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NEW LEUCONIDS FROM THE GULF OF MEXICO (CRUSTACEA: CUMACEA: LEUCONIDAE)

IORGU PETRESCU, RICHARD W. HEARD

Abstract. Second paper that contained records of 13 species of Leuconidae from the Gulf of Mexico. Four new species are described: *Leucon papadopoli* n. sp., *L. andreiaae* n. sp., *L. radulezti* n. sp. and *L. serafimae* n. sp. Other 8 species and subgenera *Crymoleucon* Watling, 1991 and *Macrauloleucon* Watling, 1991 are recorded for the first time from the area, only *Leucon americanus* Zimmer, 1943 was previously found.

Résumé. C'est le second travail contenant des espèces de Leuconidae du Golfe de Mexico. On y a trouvé 13 espèces, dont 4 sont nouvelles pour la science: *Leucon papadopoli* n. sp., *L. andreiaae* n. sp., *L. radulezti* n. sp. et *L. serafimae* n. sp. Huit autres espèces et deux sous-genres, à savoir *Crymoleucon* Watling, 1991 et *Macrauloleucon* Watling, 1991 sont mentionnées pour la première fois dans cette zone du golfe. Une seule espèce y a été retrouvée, à savoir *Leucon americanus* Zimmer, 1943.

Key words: Gulf of Mexico, Cumacea, Leuconidae, new species, new records.

INTRODUCTION

Calman (1912) reported *Oxyrostylis smithi* from Punta Rassa, first mention of Cumacea from the Gulf of Mexico. Later, Zimmer (1943, 1944), Băcescu (1971, 1979), Băcescu & Muradian (1977), Muradian-Ciamician (1980), Watling (1977), Radhadevi & Kurian (1981), Omholt & Heard (1982), Roccatagliata & Heard (1995), Petrescu (2004), Petrescu & Heard (2001, 2004 a, b, 2005) mentioned other species and genera from families Bodotriidae, Nannastacidae and Diastylidae, but not from family Leuconidae. The only paper dedicated to cumaceans from this area in which the family Leuconidae (with genera *Eudorella* and *Leucon*) is mentioned is that of Heard, Roccatagliata & Petrescu (2007): "An illustrated guide to Cumacea (Crustacea: Malacostraca: Peracarida) from Florida coastal and shelf waters to depths of 100 m. State of Florida". The occurrence of leuconid cumaceans in the Gulf of Mexico has not been well studied. *Eudorella monodon* Calman, 1912 was the first member of the family to be reported from the Gulf of Mexico. This species, which was described by Calman (1912) from brackish waters along the coast of Louisiana, has since been reported from other areas of the northern Gulf of Mexico (Farrel, 1979; Modlin & Dardeau, 1986; Heard et al., 2007) and western Gulf of Mexico (Donath-Hernández, 1988). Modlin & Dardeau (1988) also reported *Leucon americanus* Zimmer, 1943 from Mobile Bay; however, Heard et al. (2007) concluded that material from Mobile Bay represented an undescribed species („*Leucon* sp. A"), which is apparently endemic to the northern Gulf of Mexico. *Leucon americanus* appears to be restricted to the East Coast of North America, though it was inadvertently listed from the Gulf of Mexico by Heard & Roccatagliata (2009). In their guide to the Cumacea of Florida waters, Heard et al. (2007) reported two undescribed species of *Leucon* (species A & B). from Gulf of Mexico coastal and shelf waters.

MATERIAL

The material was collected from 54 stations from the Gulf of Mexico, almost in the middle of it, west of Florida, from 213 to 3316 m depth, in April-December 2000, January-July 2001 and August 2002 by the Minerals Management Service (MMS).

Collecting stations

| Station | Coordinates | Depth (m) | Data |
|---------|------------------------------|-----------|------------|
| B 1-2 | 27°12.1374'N 91°24.1806'W | 2255 | 6.05.2000 |
| B 3-2 | 26°09.7884'N 91°43.9954'W | 2580 | 6.04.2001 |
| B 3-3 | 26°09.9750'N 91°43.9772'W | 2650 | 24.07.2001 |
| BH 1-1 | 27°47.8832'N 91°28.2238'W | 546 | 18.06.2001 |
| BH 1-3 | 27°47.9416'N 91°28.1321'W | 540 | 18.06.2001 |
| C 1-1 | 28°03.6046'N 90°14.9329'W | 334 | 30.05.2000 |
| C 4-1 | 27°27.5640'N 89°47.1391'W | 1455 | 30.01.2001 |
| C 4-3 | 27°27.1450'N 89°46.5588'W | 1463 | 31.05.2001 |
| C 4-5 | 27°27.2854'N 89°45.7098'W | 1470 | 31.05.2000 |
| C 7-1 | 27°43.6967'N 89°58.7782'W | 1080 | 30.05.2000 |
| C 7-2 | 27°43.9413'N 89°58.6211'W | 1070 | 30.05.2000 |
| C 7-5 | 27°44.1073'N 89°58.8717'W | 1057 | 16.06.2001 |
| C 12-2 | 26°22.9752'N 89°14.4854'W | 2920 | 22.01.2001 |
| C 12-5 | 26°28.7838'N 89°14.4179'W | 2920 | 2.06.2000 |
| GKF-2 | 26°55.2967'N 90°13.2297'W | 2473 | 15.06.2001 |
| MT 1-1 | 28°32.2850'N 89°49.6638'W | 487 | 2.06.2001 |
| MT 1-2 | 28°32.3703'N 89°49.7338'W | 482 | 13.08.2002 |
| MT 1-3 | 28°32.4636'N 89°49.6283'W | 676 | 17.06.2000 |
| MT 1-5 | 28°32.5111'N 89°49.7656'W | 478 | 2.06.2001 |
| MT 2-1 | 28°27.0646'N 89°40.3563'W | 676 | 17.06.2000 |
| MT 2-2 | 28°27.0726'N 89°40.2206'W | 677 | 17.06.2000 |

Collecting stations (*continued*)

