Fanagoriyskaya Cave, male 8.5 mm, Paratype: **A**, propodus of gnathopod 1; **B**, propodus of gnathopod 2; **C**, urosome with uropods 1-2; **D**, uropod 3.

rather stout articles (Fig. 3D, F); the anterior margin of all articles are poorly setose, and setae are very short (Fig. 3D, F); the posterior margin of article 2 have long marginal setae; articles 3-4 have short setae at the posterior margin; articles 5-6 have 3-4 bunches of short spines along the posterior margin (Fig.. 3D, E); dactylus stout, with one short median seta (Fig. 3E, G); nail long, as long as or longer than pedestal; outer margin of dactylus with one median short plumose seta (Fig. 3E, G).

Perepods 5-7 moderately slender, pereopod 5 is shorter than pereopods 6-7 (Fig. 4A, C, E). Pereopod 5: article 2 subrectangular, without ventroposterior lobe; posterior margin barely concave in the middle, bearing a row of 9-10 posterior short marginal setae; facial setae are absent. The anterior margin of article 2 is slightly convex, with a row of short marginal spines in the proximal part, and setae in the distal part of article 2 (Fig. 4A). The anterior margin of articles 3-6 have bunches of short setae, along the posterior margin with 2-3 bunches of short spines each; dactylus short, shorter than half of article 6, moderately slender, with one median spine at the inner margin and one short median seta at the outer margin; nail slender, nearly as long as pedestal (measured along the outer margin) (Fig. 4B).

Pereopod 6 long, article 2 narrow, slightly more than twice as long as broad, without a distinct ventroposterior lobe and with a concave posterior margin bearing a row of 10-11 short marginal setae; anterior margin convex, with a row of longer marginal setae; articles 3-4 with short setae along the anterior margin; article 4 along the posterior margin with 3-4 spines (Fig. 4C); articles 5-6 along both margins with bunches of spines intermixed with single short setae (Fig. 4C); dactylus relatively slender, with one slender median spine at the inner margin, and one short median plumose seta at the outer margin; nail slender, rather shorter than pedestal (Fig. 4D).

Pereopod 7: article 2 narrow, nearly twice as long as broad, without distinct ventroposterior lobe, posterior margin slightly concave, bearing nearly 10 short marginal setae (Fig. 4E); anterior margin of article 2 with a row of long slender spines; articles 3-4 along the outer margin with short setae; article 4 with 3 bunches of short posterior marginal spines; article 5 distinctly shorter than 6, articles 6-7 along both margins with bunches of spines intermixed sometimes with single setae (Fig. 4E, F); dactylus slender, almost three times as short as article 6, with one median spine at the inner margin, and one short median plumose seta at the outer margin; nail slightly exceeding half of the pedestal (Fig. 4G).

Pleopods: Peduncle of pleopod 1 with one distoanterior long seta and with 7 retinacula (Fig. 5C); peduncle of pleopod 2 smooth, with 8 retinacula (Fig. 5D); peduncle of pleopod 3 along the posterior margin with 3 strong posterior setae, and with 10 retinacula (Fig. 5E, F).

Uropod 1: protopodite (peduncle) longer than rami, with a dorsoexternal and dorsointernal row of setae (except distal spines); rami straight, outer ramus slightly longer than the inner one, both rami with lateral and distal long spines (Fig. 5G).

Uropod 2: inner ramus barely longer than the outer one (Fig. 5G), both rami with lateral and distal spines.

Uropod 3 long and slender, protopodite with short inner ramus bearing 3 distal spines (Fig. 1J); outer ramus long, with both articles subequally long, poorly setose (Fig. 1J).

Telson not elongated, nearly as long as broad, deeply incised, lobes obtuse distally, bearing 4-5 long distal spines and one lateral seta accompanied in one lobe by 1 long spine (Fig. 5H); a pair of short plumose setae appear near the middle of each lobe (Fig. 5H). Some distal spines exceeding half of the telson-length.

