Acta Adriat., 28 (1—2): 103—119 (1987)

YU ISSN: 0001 - 5113
AADRAY

Original scientific paper
UDC 595.371 (262)

TWO NEW SPECIES OF GENUS *HARPINIA* BOECK (FAM. PHOXOCEPHALIDAE) FROM THE MEDITERRANEAN SEA

(CONTRIBUTION TO THE KNOWLEDGE OF THE AMPHIPODA 163)

DVIJE NOVE VRSTE IZ RODA *HARPINIA* BOECK (FAM. PHOXOCEPHALIDAE) IZ SREDOZEMNOG MORA

(163. PRILOG POZNAVANJU AMPHIPODA)

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Two new species of the genus *Harpinia* Boeck (*Amphipoda*, fam. *Phoxocephalidae*) are discovered and described from Bay of Neapel in the Mediterranean Sea, *Harpinia agna*, n.sp. and *Harpinia zavodniki*, n.sp. These species are figured and their taxonomic position within the genus *Harpinia* is discussed.

INTRODUCTION

The family *Phoxocephalidae (Amphipoda Gammaridea)* is presented in the North Atlantic Ocean by several genera and numerous species, especially species of genus *Harpinia*. The recent intensive studies of that family in the Pacific Ocean and coasts of Australia (Barnard 1958, 1960, 1969; Gurjanova 1977; Barnard and Drummond 1978; Barnard and Barnard 1982a, 1982b, etc.) showed that these parts of the World are much more rich in the genera and species of the family *Phoxocephalidae* than Atlantic Ocean.

The number of genera and species of the family *Phoxocephalidae* in the Mediterranean Sea is much lower than that in North Atlantic, and till recent time no endemic Mediterranean species have been known. G. Karaman (1973) mentioned for the Mediterranean Sea (including Adriatic Sea) 8 species (5 species of genus *Harpinia*, 2 species of genus *Metaphoxus* and one species of genus *Paraphoxus*). He described (1973) *Harpinia pectinata* f. *mediterranea* n. f. as first Mediterranean taxon, described from Boka Kotorska Bay in the Adriatic Sea.

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* This scientific work is realized in collaboration with Institute of Oceanography and Fisheries in Split, Yugoslavia.

G. Karaman recently (1986a, 1986b) descrbed two new endemic Mediterranean species, *Metaphoxus gruneri,* n. sp. and *Phoxocephalus aquosus,* n. sp., from the vicinity of Malta Island.

Based on further studes of the family *Phoxocephalidae* in the Mediterranean Sea, two new species of genus *Harpinia* were discovered and here described and figured, *Harpinia agna,* n. sp. and *H. zavodniki,* n. sp.

It is evident, that Mediteranean fauna of the family *Phoxocephalidae* is relatively rich in the taxa and we suppose that other new species can be disocered during next studies of the Mediterranean fauna of *Amphipoda.*

RESULTS

HARPINIA AGNA, n. sp.

Material examined: Mediterranean Sea, Golfo di Napoli (Bay of Neapel): — Ischia Island, »Spiaggia degli Inglesi«, sandy bottom, depth 4—5 meters, August 1, 1969, 5 scep. (leg. U. Schiecke);

— SW. of Punta di S. Pancrazio, Ischia, muddy bottom, on 150 meters depth, January 17, 1970, 10 spec. (leg. U Schiecke).

Description: Ovigerous female 3 mm: Metasomsegments 1—3 bearing several longer hairly-like setae each (fig. 4 G), urosomites smooth.

Head relatively stout and short, eyes absent (fig. 1A). Antenna 1 short, first peduncular segment with 2 ventrodistal stout plumose setae (fig. 4A); peduncular segment 2 with bunch of long ventrodistal setae, peduncular segment 3 short (fig. 4A); main flagellum shorter than peduncle, consisting of 6 articles (fig. 4A), accessory flagellum consisting of 4 articles (fig. 4A).

Antenna 2 short, peduncle without liguliform (= ensiform) process on peduncle (fig. 4B), peduncular segment 4 distally dilated, at distoexternal and distointernal tip with bunch of long setae; peduncular segment 5 narrow, with row of ventral setae; flagellum slender, shorter than peduncle, consisting of 4 articles, first article long (fig. 4B).

Labrum broader than long, slightly bilobe (fig. 2A, B); labium with entire outer lobes bearing small distal finger, inner lobes small (fig. 4C).

Mandibles with nontriturative, conical molar, bearing one distal spine (fig. 3E). Left mandible with broad, undistinctly toothed incisor and broad, pluritoothed lacinia mobilis accompanied by row of 6—7 partially plumose setae (fig. 3F). Right mandible with 3-toothed incisor, lacinia mobilis short, with 2 distinct teeth (fig. 3E), accompanied by row of 5 setae (one smooth and 4 plumose setae); mandibular palp long and very slender, 3-segmented, palp segments progressively longer, distal segment with 6—7 simple setae (fig. 3D).

Maxilla 1: inner plate short, bearing 2 plumose setae (fig. 4D), outer plate bearing 9 spines bearing one to several lateral teeth each (fig. 4D); palp 2-segmented, with 4 distal spine-like setae.

Maxilla 2: both plates short and broad, with distomarginal setae only, inner plate hardly broader than outer one (fig. 4E).