| Station | Coordinates | Depth (m) | Data |
|---------|------------------------------|-----------|------------|
| MT 2-5 | 27°26.8755'N 89°40.9167'W | 680 | 17.06.2000 |
| MT 3-1 | 28°13.2246'N 89°29.7679'W | 983 | 16.06.2000 |
| MT 3-2 | 28°13.4659'N 89°30.3941'W | 982 | 4.06.2001 |
| MT 3-3 | 28°13.1426'N 89°29.5065'W | 990 | 16.06.2000 |
| MT 3-4 | 28°13.2498'N 89°30.3220'W | 984 | 4.06.2001 |
| MT 3-5 | 28°13.2906'N 89°29.2627'W | 985 | 16.06.2000 |
| MT 4-1 | 28°49.6198'N 89°09.9562'W | 1401 | 18.12.2000 |
| MT 4-2 | 27°49.7018'N 89°09.9562'W | 1401 | 16.05.2001 |
| NB 2-1 | 27°43.6967'N 89°58.7782'W | 1530 | 7.05.2000 |
| NB 5-2 | 26°15.0855'N 91°12.7524'W | 2060 | 9.05.2000 |
| RW 1-1 | 27°30.0242'N 96°00.1437'W | 213 | 23.05.2000 |
| RW 1-2 | 27°29.9333'N 96°00.2164'W | 213 | 13.11.2000 |
| RW 1-5 | 27°30.5085'N 96°50.1708'W | 213 | 23.05.2000 |
| RW 2-3 | 27°14.9757'N 95°44.8287'W | 950 | 6.08.2001 |
| RW 5-2 | 26°30.0261'N 95°00.1315'W | 1620 | 27.06.2001 |
| RW 6-3 | 25°59.9982'N 94°29.5629'W | 3000 | 11.07.2001 |
| RW 6-4 | 25°59.8684'N 94°29.9071'W | 3000 | 18.05.2000 |
| S 5-33 | 25°29.5313'N 88°16.2453'W | 3316 | 13.06.2002 |
| S 35-1 | 29°20.0500'N 87°03.3758'W | 658 | 27.08.2000 |
| S 35-2 | 29°19.9897'N 87°02.9021'W | 667 | 2.04.2001 |
| S 35-3 | 29°19.9337'N 87°03.0166'W | 668 | 11.06.2000 |
| S 35-5 | 29°20.1091'N 87°02.7818'W | 666 | 11.06.2000 |
| S 36-1 | 28°54.7195'N 87°40.7687'W | 1849 | 10.06.2001 |
| S 36-2 | 28°54.8933'N 87°37.4229'W | 1925 | 12.08.2001 |
| S 36-3 | 28°55.1485'N 87°40.9469'W | 1825 | 13.06.2001 |

Collecting stations (*continued*)

| Station | Coordinates | Depth (m) | Data |
|---------|------------------------------|-----------|------------|
| S 36-4 | 28°54.5677'N 87°40.6751'W | 1850 | 10.06.2001 |
| S 36-5 | 28°54.9072'N 87°40.5773'W | 1840 | 10.06.2001 |
| S 37-1 | 28°33.4057'N 87°45.7357'W | 2388 | 2.08.2000 |
| S 37-2 | 28°33.4292'N 87°45.6441'W | 2382 | 13.06.2000 |
| S 37-3 | 28°33.2345'N 87°45.8373'W | 2387 | 12.09.2001 |
| S 40-1 | 27°50.3354'N 86°45.1549'W | 2975 | 30.10.2000 |
| S 42-1 | 28°15.1557'N 86°25.0663'W | 767 | 27.11.2000 |
| S 43-1 | 28°30.1055'N 86°04.9983'W | 366 | 6.11.2000 |
| W 1-1 | 27°34.7791'N 93°32.8573'W | 379 | 2.11.2000 |

The material was sorted at Gulf Coast Research Laboratory, Ocean Springs, Mississippi, U. S. A. and identified in the „Grigore Antipa” National Museum of Natural History, Bucharest (Romania). The type specimens are mainly deposited in the collections of the National Museum of Natural History, Smithsonian Institution, Washington and partially in the „Grigore Antipa” National Museum of Natural History, Bucharest.

RESULTS

In the present material we identified 13 species, from two genera and four subgenera; four species of genus *Leucon* are new to sciences.

Two species of genus *Eudorella* Norman, 1867 are presented in Heard, Roccatagliata & Petrescu (2007), *Eudorella monodon* Calman (1912) and *Eudorella* sp. A. We mentioned other two, including a new species; none of the previously mentioned species are present in our material. Regarding the genus *Leucon*, three species were found by Heard, Roccatagliata & Petrescu, *Leucon americanus* Zimmer, 1943, *Leucon* sp. A and *Leucon* sp. B; in our material we found twelve species, including four new species; the subgenera *Crymoleucon* Watling and *Macrauloleucon* Watling are mentioned for the first time from deep waters of the Gulf of Mexico.

Genus *Eudorella* Norman, 1867

Eudorella hispida G. O. Sars, 1871

Eudorella hispida G. O. Sars, 1871: 49, figs 95-97.

Material: 1 immat. ♂, sta. BH 1-1; 1 ♀, sta. BH 1-3; 1 immat. ♂, sta. C 7-5; 1 ♂, 1 ♀, sta. MT 1-1; 1 immat. ♂, sta. MT 1-2; 5 ♀♀, sta. MT 1-3; 1 ♀, 2 ♂♂, sta. MT 1-5; 1 ♀, sta. MT 2-2; 5 ♀♀, sta. MT 3-2; 1 ♂, sta. MT 3-3; 1 ♀, sta. MT 3-4; 2 ♀♀, sta. MT 3-5; 1 ♀, sta. S 35-2; 1 ♀, sta. S 35-5; 2 ♂♂, sta. S 37-1.

Remarks

Previously known from the Atlantic coast of U. S. A., up to 39°N. First mention from 28°N latitude, from the Gulf of Mexico.

Genus *Leucon* Krøyer, 1846
Subgenus *Crymoleucon* Watling, 1991
***Leucon papadopoli* n. sp.**
(Figs 1, 2)

Material: holotype, ♂, no. USNM 1149371. *Type locality*: sta. S 37-2, 28°33.4292'N, 87°45.6441'W, 2382 m, 13.06.2000.

Etymology: species dedicated to the memory of Aurel Papadopol (1923-2009), former deputy director of „Grigore Antipa” National Museum of Natural History, reknown ornithologist, who generously devoted his life to the museum in which he worked for 38 years.

Description of male (holotype)

Body length: 4.6 mm.

Carapace (Fig. 1 A, B), 0.3 of entire body length, twice as long as high, pseudorostrum 0.48 times as long as frontal lobe, ocular lobe without lenses, with a median tooth, short serration on anterior margin, antero-ventral corner not evident, not visible antennal notch, dorsal and ventral margins smooth.

Antenna 1 (Fig. 1 C), median article of peduncle, the longest, two pappose setae on inner margin of 2nd and one on 3rd article; main flagellum with four articles, four aesthetascs on basal article; accessory flagellum reaches the distal extremity of second article of main one.

Antenna (Fig. 1 D), peduncle with five articles, flagellum reaches the uropods.

Maxilliped 3 (Fig. 1 E), basis 0.53 times as long as entire length of maxilliped, a plumose seta on inner margin, two long plumose setae on outer margin; merus 1.5 times as long as ischium, with a long plumose seta on outer margin; carpus 1.3 times as long as merus and propodus, with three short plumose setae on inner margin, a long plumose seta on outer margin, propodus with a plumose seta on inner margin, two long simple ones on outer margin; dactylus as long as propodus, with long terminal simple setae. Exopod, large, longer than basis, flagellum with six articles.

Pereopod 1 (Fig. 1 F), basis 0.38 times as long as entire pereopod length, 10 plumose setae on inner margin, two plumose longer ones on outer margin; merus twice as long as ischium, a plumose seta on outer margin; carpus twice as long as merus, with three simple setae on inner margin, four plumose ones on outer margin, one plumose seta on ventral surface; propodus 1.25 times as long as carpus, second longest article of 1st pereopod, simple and plumose setae on both margins; dactylus 0.4 times as long as propodus, with terminal setae longer than article.