Coxal gills ovoid, of moderate size, never reaching the distal tip of pereopod article 2 (Figs. 2D; 3D, F; 4A, C).

Females unknown.

Variability. Male, 8.5 mm (Paratype): Urosomite 1 with 1 dorsolateral seta on each side; urosomite 2 with 2 dorsolateral spines on each; urosomite 3 smooth (Fig. 6C). The ratio between antenna 1 and body-length is 4.5 : 8.5. Main flagellum of antenna 1 with 23-24 articles. Mouthparts like those in holotype, but the inner plate of maxilla 1 with 2-3 setae.

Gnathopod 1: propodus longer than broad, with 6 transversal rows of setae along the posterior margin; palm inclined to half of the propodus length, defined on the outer face by one strong corner spine accompanied by 3 short serrate lateral spines, as well as 3 facial

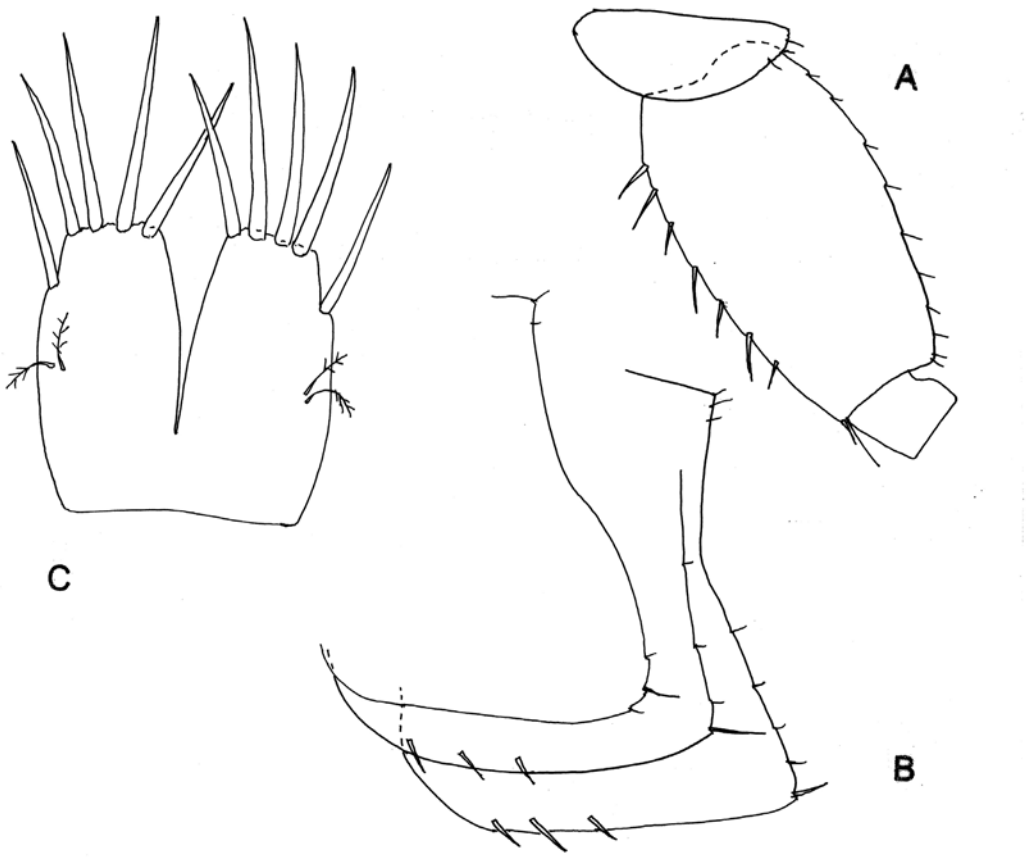

Figure 7. *Niphargus krasnodarus*, sp. n., Fanagoriyskaya Cave, male 8.5 mm, Paratype: **A**, basipodit of pereopod 7; **B**, epimeral plates 1-3; **C**, telson.

setae (Fig. 6A); at the inner face, the palm is defined by 1 short subcorner spine; dactylus with 4 setae along the outer margin (Fig. 6A).