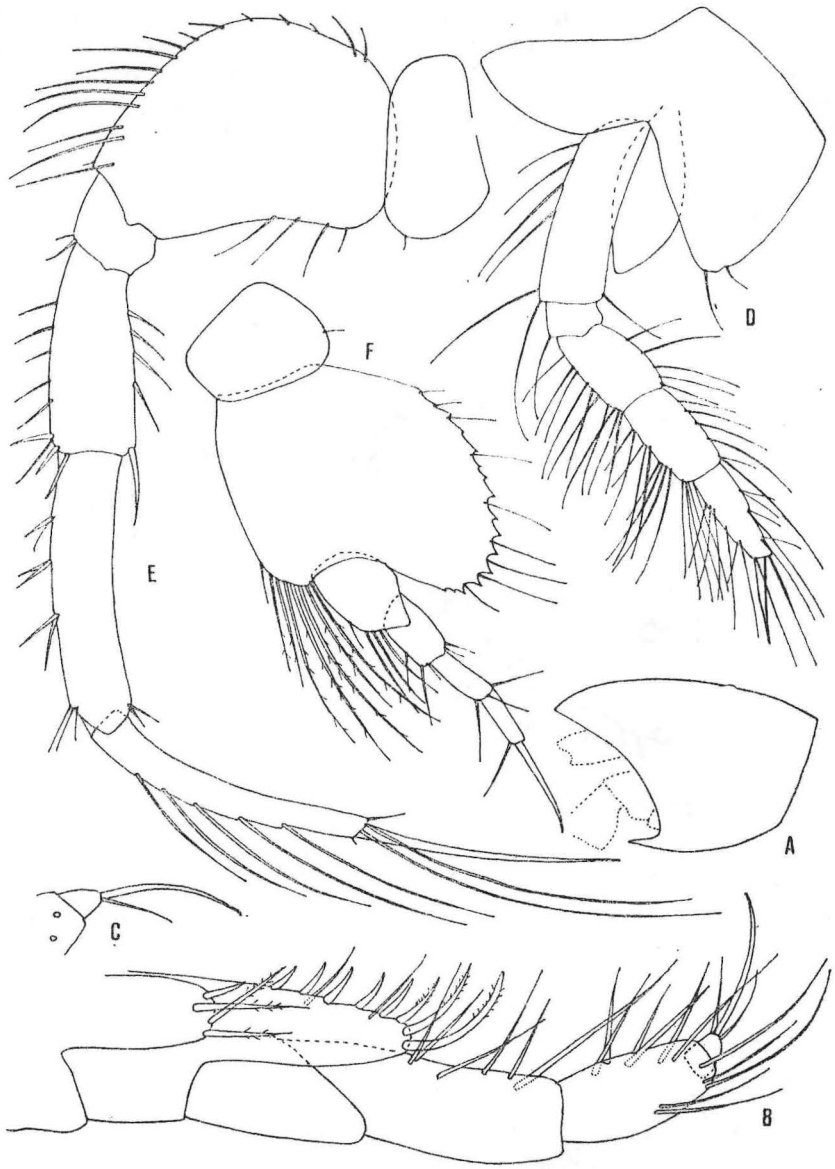

Fig. 1. *Harpinia agna*, n. sp., Bay of Neapel, Ischia, female 3 mm: A = head; B—C = maximilliped; D = pereopod 5; E = pereopod 6; F = pereopod 7

Maxilliped: inner plate short, hardly exceeding basis of first palp segment and bearing distally one short spine and 3 long plumose setae (fig. 1B); outer plate not reaching half of second palp segment, bearing a row of distolateral slender, partially plumose spines, palp segment 3 narrow, unlobed

distally, bearing setae along both margins (fig. 1B); palp segment 4 short, distally with very long nail accompanied by 1—2 shorter setae (fig. 1B, C).

Coxae 1—4 with entire ventral margin, bearing a row of ventral plumose setae each, but number of setae on coxa 4 is smaller (fig. 2D). Coxa 1 dilated distally (fig. 3B), coxae 2 and 3 with nearly parallel lateral margins (fig. 2C,

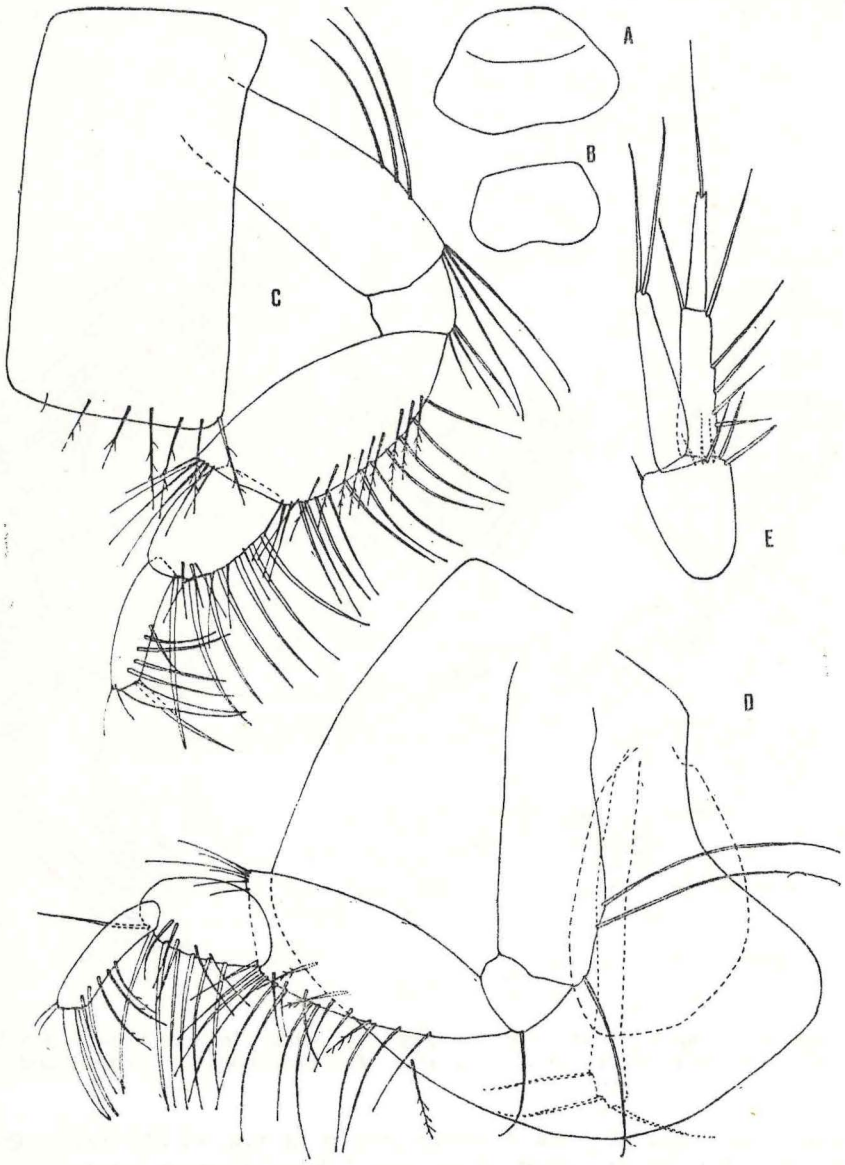

Fig. 2. *Harpinia agna*, n. sp., Bay of Neapel, Ischia, female 3 mm: A—B = laburm; C = pereopod 3; D = pereopod 4; E = uropod 3

3C), coxa 4 large, with large ventroposterior lobe (fig. 2D). Coxa 5 relatively large, but smaller than coxa 4, deeply bilobe, posterior lobe much larger than anterior one (fig. 1D); coxae 6—7 entire, small (fig. 1 E, F).