Pereopod 2 (Fig. 2 A), basis 0.46 times as long as entire pereopod length, three plumose setae on inner margin; merus three times as long as ischium, with a plumose seta on inner margin; carpus 1.9 times as long as merus with four plumose setae on outer margin and two simple ones on inner distal corner; propodus 0.4 of carpus length; dactylus 1.9 times as long as propodus, with five plumose setae on inner margin, and a long plumose seta distally. Exopod, reaching extremity of carpus, with large peduncle and flagellum with eight articles.

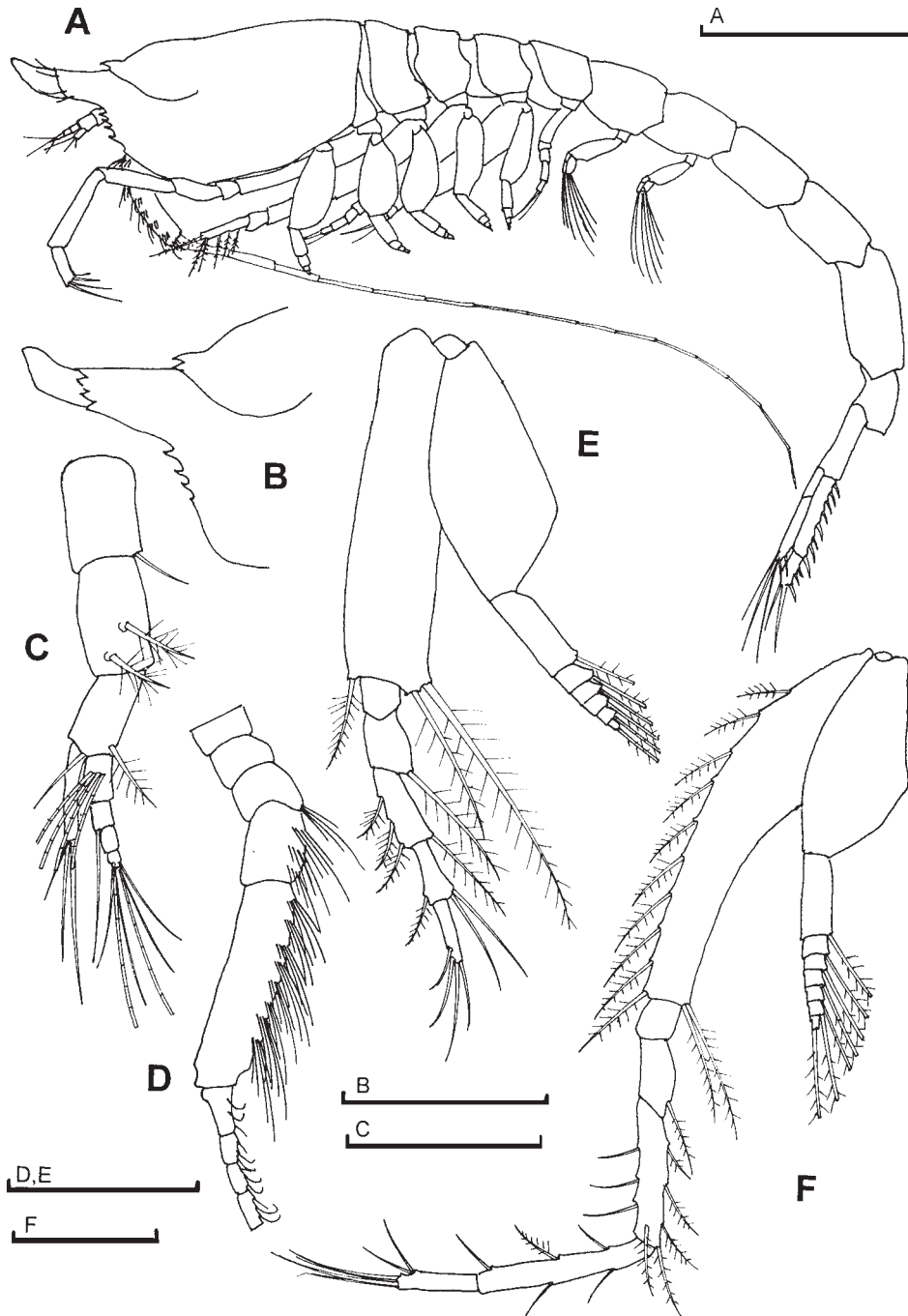


Fig. 1 - *Leucon* (*Crymoleucon*) *papadopoli* n. sp. Holotype male: A, body, lateral view; B, carapace, frontal part; C, antenna 1; D, antenna; E, maxilliped 3; F, pereopod 1. Scale bars (in mm): A, 1; B, 1; C, 0.2; D, E, 0.3; F, 0.3.

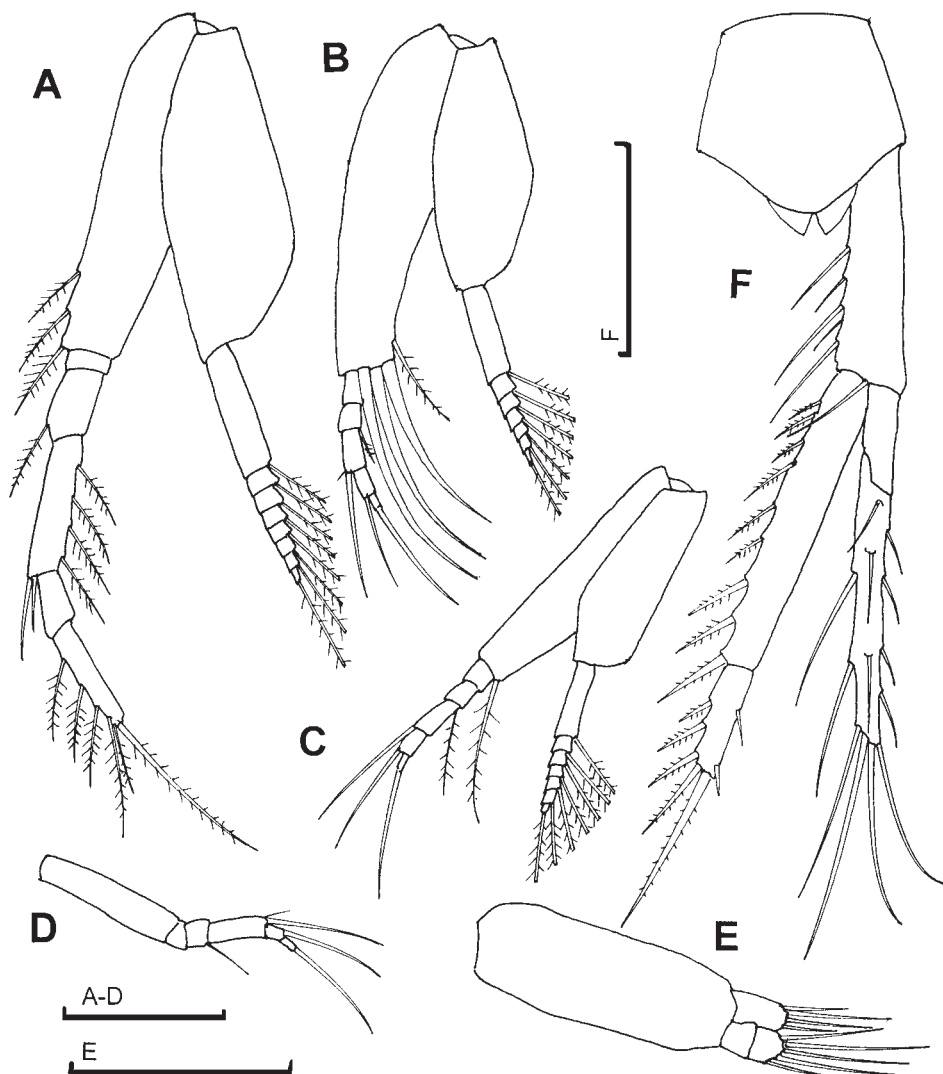


Fig. 2 - *Leucon* (*Crymoleucon*) *papadopoli* n. sp. Holotype male: A, pereopod 2; B, pereopod 3; C, pereopod 4; D, pereopod 5; E, pleopod; F, last pleonite and right uropod. Scale bars (in mm): A-D, 0.3; E, 0.2; F, 0.3.