Gnathopod 2: propodus nearly as long as broad, with 8 posterior transversal groups of marginal setae; palm inclined barely over half of the propodus length, defined on the outer face by 1 strong corner spine accompanied laterally by 2 short serrate spines and 3-4 facial setae, on the inner face by 1 short subcorner spine; dactylus along the outer margin with 5 setae (Fig. 6B).

Pereopods 3-4 like those in holotype. Pereopods 5-7 have a shorter and broader article 2, with a convex posterior margin; ventroposterior lobe absent (Fig. 7A). Dactylus of pereopods 3-7 like those in holotype.

Epimeral plates 1-3 angular, plate 1 with a convex posterior margin; plates 2-3 with a straight or slightly concave posterior margin and with 3 subventral spines each (Fig. 7B).

Uropod 1: peduncle with a dorsoexternal row of spines and a dorsointernal row of setae and spines (Fig. 6C); outer ramus slightly longer than the inner one, both rami with lateral and distal spines; outer ramus also has bunches of median setae (Fig. 6C).

Uropod 2: rami nearly of subequal length, inner and outer ramus with lateral and distal spines (Fig. 6C).

Uropod 3 long, second article of the outer ramus slightly exceeding half of the first article; first article along the inner margin with spines and single slightly plumose setae (Fig. 6D).

Telson as long as broad, obtuse distally; each lobe with 4 long distal and one distolateral spine (Fig. 7C); a pair of short plumose setae appear mid-laterally of each lobe.

Remarks. Most *Niphargus* species from Russia and the former Soviet Union are poorly described, and many taxonomical characters in these descriptions are omitted. In addition, some species have been described based on females only (*Niphargus gurjanovae*, etc.). Thus, the number of existing data is insufficient for

thorough taxonomical analyses.

Because of this, it was very difficult to establish the real taxonomical position of *N. krasnodarus* and its close relations to other *Niphargus* species known from this region.

Niphargus cubanicus Birstein, 1954 is known from the region of Krasnodar, from a pond in the village Goryachiy Klyuch in the western Caucasus, Russia, where Fanagoriyskaya Cave is situated (but apparently ecologically different). This species differs remarkably from our species, with a sharply pointed epimeral plate 3, and dactylus of pereopods 3-4 with 3 spines at the inner margin, etc.

Recently *Niphargus kirgizi* Fišer et al., 2009, was described from drinking water in Katransekisi (Bürücek pasture) at 1200 m above sea level, in Pozantı (Adana, Turkey). This species is rather similar to our species based on the following: an elevated number of retinacula (4-8), the shape of its epimeral plates, its narrow article 2 and slender dactylus of pereopods 5-7, the row of single setae at the outer margin of dactylus of gnathopods, the poor armature of urosomites 1-3 and long uropod 3. However, this species does differ from *N. krasnodarus* by several criteria, including: the presence of one seta on the inner plate of maxilla 1; the lower number of setae on maxilla 1 palp; the remarkably inclined propodus palm of gnathopods 1-2; the shorter and stouter dactylus of pereopods 5-7 with a shorter nail; the longer outer ramus of uropod 1; 2 spiniform setae at the base of uropod 1; the peduncle of pleopod 2 with "distinct stout setae"; shorter distal spines on telson and the absence of outer marginal spines on the lobes of telson; and the presence of strong and stout setae on coxa 6.

Niphargus alasonius Dershavin, 1945, described from Dumastori spring, is provided with a large propodus of gnathopods 1-2, with a dactylus bearing several setae along the outer margin, and the dactylus of perepods 3-7 with one spine at the inner margin, etc.; but differs from *N. krasnodarus* by several criteria, including: a more narrow telson, the second article of uropod 3 outer ramus is relatively short, article 2 of pereopod 7 is broader, propodus of gnathopods 1-2 have a strongly inclined palm.