Gnathopods 1—2 of the similar shape and size, but segment 6 of gnathopod 2 is slightly broader than that of gnathopod 1 (fig. 3 B, C); segment 2 of gnathopod 1 is slightly less setose that of gnathopod 2 (fig. 3 B, C); seg-

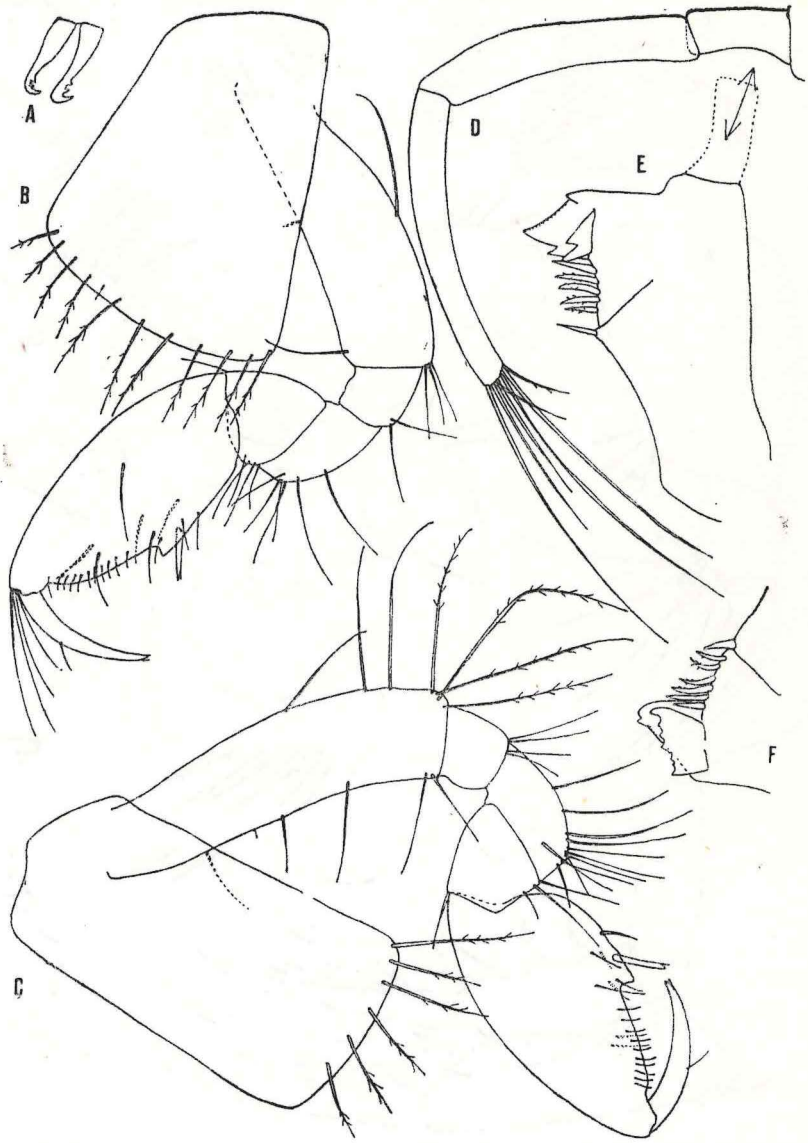

Fig. 3. *Harpinia agna*, n. sp., Bay of Neapel, Ischia, female 3 mm: A = retinacula; B = gnathopod 1; C = gnathopod 2; D—E = right mandible; F = tip of left mandible

ment 4 with several groups of setae along posterior margin (fig. 3 B, C); segment 5 short; segment 6 with oblique convex palm defined by one strong corner tooth and one strong marginal spine; dactyl slender, recurved, bearing