Pereopod 3 (Fig. 2 B), basis longer than rest of articles combined, a plumose seta on outer margin and three very strong annulate setae distally; carpus 1.6 times as long as merus, with an annulate seta; propodus also with an annulate seta and very short dactylus with a long terminal simple seta. Exopod, large, exceeding extremity of merus.

Pereopod 4 (Fig. 2 C), basis longer than rest of articles combined, a long plumose seta on distal outer corner; merus also with a plumose outer seta. Exopod, exceeding merus.

Pereopod 5 (Fig. 2 D), basis half pereopod length, carpus 1.4 times as long as ischium and merus combined.

Pleopod (Fig. 2 E), peduncle with equal rami.

Uropod (Fig. 2 F), peduncle 1.2 times as long as last pleonite, 0.58 times as long as its endopod, with five simple setae on inner margin and a medio-distal one; exopod 0.8 times as long as endopod, proximal article 0.3 times as long as distal one, distal article with four simple setae on outer margin, three median ones and two longer ones on inner margin, three subterminal ones and a robust terminal seta; endopod with two articles, proximal article 2.8 times as long as distal one, with nine microserrate setae on inner margin, distal article with three microserrate inner setae, one subterminal and a terminal stout one.

Remarks

First mention of the subgenus *Crymoleucon* Watling (1991) from North-western Atlantic. *Leucon papadopoli* n. sp. has a dorsal, median tooth on frontal lobe like *Leucon andreiaae* n. sp. It differs mainly by first pereopod, shorter in *L. papadopoli* n. sp. than in *L. andreiaae* n. sp. and uropods, with shorter peduncle, longer rami, longer proximal article of endopod. It also differs from all the known species of the subgenus by accessory flagellum of antenna 1, longer than first two articles of main flagellum.

***Leucon andreiaae* n. sp.**

(Fig. 3)

Material: holotype, ♀, no. USNM 1149370; *paratypes*: 1 ♀, sta. MT 2-2, no. USNM 1149370; 1 ♀, sta. MT 3-1, no. MGAB CUM 1687; 1 ♀, 1 immat. ♂, sta. MT 3-5, no. USNM 1149370. *Type locality*: sta. MT 2-1, 28°27.0646'N, 89°40.3563'W, 676 m, 17.06.2000.

Etymology: species dedicated in honor of distinguished colleague Gabriela Andrei, specialist in Mollusca from „Grigore Antipa” National Museum of Natural History, as a sign of perpetuals remember of her discrete dedication to the history of the museum, and for all the friendship that she shown to the first author.

Description of female paratype

Body length: 3.6 mm.

Carapace (Fig. 3 A), 0.3 times as long as entire body length, a medial dorsal tooth on frontal lobe, pseudorostrum 1.4 times as long as frontal lobe, with serrate margins, small antennal notch, serrated ventral margin.

Pereon, 0.7 times as long as carapace length.

Pleon, little shorter than half of body.

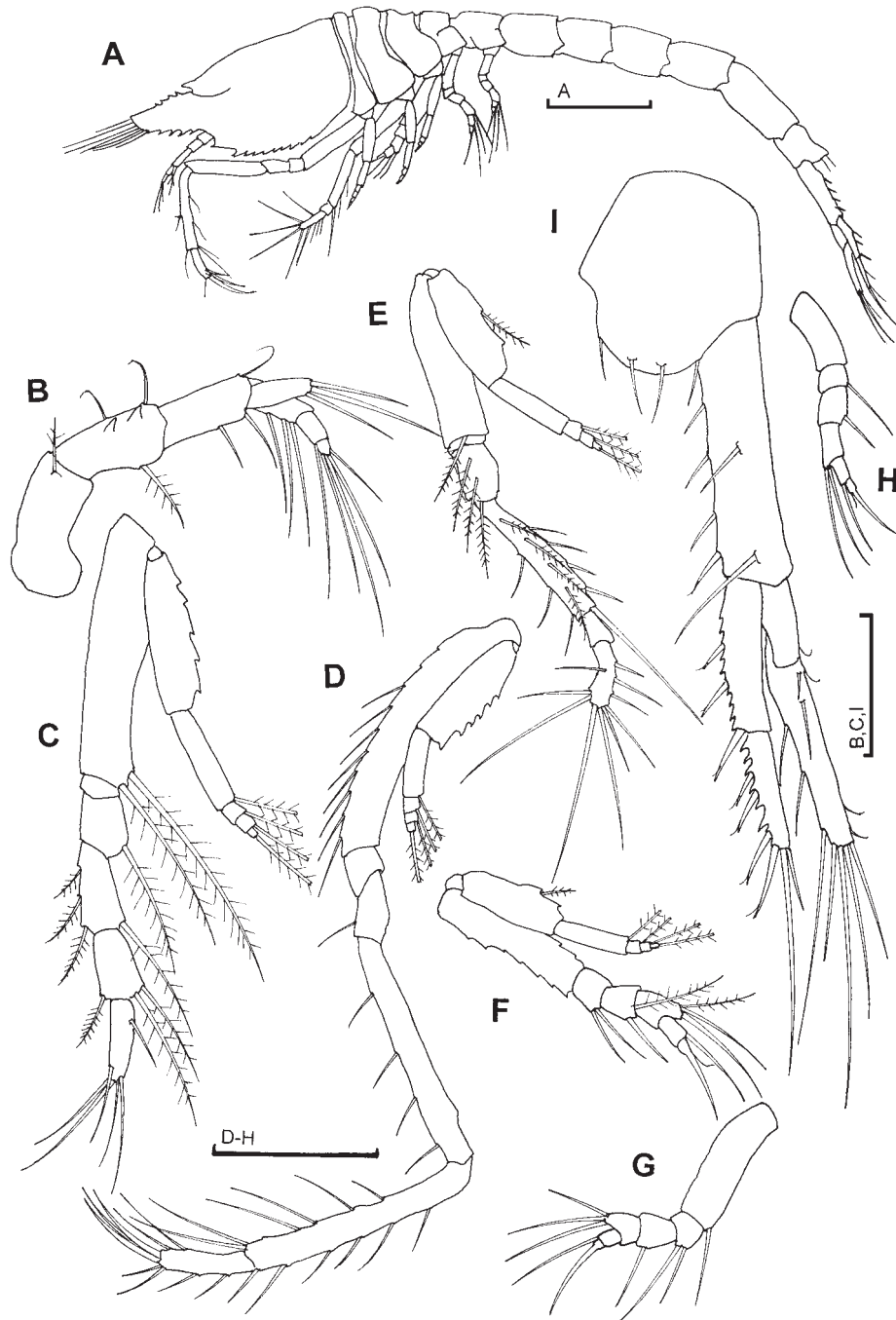


Fig. 3 - *Leucon (Crymoleucon) andreiae* n. sp. Holotype female: A, body, lateral view; B, antenna 1; C, maxilliped 3; D, pereopod 1; E, pereopod 2; F, pereopod 3; G, pereopod 4; H, pereopod 5; I, last pleonite and right uropod. Scale bars (in mm): A, 2.5; B, C, I, 0.2; D-H, 0.3.