Niphargus eugeniae Dershavin, 1945, described from a spring of the river Tchernaya near Gudaut, has a large, almost quadrate propodus of gnathopods 1-2; dactylus of both gnathopods with a row of setae along the outer margin. However, this species differs from *N. krasnodarus* because of the equal rami of uropod 1 in males, and the dactylus of pereopods 3-7 with additional spines, etc.

Niphargus inornatus Dershavin, 1945, from Basin Okhchi-chaia, is very poorly described and any real comparison of *N. krasnodarus* with this species is uncertain. Propodus of gnathopods 1-2 in *N. inornatus* is provided with a row of single setae along the outer margin, an inner plate of maxilla 1 with 2 setae, and telson with 3 distal and one lateral spine.

Niphargus smirnovi Birstein, 1952, described from Verkhne-Mzymtinskaya Cave, is also rather similar to our species based on its elevated number of retinacula, the long second article of outer ramus of uropod 3, the slender dactylus of pereopods 3-7, the relatively narrow basipodite of pereopod 7, the presence of several setae along the outer margin of dactylus in gnathopods 1-2, and its obtuse epimeral plates, etc. However, this species differs from *N. krasnodarus* because of its more narrow propodus of gnathopods 1-2 with less inclined palm, more angular ventroanterior corner of coxa 1, an inner plate of maxilla 1 with only 2 setae, a higher number of dorsolateral spines on urosomites 1-2, and a longer telson, etc.

Niphargus caaelestis G. Karaman, 1982, described from Ushchelnaya Cave near Vorontsovka, is also rather similar to our species, based on: its elevated number of retinacula; the narrow basipodite of pereopod 7; an elongated uropod 3 outer ramus; the slender dactylus of pereopods 3-7; the long spines on telson; and the shape of epimeral plates, etc. However, this species differs from *N. krasnodarus* by its more narrow propodite of gnathopod 1; the elevated number of setae on the outer margin of dactylus in gnathopods 1-2; the presence of 2 setae on the inner plate of maxilla 1, and its lower number of distal spines on the lobes of telson, etc.

Niphargus latimanus Birstein, 1952, described from Vorontsovskaya Cave near Khosta, is rather similar to our species, based on its elevated number of retinacula, the narrow basipodite of pereopod 7, and the shape of telson and uropod 3, etc. This species differs from *N. krasnodarus* based on the distinctly unequal

shape of gnathopods 1 and 2, and the different number of distal spines on telson, etc.

Niphargus pseudolatimanus Birstein, 1952 from Novaya Cave, is also similar to our species, based on the following: its elevated number of retinacula, narrow basipodite of pereopods 5-7, the inclined propodus of gnathopods 1-2 (with a row of setae along the outer margin), its obtuse epimeral plates, and the elongated distal article of uropod 3 outer ramus. However, it differs from *N. krasnodarus* by the presence of 4 setae on the inner plate of maxilla 1, by the broader propodus of gnathopod 2 with a longer dactylus, and by its longer telson, etc.

Although the subterranean fauna of Amphipoda in Russia and the former Soviet Union is believed to be very rich, it remains only partially known, and relatively poorly described and Figured.

The discovery of *Niphargus krasnodarus* sp. n. in the Krasnodar region (E. of the Black Sea, Russian Caucasus) as a distinct, but very similar species to some other *Niphargus* species known from Russia, Abkhazia, Georgia and Turkey, indicates an urgent need to redescribe all known species from this region of Eurasia. These studies will provide further, more detailed taxonomical studies of various *Niphargus* species, which will enable us to recognize the variability of each species.

It is interesting to remember that the Caucasus and adjacent regions are regions settled by various *Niphargus* species with an elevated number of retinacula, narrowed pereopods 5-7, and a strongly armed telson, etc.

Derivatio nominis. The name *krasnodarus* pertains to the name of the city of Krasnodar in the vicinity of the locality where this species was collected.

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