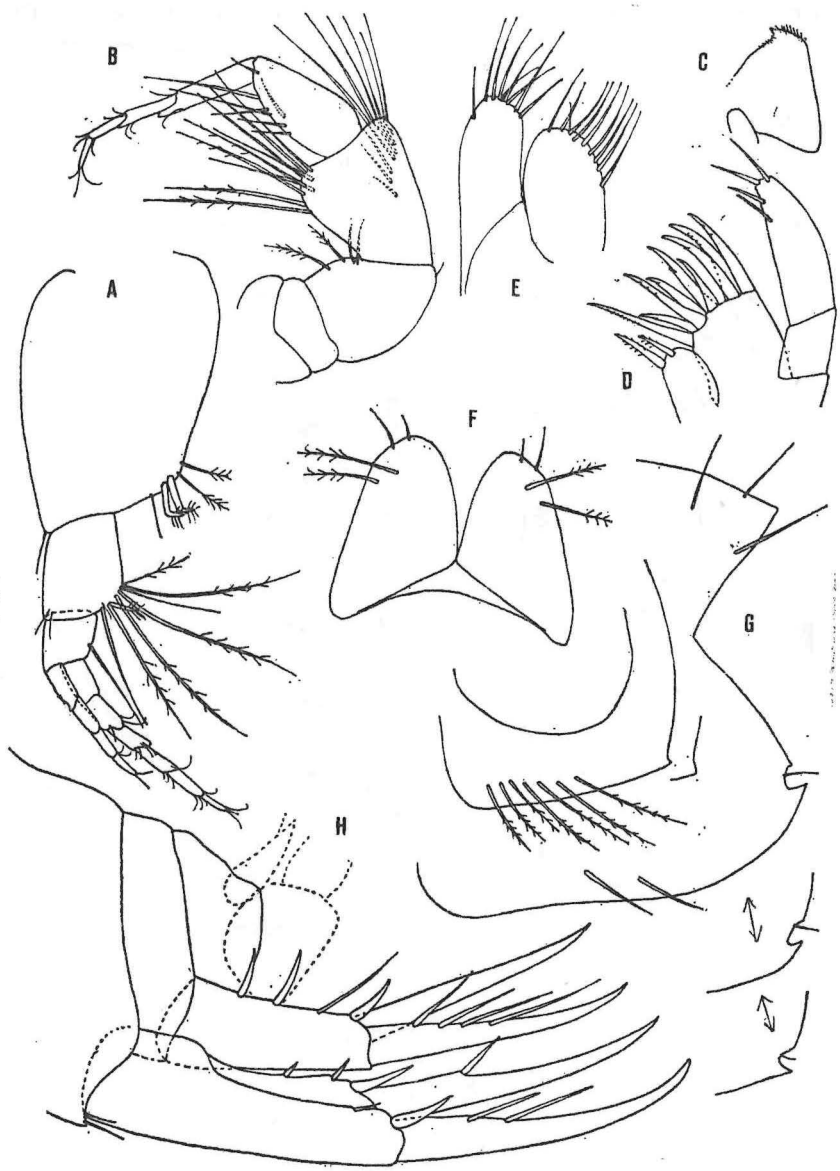

Fig. 4. *Marpinia agna*, n. sp., Bay of Neapel, Ischia, female 3 mm: A = antenna 1; B = antenna 2; C = part of labium; D = maxilla 1; E = maxilla 2; F = telson; G = epimeral plates 1—3; H = urosome with uropods 1—2

one seta at outer margin sitting nearly the middle of dactyl (fig. 3, C, D).

Pereopods 3 and 4 of the similar shape, with slightly inflated segments 4 and 5 (fig. 2, C, D), segment 5 with up to 7 strong long spine-like setae along posterior margin longer than segment 6 itself; segment 6 with long setae in distal part of posterior margin and with one strong distal spine as

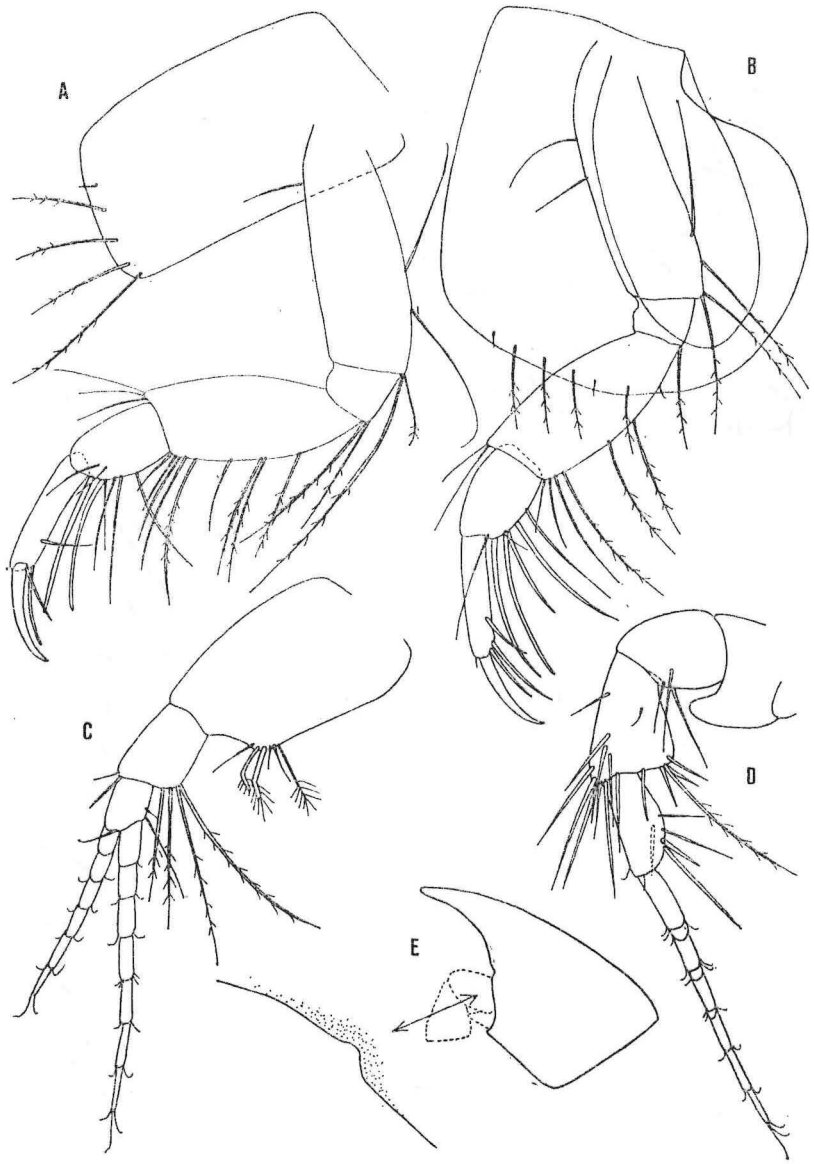

Fig. 5. *Harpinia zavodniki*, n. sp., Bay of Neapel, Banco Lo Bianco, female 2.9 mm: A = pereopod 3; B = pereopod 4; C = antenna 1; D = antenna 2; E = head

long as dactyl itself (fig. 2 C, D); dactyl nearly as long as segment 6, without seta at outer margin.

Pereopod 5: segment 2 linear, unlobed, with row of long setae along anterior margin, segments 4—6 with long setae at both margins; segment 7 (dactyl) nail-shaped, slightly shorter than segment 6 itself (fgi. 1 D).

Fg. 6. *Harpinia zavodniki*, n. sp., Bay of Neapel, Banco Lo Bianco, female 2.9 mm: A = gnathopod 1; B = gnathopod 2; C = labrum; D—E = maxilliped; F = urosome with uropods 1—2

Pereopod 6 is much longer than pereopod 5, segment 2 dilated, with slightly concave posterior margin bearing several setae (fig. 1 E), anterior mragin strongly convex, bearing row of long setae; segmetns 4—5 with short spines; segment 6 with row of long setae (simple) along anterior margin, dactyl, narrow, as long as segment 6 (fig. 1 E).