Antenna 1 (Fig. 3 B), peduncle with progressively shorter articles, two teeth on outer margin of median one; main flagellum as long as median article of peduncle, with three articles; accessory flagellum as long as main flagellum basal article, with three long stout setae distally.

Maxilliped 3 (Fig. 3 C), basis 0.47 times as long as entire length of maxilliped, two long plumose setae on outer margin; merus twice as long as ischium, one plumose seta on outer margin; carpus 1.6 times as long as merus, three plumose setae on inner margin, one on outer margin; propodus 0.75 times as long as carpus, a seta on inner margin, two on outer margin; dactylus 1.13 times as long as propodus, with long terminal simple setae. Exopod reaches half of merus.

Pereopod 1 (Fig. 3 D), short basis, 0.28 of entire length, eight simple setae on inner margin; merus 1.5 times as long as ischium, with one seta on outer margin; long carpus, 3.5 times as long as merus, simple setae on inner margin; propodus as long as carpus, numerous simple setae on both margins, two long simple subterminal setae; dactylus 0.34 times as long as propodus, terminal simple setae. Exopod, shorter than endopodal basis.

Pereopod 2 (Fig. 3 E), basis 0.34 as long as entire length of pereopod, with a plumose distal seta; merus 6 times as long as ischium, with three plumose median ones; carpus 2.6 times as long as merus, with four simple setae on outer margin, three simple setae on inner one, four plumose median ones and a long stout distal one, exceeding extremity of dactylus; dactylus twice as long as propodus, five simple setae on outer margin, two longer ones on inner margin, two much longer subterminally, and a terminal one, the longest, 3 times as long as dactylus. Exopod, reaching distal extremity of merus.

Pereopod 3 (Fig. 3 F), basis almost as long as rest of articles combined; carpus 1.4 times as long as merus, with two annulate setae; short dactylus, 0.6 as long as propodus, fused with a terminal stout long seta. Exopod exceeds dorsal extremity of merus.

Pereopod 4 (Fig. 3 G), basis longer than rest of articles combined, carpus as long as merus, with three annulate setae, tiny dactylus. Without exopod.

Pereopod 5 (Fig. 3 H), basis almost half of pereopod, ischium and merus with an inner simple seta, carpus with two annulate setae, propodus with one annulate seta, tiny dactylus. Without exopod.

Uropod (Fig. 3 I), peduncle 1.34 times as long as 6th pleonite, as long as endopod, with two median simple setae and other four ones on inner margin; exopod as long as endopod, proximal article 0.45 times as long as distal one, distal article with two median simple setae, two inner ones, four subterminal long ones and a terminal stout seta little shorter than exopod; endopod proximal article 1.28 times as long as distal one, three short stout sensory setae on serrate inner margin of proximal article; distal article with three and two subterminal longer ones and a terminal stout sensory seta, 0.74 times as long as endopod length.

Remarks

Leucon (C.) andreiaae n. sp. is close related to *L. (C.) papadopoli* n. sp., both of them with an apical tooth on ocular lobe and long accessory flagellum of first antenna. It differs mainly by: carapace with ventral serrate margin, flagelli of antenna 1 and by uropods, longer peduncle, shorter rami, longer distal article of endopod.

Subgenus *Macrauloleucon* Watling, 1991***Leucon raduleți* n. sp.**

(Fig. 4)

Material: holotype, ♂, no. USNM 1149372; *paratype:* 1 manca, no. USNM 1149372. *Type locality:* sta. GKF-2, 26°55.2967'N, 90°13.2297'W, 2473 m, 15.06.2001.

Etymology: species dedicated to the honor of Năstase Răduleț, specialist in Chiroptera, Mammalia from „Grigore Antipa” National Museum of Natural History, distinguished colleague of first author, as a sign of eternal remember of his kindness and discretion.

Description of male holotype

Body length: 3.9 mm.

Carapace (Fig. 4 A), 0.3 times as long as entire body length, twice longer than high, four small teeth on dorsal margin, another on pseudorostrum; long pseudorostrum, twice as long as frontal lobe, 0.36 of entire carapace length, large serration on its ventral margin, strong spines on anterior margin, long siphon, 0.7 of entire carapace length, serrate ventral margin.

Pereon, 0.18 of entire length, five segments visible, short serration on dorsal margin on 2-4 segments.

Pleon, 0.51 of entire length.

Antenna 1 (Fig. 4 B), peduncle with one long plumose seta, main flagellum little longer than 3rd article of peduncle, with three articles, four long terminal aesthetascs; accessory flagellum, half of 1st article of main flagellum, with two aesthetascs.

Maxilliped 3 (Fig. 4 C), massive basis 0.38 times as long as entire length, three pappose setae on inner margin, three long pappose setae on outer process; merus twice as long as ischium, long pappose seta on outer serrate margin; carpus 1.5 times as long as merus, two pappose setae on inner margin, one long pappose seta on serrate outer margin; propodus 0.76 times as long as carpus; dactylus half of propodus, with terminal stout long setae. Exopod, large, reaches half of merus.

Pereopod 1 (Fig. 4 D), basis 0.3 times as long as entire length, with two plumose setae interspersed with robust sensory inner ones, a plumose seta on distal outer margin; ischium with a plumose seta on inner margin; merus 1.6 times as long as ischium, a spine on inner margin, two plumose distal setae; carpus 2.75 times as long as merus, three plumose setae on inner margin, three plumose setae on outer margin; propodus as long as carpus, four plumose setae on both margins, dactylus 0.43 times as long as propodus. Exopod, smaller than that of maxilliped 3.

Pereopod 2 (Fig. 4 E), basis 0.3 of entire length; carpus 1.8 times as long as merus, three plumose setae on inner margin, two plumose ones on outer margin, two long plumose setae and a stout sensory seta distally; dactylus 2.7 times as long as propodus, two stout sensory setae on inner margin, two plumose setae on outer margin, five long plumose setae subterminally and a long plumose seta terminally.

Pereopod 3 (Fig. 4 F), basis longer than rest of articles combined, carpus as long as ischium and merus combined with two annulate setae, dactylus fused with terminal stout setae.

Pereopod 4 (Fig. 4 G), basis as long as articles combined, carpus shorter than merus and ischium combined, dactylus fused with terminal seta.