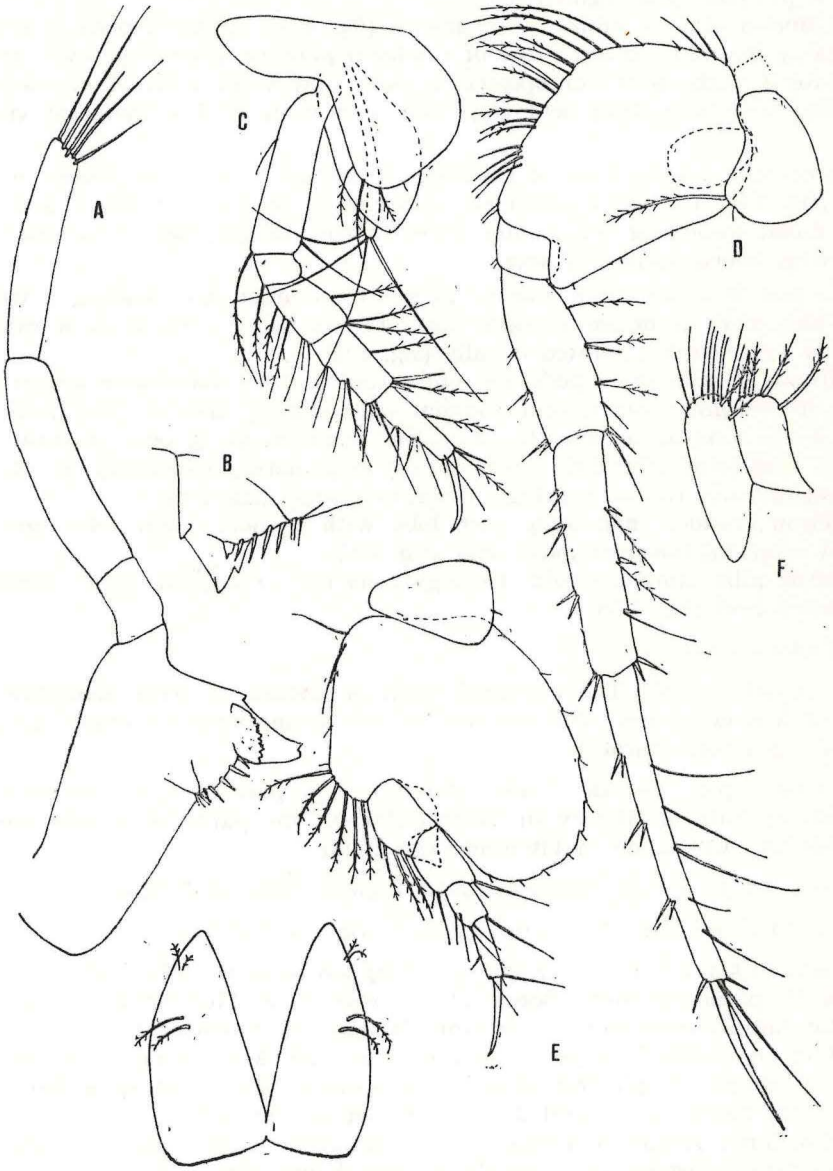

Fig. 7. *Harpinia zavodniki*, n. sp., Bay of Neapel, Banco Lo Bianco, female 2.9 mm: A = left mandible; B = tip of right mandible; C = pereopod 5; D = pereopod 6; E = pereopod 7; F = maxilla 2; G = telson

Pereopod 7 is short; segment 2 strongly dilated, posterior margin moderately serrate, bearing row of logn plumose setae, ventroposterior lobe large, reaching or slightly exceeding distal tip of segment 3 (fig. 1 F); segments 3—6 relatively, dactyl longer than segment 6 (fig. 1 F).

Pleopods with stout short peduncles bearing 2 retinacula each (fig. 3 A), rami of pleopods plurisegmented.

Epimeral plate 1 subrounded, smooth (fig. 4 G), epimeral plate 2 angular or weakly toothed and with row of subdistal plumose setae (fig. 4 G); epimeral plate 3 with short ventoposterior tooth and small excavation above it, provided with one short seta (fig. 4 G), and with 2—3 submaginal ventral setae.

Urosomite 1 near basis of peduncle of uropod 1 with one bunch of 2—3 setae (fig. 4 H). Uropod 1: peduncle with row of dorsoiferior spines and with short distal spine (fig. 4 H), outer ramus hardly longer than inner one, both rami with lateral spine-like setae.

Uropod 2: outer ramus hardly longer than inner one, bearing a row of spine-like setae at dorsal margin, inner ramus naked. Tip of both rami of uropods 1—2 slender, pointed distally (sig. 4 H).

Uropod 3 with short peduncle, outer ramus more than twice longer than peduncle, 2-segmented; second segment only slightly shorter than first one, bearing one long distal seta (fig. 2 E), first segment along outer margin with row of long setae (fig. 2 E); inner ramus long, hardly exceeding tip of first segment of outer ramus, bearing 2 distal long setae (fig. 2 E).

Telson broader than long, each lobe with 2 short distal setae and one pair of subdistal facial plumose setae (fig. 4 F).

Coxal gills simple, ovoid. Oostegyts narrow, marginal setae, occur on pereonites 2—5 (fig. 2 D).

Males unknown.

Variability: The marginal teeth on incisor of both mandibles are more or less developed. The presence of two distal setae on inner ramus of uropod 3 is stable character.

Holotype: Female 3 mm. Holotype and paratypes are deposited in Museum of Natural History in Verona (Italy). One paratype is deposited in KARAMAN's Collection in Titograd (Ygoslavia).

Loc. typ.: Ischia, »spiaggia degli Inglesi«, Bay of Neapel.

Distribution: Golfo di Napoli (= Bay of Neapel).

Remarks and affinities: *Harpinia agna* is rather similar to the species *Harpinia crenulata* Boeck 1871 known from Mediterranean Sea and Atlantic, but *H. crenulata* differs from *H. agna* by absence of ventroanterior dilatation on article 2 of pereopod 7 bearing only a few short setae on this place, by shape of epimeral plate 3, by absence of row of spine-like setae along outer ramus of uropod 2, by short second segment of outer ramus in uropod 3, inner ramus of uropod 3 is remarkably shorter than first segment of outer ramus, bearing only one shorter distal seta, etc.

Some females of gneus *Pseudharpinia* Schell. 1931 are rather similar to the females of *Harpinia agna*. So, the females of *Pseudharpinia brevirostris*

Chevreux 1927, known from N. Atlantic is rather similar to that of *H. agna* by presence of 2 distal setae on inner ramus of uropod 3, by narrow gnathopod 1, by short and broad head, etc., but *P. brevirostris* differs from *H. agna* by short inner ramus of urpod 3, by shorter second segment of outer ramus of uropod 3 without long distal seta, by angular epimeral plate 3, etc.

The females of *Pseudarpinia birjulini* Gurjanova 1953, known from Pacific Ocean has 3 long distal setae on tip of inner ramus of uropod 3, but outer ramus of uropod 3 is provided with 2 distal long setae, also, epimeral plate 3 is sharply pointed, segment 2 of pereopod 7 is strogly serrate, etc.

Ecology: *Harpinia agna* was found on muddy and sandy bottom, on depth between 4 and 150 meters, accompanied by several other *Harpinia* species *(H. dellavallei* Chevr. 1910, *H. pectinata* f. *mediterranea* G. Kar. 1973); *Metaphoxus pectinatus* (Walker 1896), *Carangoliopsis spinulosa* Ledoyer 1970. etc.

HARPINIA ZAVODNIKI n. sp.*

Material examined: Mediterranean Sea, Golfo di Napoli (= Gulf of Neapel): Banco Lo Bianco, depth 140—150 meters, organogenic sandy bottom, May 4, 1970, one spec. (holotype) (leg. U Schiecke);

— ibid., depth 180—190 meters, muddy bottom, August 1, 1970, one spec. (leg. U. Schiecke);

— ibid., depth 190 meters, August 1, 1970, 3 spec. (leg. U Schiecke);

— Mergellina, depth 200 meters, June 6, 1955, one spec. (leg. S. Ruffo);

— N. of Capri Island, depth 120—130 meters, sand + mudd, December 14, 1971, one spec. (leg. U. Schiecke);

— Off Capri Island, depth 120 meters, sand + mudd, November 14, 1974, one spec. (leg. U. Schiecke).

Description: Ovigerous female 2.9 mm: Metasomsegments 1—3 each with 4—6 dorsal short setae (fig. 8 G), urosomite 1 near basis of peduncle of uropod 1 with 2 short lateral setae (fig. 6 F).

Head with long rostrum (shield), lateral margins with small medial excavation and small ventroanterior tooth (fig. 5 E), eyes absent.

Antenna 1: peduncular segment 1 broad, bearing one group of ventral setae including 2 strong angular plumose setae (fig. 5 C); peduncular segment 2 with 4 long ventral plumose setae, ped. segment 3 short (fig. 5 C); main flagellum consisting of 7 articles, accessory flagellum consisting of 6 articles (fig. 5 C).

Antenna 2: peduncle with well developed ensiform process (fig. 5 D), peduncular segments 3—5 short, ped. segment 3 with 3—4 ventral setae, ped. segment 4 with bunch of distodorsal spines and ventral spines and one long plumose seta (fig. 5 D), segment 5 slender, with ventral spines and setae; flagellum consisting of 5—6 articles.

Labrum entire (fig. 6 C), labium short and broad, outer lobes with distoinferior finger, inner lobes small, fused together (fig. 8 C, D).

Mandible with nontriturative, conical molar bearing several distal spines only. Left mandible with narrow incisor bearing 2 teeth, lacinia mobilis

* This species is named in honor of Dr. Dušan Zavodnik from the Institute »Ruđer Bošković«, Center for Marine Research in Rovinj, Yugoslavia, for his important ecological studies of the benthic fauna from the Adriatic Sea.

broad, pluritoothed (fig. 7 A), between molar and incisor appear 5 smooth spines. Right manible with broad 3-toothed incisor, lacinia mobilis very small (fig. 7 B), between molar and incisor is roy of 4 spines. Mandibular palp long, 3-segmented, palp segment 3 with 5 distal setae (fig. 7 A).

Maxilla 1: inner plate short, with 2 stout plumose setae (fig. 8 B), outer plate with 9 spines bearing several lateral teeth each; palp 2-segmented, palp segment 2 with 3 distal spines and one seta.

Maxilla 2: both plates short, with distal setae each (fig. 7 F).

Maxilliped: inner plate short, with 3 distal plumose setae (fig. 6 E); outer plate short, with distolateral row of spines and one distal strong plumose seta (fig. 6 E); palp 4-segmented, palp segment 3 narrow, unlobed, segment 4 very short, with very long distal nail accompanied by 2 short setae (fig. 6 D, E) and one dorsomedian seta.

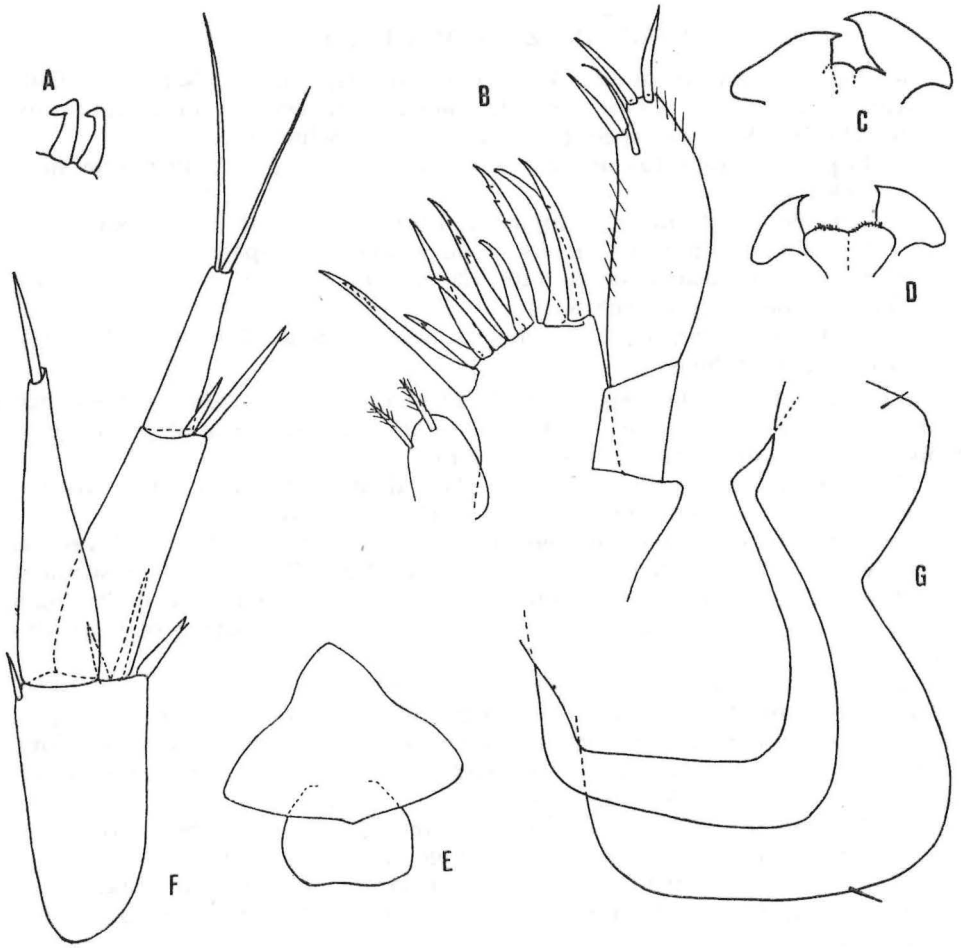

Fig. 8. *Harpinia zavodniki*, n. sp., Bay of Neapel, Banco Lo Bianco, female 2.9 mm: A = retinacula; B = maxilla 1; C—D = labium; E = labrum; F = uropod 3; G = epimeral plates 1—3