Pereopod 5 (Fig. 4 H), basis shorter than rest of articles combined.

Exopods, on pereopods 1-4.

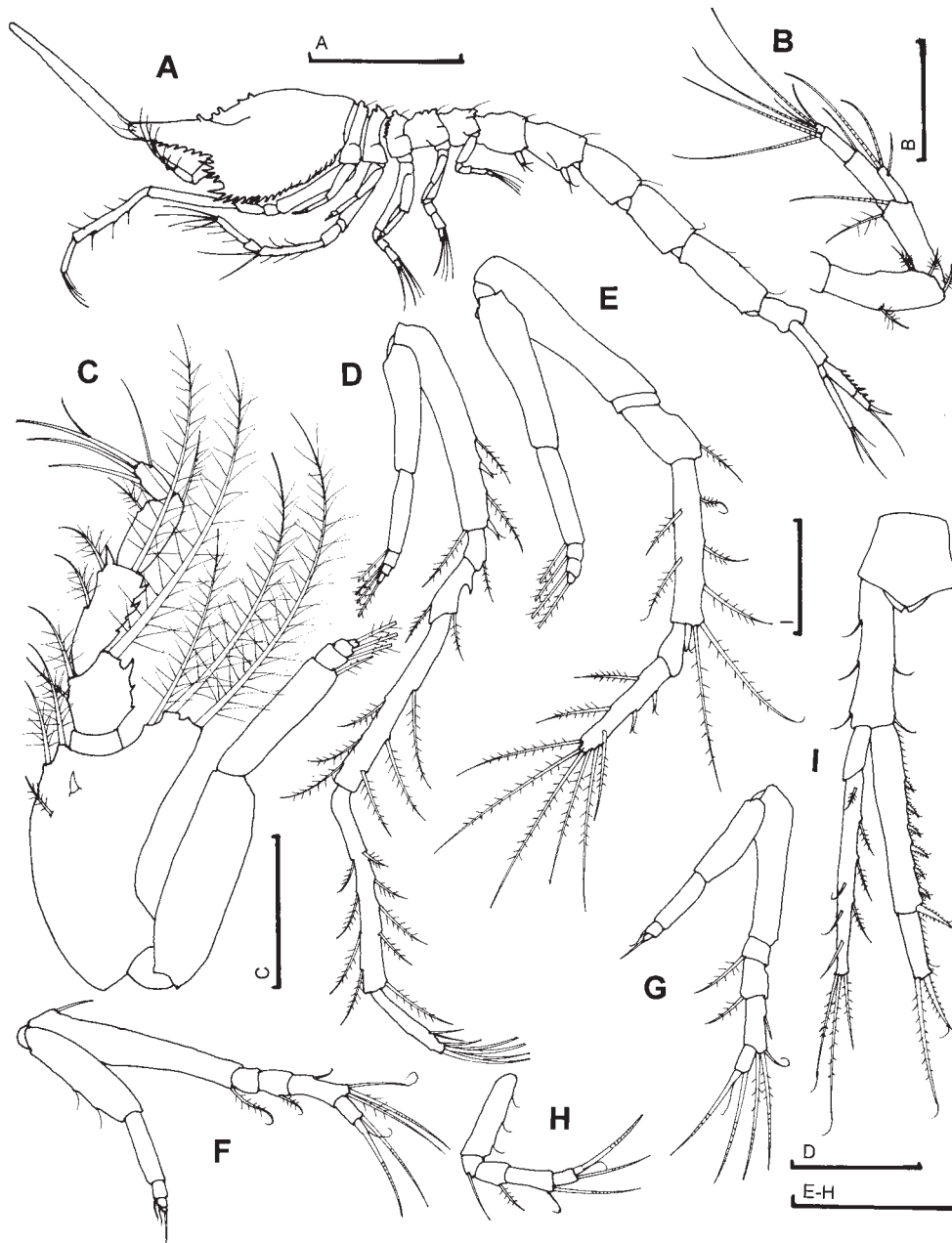


Fig. 4 - *Leucon* (*Macrauloleucon*) *radulezzi* n. sp. Holotype immature male: A, body, lateral view; B, antenna 1; C, maxilliped 3; D, pereopod 1; E, pereopod 2; F, pereopod 3; G, pereopod 4; H, pereopod 5; I, last pleonite and left uropod. Scale bars (in mm): A, 1; B, 0.2; C, 0.2; D, 0.3; E-H, 0.3.

Uropod (Fig. 4 I), peduncle 1.5 times as long as 6th pleonite, 0.57 times as long as endopod, simple setae on both margins; exopod as long as endopod, distal article four times as long as proximal one, four setae on dorsal surface (one plumose, three simple), three plumose setae on inner margin, two subterminal plumose setae, a terminal plumose seta; endopod proximal article 2.8 times as long as distal one, seven microserrate sensory setae on inner margin; distal article with a long plumose seta and a microserrate sensory seta terminally.

Remarks

Leucon (M.) radulezzi n. sp. resembles *L. (M.) spinulosus* Hansen (1920) and *L. (M.) siphonatus* Calman (1906) from the Arctic, but with lesser spines on carapace, shorter siphon and other number and form of setae on uropods. It is also close to *L. parasiphonatus* Mühlenhardt-Siegel (1994), but with spines on carapace, uropods with different number of setae. The new species is closer related to *L. (Macrauloleucon) dentirostris* and *L. (M.) brigittehilbigae*, both described by Mühlenhardt-Siegel (2005) from Angola waters, it differs by uropodal rami longer than peduncle than in *L. dentirostris*, several spines on dorsal margin of carapace in *L. radulezzi* n. sp. than in *L. brigittehilbigae*.

Leucon siphonatus Calman, 1905

Leucon siphonatus Calman, 1905: 19-20, figs 2-4.

L. (Macrauloleucon) siphonatus - Watling, 1991: 572-573.

Material: 1 ♂, sta. MT 1-1; 1 manca, sta. C 7-1; 1 ♂, sta. RW 2-3; 1 ♀, sta. S 37-2; 1 ♂, sta. C 7-5.

Remarks

First record from the Gulf of Mexico. Previously mentioned from North East Atlantic and the Mediterranean (Băcescu, 1988).

Subgenus *Epileucon* Jones, 1956

Leucon ensis (Bishop, 1981)

Epileucon ensis Bishop, 1981 a: 375-379, figs 9,10.

L. (Epileucon) ensis - Watling, 1991: 572.

Material: 1 manca, sta. MT 3-4; 1 manca, sta. S 36-2; 1 ♀, sta. C 1-1; 2 ♀♀, sta. S 35-1.

Remarks

First record from the Gulf of Mexico.

Leucon longirostris G. O. Sars, 1871

Leucon longirostris G. O. Sars, 1871: 42-43, fig. 75.

Material: 4 ♀♀, sta. C 7-2; 1 ♀, sta. MT 2-1; 5 ♀♀, sta. MT 3-1; 5 ♂♂, sta. MT 3-2; 2 ♀♀, sta. MT 4-1; 1 ♀, sta. S 37-2.