Coxae 1—3 with entire ventral margins, coxa 1 dilated, with row of ventral setae (fig. 6 A); coxae 2—3 with parallel lateral margins and long ventral pumose setae (fig. 5 A; 6 B), coxa 4 with subrounded ventroposterior large lobe (fig. 5 B). Coxa 5 deeply bilobe, with very large posterior lobe provided with ventral marginal setae (fig. 7 C). Coxa 6 small, weakly bilobe, with long posterior marginal plumose seta (fig. 7 D). Coxa 7 entire, small (fig. 7 E).

Gnathopods 1—2 nearly subequal. Gnathopod 1: segment 2 poorly setose, segments 3—5 short (fig. 6 A); segment 6 long and narrow, with oblique palm defined by strong corner tooth and 1 spine (fig. 6 A), dactyl with one medial seta at outer margin.

Gnathopod 2: segment 2 with long plumose posterior distal setae (fig. 6 B), segments 3—5 short; segment 6 ovoid, palm oblique, convex, defined by strong corner tooth and 1 spine, dactyl with one median seta at outer margin (fig. 6 B).

Pereopod 3—4 similar to each other, with long setae at posterior margin of articles 2—4 (fig. 5 A, B); segment 5 short, with 3 long distoposterior spines (2 spines exceeding tip of segment 6); segment 6 narrow, with one posteromedian and 2 slender posterodistal spines (fig. 5 A, B); dactyl slightly shorter than segment 6, stout.

Pereopod 5 is short, segment 2 linear, unlobed, with one long distal seta on each side (fig. 7 C), segments 4—6 progressively longer, bearing setae along both margins; dactyl nearly as long as segment 6 (fig. 7 C).

Pereopod 6 is more twice longer than pereopod 5, segment 2 dilated, with strongly convex anterior margin bearing row of setae (fig. 7 D), posterior margin of segment 2 slightly concave, with well developed ventroposterior lobe; segments 4—6 progressively longer, bearing spines along anterior margin, nail remarkably shorter than segment 6 (fig. 7 D).

Pereopod 7 short, segment 2 large, ovoid, with strong ventroanterior dilatation provided with several plumose setae (fig. 7 E), and with large ventroposterior lobe reaching the tip of article 4, posterior margin of segment 2 poorly crenellated, bearing short marginal single setae only (fig. 7 E); article 3 with row of distoanterior plumose setae, article 4 shorter than 3, article 5longer than 4, dactyl (article 7) is longer than segment 6.

Pleopods with short, stout peduncle, each with 2 retinacula (fig. 8 A). Epimeral plates 1—3 subrounded, with convex posterior margin, epimeral plate 3 usually with one ventral small seta (fig. 8 G).

Uropod 1: peduncle slightly longer than rami, with dorsal row of spines and with short distal spine (fig. 6 F); rami slender, pointed distally, both with noe dorsal spine, outer ramus is hardly longer than inner one (fig. 6 F).

Uropod 2: peduncle with row of dorsal spines, dorsodistal spine short and stout (fig. 6 F), rami slender, pointed, like these in uropod 1, outer ramus hardly longer than inner one, with or without one dorsal spine, inner ramus naked.

Uropod 3: peduncle with several distal spines; inner ramus only slightly exceeding tip of first segment of outer ramus, bearing one shorter distal spine-like seta (fig. 8 F); outer ramus 2-segmented, first segment with 2 distoexternal spines, second segment slightly over 2/3 of first sement, bearing 2 distal longer setae (fig. 8 F).

Telson incised nearly to the basis, each lobe tapering distally, bearing one pair of short plumose setae near tip and one pair of longer pumose setae near the middle (fig. 7 G).

Male unknown.

Variability: Outer ramus of uropod 2 with or without dorsomedian spine. Epimeral plate 3 with or without ventral small seta. The presence of 2 distal setae on tip of outer ramus on uropod 3 is stable character.

Holotype: Female 2.9 mm. Holotype is deposited in Museum of Natural Museum in Verona (Italy).

Loc. typ.: Banco Lo Bianco, 140—150 m depth, Bay of Neapel.

Distribution: Golfo di Napoli (= Bay of Neapel).

Remarks and Affinities: *Harpinia laevis* Sars 1895 known from N. Atlantic Ocean, has similar segment 2 of pereopod 7 poorly serrate, and reaching distal tip of article 4 of pereopod 7, ensiform process on antenna 2 peduncle, entire subrounded epimeral plate 3, etc., but it differs from *H. zavodniki* by second segment of outer ramus in uropod 3 bearing only one distal short seta, presence of plumose setae on epimeral plates 2—3, longer palp article 4 of maxilliped, etc.

Harpinia crenuloides Stephensen 1925 known from N. Atlantic (off Greenland) has also elongated ventroposterior lobe of article 2 of pereopod 7, but shape and pilosity of uropod 3 is different (both rami with only one distal seta, inner ramus not reaching tip of first segment of outer ramus), etc.

Harpinia truncata Sars 1895, known from Mediterranean Sea and Atlantic Ocean, differs from *H. zavodniki* by shorter ventroposterior lobe of segment 2 in pereopod 7, by presence of facial setae on epimeral plate 3, by shorter inner ramus of uropod 3, outer ramus with only one distal seta, etc.

Harpinia serrata Sars 1882 from Atlantic Ocean has two distal setae on outer and inner ramus of uropod 3, strongly serrate posterior margin of segment 2 in pereopod 7, etc.

The female of *Harpinia* (?) *nadania* Barnard, J. 1961, known from Tasman Sea has also tip of outer ramus of uropod 3 with 2 long distal setae, but this species differs from *H. zavodniki* by shorter inner ramus of uropod 3 not reaching tip of first segment of outer ramus, segment 2 of pereopod 7 is with shorter posterior lobe not reaching ventral tip of article 4, epimeral plate 3 is slightly pointed, etc.

Ecology: *Harpinia zavodniki*, n. sp. was found on sandy and muddy bottom, as well as on organogenic sandy bottom, on depth of 120—200 meters, often accompanied by *Harpinia dellavallei* Chevreux 1910, *Harpinia crenulata* Boeck 1871, *Metaphoxus pectinatus* (Walker 1896), etc.

DISCUSSION

Barnard, J. L. and Drummond (1978) as well as Gurjanova (1977) provided indipendently, almost in the same time, the revision of the family *Phoxocephalidae*, creating several new subfamilies and new genera

each, but many problems regarding the value of numerous new or old genera remained undistinct.

K a r a m a n, G. (1980) discussed the taxonomic problems and value of six similar genera of the subfamily *Harpiniinae* (genera *Heterophoxus* Shoemaker 1926, *Harpinia* Boeck 1876, *Cocoharpinia* Karaman,, G. 1980, *Proharpinia* Schellenberg 1931, *Pseudharpinia* Schelllenberg 1931 and *Harpiniopsis* Stephensen 1925) indicating that further studies on the males of all these taxa will show the walue of each of these genera. However, the genus *Cocoharpinia* Karaman, G. 1980 differs from genus *Harpinia* Boeck 1876 only by shape of males (eyes present in males, male antenna 1 article 1 of main flagellum short, not brushy, article 3 of peduncle of antenna 1 with numerous long ventral setae).

The both new species described here from Bay of Neapel, *Harpinia agna,* and *H. zavodniki,* are described based on adult ovigerous females, and the i rtaxonomic characters are identic with these of genus *Harpinia.* The discovery of males of both species will show if these species remain in this genus or they will be removed to some other genera, although the justification of creation of distinct genera, based on the male's characters only, needs intensive further taxonomic studies.

Harpinia agna and *H. zavodniki* differ remarkably from all other known species of genus *Harpinia* from the Mediterranean Sea (*H. antennaria* Meinert 1893, *H. crenulata* Boeck 1871, *H. dellavallei* Chevreux 1910, *H. pectinata f. mediterranea* G. Karaman 1973, *H. truncata* Sars 1895) by presence of two distal setae on outer or inner ramus, respectively.

Regarding the males of genus *Harpinia,* it remains unknown the taxonomic value of reduced mouthparts (almost all mouthparts are partially reduced) as a good taxonomic characters of generic level.

CONCLUSIONS

Discovery of two new species of genus *Harpinia* Boeck 1876; *H. agna,* n. sp. and *H. zavodniki,* n. sp. from Bay of Neapel in the Mediterranean Sea, elevated the number of known taxa of this genus in the Mediterranean Sea on 7: *H. agna,* n. sp. *H. antennaria* Meinert 1893, *H. crenulata* Boeck 1871, *H. dellavallei* Chevreux 1910, *H. pectinata* f. *mediterranea* G. Karaman 1973, *H. truncata* Sars 1895 and *H. zavodniki,* n. sp.

Both new species, *H. agna* and *H. zavodniki,* differ clearly from all other known *Harpinia* species from the Mediterranean Sea by different pilosity of the tip of rami of uropod 3 in females. The males of both species are unknown, and still discovery of males will confirm their belonging to this genus.

Acknowledgements: I am indebted to Dr. S a n d r o R u f f o from the Museum of Natural History in Verona (Italy) for the loan of material used in this study.

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Accepted: November 20, 1987

DVIJE NOVE VRSTE IZ RODA *HARPINIA* BOECK (FAM. PHOXOCEPHALIDAE) IZ SREDOZEDNOG MORA

(163. PRILOG POZNAVANJU AMPHIPODA)

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KRATKI SADRŽAJ

Broj do sada poznatih rodova i vrsta obitelji *Phoxocephalidae* iz Sredozemnog mora je znatno niži nego iz Atlantskog oceana ,i iznosio je do nedavno 3 roda odnosno 8 vrsta. Karaman, G. je nedavno (1986a) opisao novu vrstu iz roda *Metaphoxa, M. gruneri,* n. sp. iz mora ispred otoka Malte, i otkrio je po prvi put u Sredozemnom moru rod *Phoxocephalus* (1986b) opisavši novu vrstu *P. aquosus,* n. sp., također iz mora ispred obala Malte.

U toku daljnjih istraživanja faune obitelji *Phoxocephalidae* u Sredozemnom moru, otkrivena su i ovdje opisana još dva predstavnika ove obitelji, *Harpinia agna,* n. sp. i *Harpinia zavodniki,* n. sp.; obje nove vrste su opisane iz različitih lokaliteta u Napuljskom zaljevu u Italiji. Na taj način se je broj rodova poznatih u Sredozemnom moru popeo na 4 (rodovi: *Harpinia* Boeck 1976, *Metaphoxus* Bonnier 1896, *Paraphoxus* Sars 1895 i *Phoxocephalus* Stebbing 1888), a vrsta na 11. Među njima je 5 taksona endemičnih za Sredozemno more.

Vrsta *Harpinia agna,* n. sp., se odlikuje cjelokrajnim koksalnim pločama, drška druge antene je bez jezičastog izraštaja; drugi članak sedmog pereopoda je sa kratkim stražnjim lobusom; treća epimeralna ploča ima mali stražnji zubac. Vanjska grana prvog i drugog uropoda nosi po nekoliko leđnih dugih trnova. Treći uropod ima unutrašnju granu koja malo prelazi vrh prvog članka vanjske grane i nosi na vrhu 2 duge dlake, prvi članak vanjske grane nosi nekoliko dugih bočnih dlaka na vanjskom rubu, članak nosi jednu distalnu dlaku.

Vrsta *Harpinia zavodniki,* n. sp. se odlikuje razvijenim jezičićem na drški druge antene, dužom glavom, i dužim stražnjim lobusom drugog članka sedmog pereopoda. Prvi i drugi uropod slabije trnoviti, drugi članak vanjske grane nosi 2 duge distalne dlake, unutrašnja grana malo prelazi vrh prvog članka vanjske grane i nosi jedan kratak distalni trn odnosno dlaku. Mužjaci obje vrste su nepoznati.