Remarks

First mention from the Gulf of Mexico, previously known from Greenland, Atlantic coast of U. S. A., of Europe and Africa (Băcescu, 1988).

Leucon tenuirostris G. O. Sars, 1887*Leucon (Epileucon) tenuirostris* G. O. Sars, 1887: 38-40, figs 1-4.

Material: 1 ♀, sta. C 4-1; 3 ♀♀, 3 ♂♂, sta. C 7-1; 2 ♀♀, sta. C 7-5; 1 ♀, sta. S 5-33; 1 immat. ♂, sta. S 36-2; 1 ♀, sta. S 36-4; 1 ♀, sta. S 35-2; 2 ♂♂, sta. S 37-1; 1 ♀, sta. S 37-2.

Remarks

Recorded for the first time from the Gulf of Mexico, previously known from both coasts of Atlantic (Băcescu, 1988).

Subgenus *Leucon* Kröyer, 1846*Leucon americanus* Zimmer, 1943*Leucon americanus* Zimmer, 1943: 159-160.

Material: 1 ♀, sta. MT 3-2; 1 manca, sta. S 36-5.

Remarks

Previously known from the Western Central Atlantic (Băcescu, 1988).

Leucon homorhynchus Bishop, 1981*Leucon homorhynchus* Bishop, 1981 b: 145-151, figs 1-3.

Material: 1 immat. ♂, sta. C 7-5; 2 ♂♂, sta. B 1-2; 1 ♀, sta. B 3-2; 1 ♀, sta. MT 2-2; 1 ♀, sta. MT 3-5; 1 ♀, sta. NB 2-1; 1 ♂, sta. NB 5-2; 1 ♀, sta. RW 2-1; 1 ♀, sta. RW 6-3; 3 ♀♀, sta. S 35-1; 1 ♀, sta. S 35-5; 1 ♀, sta. S 37-2; 1 ♀, sta. S 42-1; 2 ♂♂, sta. S 43-1; 2 ♀♀, sta. W 1-1.

Remarks

First record from the Gulf of Mexico, previously recorded only from both sides of Atlantic (Băcescu, 1988).

Leucon serafimae n. sp.

(Figs 5, 6)

Material: holotype, ♀, no. USNM 1149373. *Type locality:* sta. RW 1-1, 27°30.0242'N, 96°00.1437'W, 213 m, 23.05.2000.

Etymology: species dedicated to the honor of Rodica Serafim, specialist in Coleoptera from „Grigore Antipa” National Museum of Natural History, distinguished colleague of the first author, as a sign of high appreciation of her devotion to her domain of work, of her firm position in crucial events.

Description of female (holotype)

Body length: 4.08 mm.

Carapace (Fig. 5 A-C), 0.28 of entire length, 1.7 times as long as high, 2.5 times as long as width, with a median dorsal row of denticles, two pairs of small denticles on basis of frontal lobe, anterior and ventral margin, serrated.

Pereon, 0.75 times as long as carapace.

Pleon, about half of entire length.

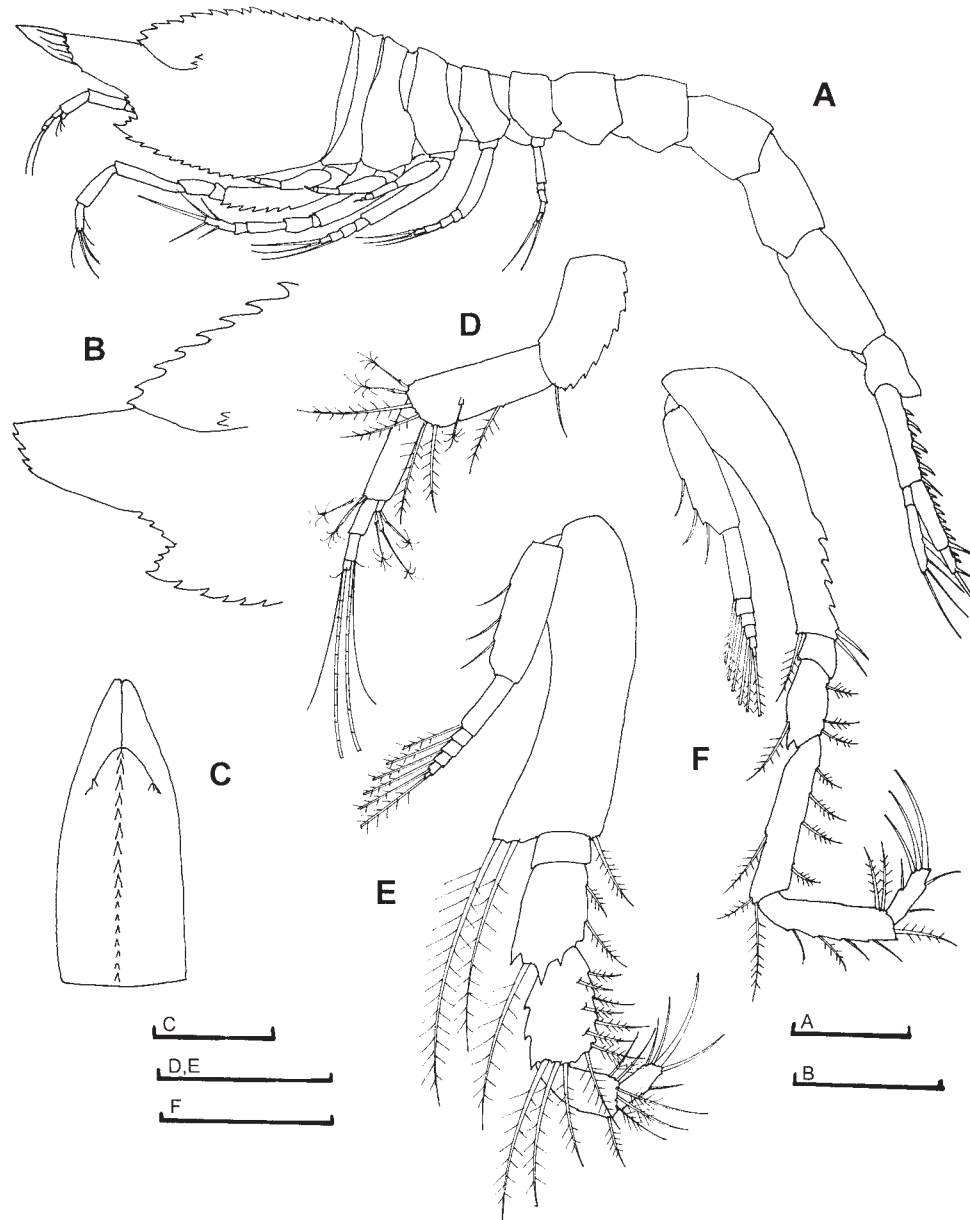


Fig. 5 - *Leucon (Leucon) serafimae* n. sp. Holotype female: A, body, lateral view; B, carapace frontal part, lateral view; C, carapace, dorsal view; D, antenna 1; E, maxilliped 3; F, pereopod 1. Scale bars (in mm): A, 0.5; B, 0.3; C, 0.5; D, E, 0.2; F, 0.3.

Antenna 1 (Fig. 5 D), first article of peduncle as long as second one, numerous plumose and pappose setae on second and third articles; main flagellum with three articles, accessory flagellum short.

Maxilliped 3 (Fig. 5 E), basis 0.46 times as long as entire maxilliped, one plumose seta on inner margin, two long ones on outer process; merus 3.6 times as long as ischium, outer and distal margin serrate, long plumose seta on outer margin; large carpus little longer than merus, with four distal plumose setae and numerous shorter ones on inner margin; propodus 0.74 times as long as carpus, with six distal microserrate shorter setae; dactylus 0.76 times as long as propodus, with simple terminal setae. Exopod as long as endopodal basis.

Pereopod 1 (Fig. 5 F), basis 0.42 times as long as entire pereopod length, distal half of inner margin with a strong serration, two setae distally; merus twice as long as ischium, with a tooth and a plumose seta on outer margin and three plumose setae on inner margin; carpus twice as long as merus, with plumose setae on both margins; propodus 0.8 times as long as carpus; dactylus, half of propodus length, long terminal stout setae. Exopod, little exceeding endopodal basis.

Pereopod 2 (Fig. 6 A), basis 0.47 times as long as entire pereopod length, five simple setae on outer margin, two plumose ones on distal inner margin; merus with a stout sensory seta on inner margin; carpus little longer than merus, with two short plumose setae and three strong stout setae, distally; dactylus 1.8 times as long as propodus, terminal stout seta twice as long as dactylus. Exopod, shorter than endopodal basis.

Pereopod 3 (Fig. 6 B), basis 0.67 times as long as entire pereopod length, simple and plumose setae on both margins; merus as long as ischium; carpus little longer than merus, two annulate distal setae; propodus with an annulate seta; dactylus with a long terminal seta. Exopod, shorter than endopodal basis.

Pereopod 4 (Fig. 6 C), basis 0.6 times as long as entire pereopod length, three plumose setae on each margin; carpus 1.5 times as long as merus, two annulate setae distally; dactylus 0.3 times as long as propodus, with a long terminal simple seta. Without exopod.

Pereopod 5 (Fig. 6 D), basis 0.47 times as long as entire pereopod length. Without exopod.

Uropod (Fig. 6 E), peduncle 1.3 times as long as last pleonite, four microserrate stout setae interspersed with four simple shorter ones on inner margin, 0.9 times as long as exopod; exopod 1.04 times as long as endopod, distal article 2.73 times as long as proximal one, with short plumose and simple setae on outer margin, five long plumose ones on inner margin, terminal stout plumose seta 0.6 times as long as exopod; proximal article of endopod 1.8 times as long as distal one, with three stout microserrate sensory setae and seven stout simple ones on inner margin; distal article with six stout simple setae on inner margin and a subterminal and a short terminal ones.

Remarks

Leucon (*L.*) *serafimae* n. sp. resembles many species of the subgenus from the Atlantic and Eastern Pacific due to serrate dorsal margin of carapace. Main differences: frontal lobe with two pairs of contiguous lateral denticles, endopodal uropod with more setae on inner margin than *L. robustus* Hansen, 1920 from North Atlantic (16 versus 13); *L. assimilis* Sars, 1887 from Kerguelen, also with 16 setae but it has fewer setae on peduncle and exopod.

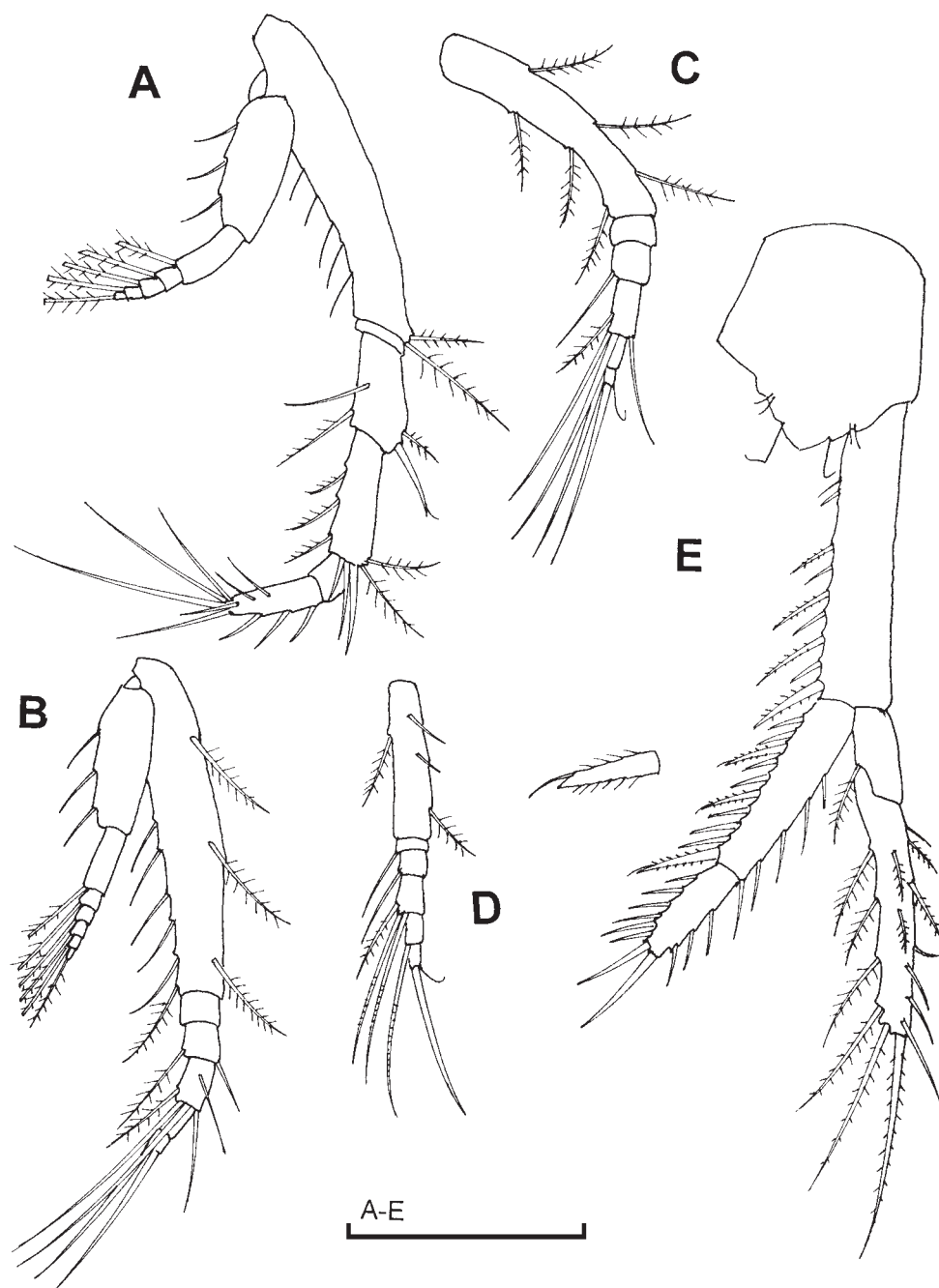


Fig. 6 - *Leucon (Leucon) serafimae* n. sp. Holotype female: A, pereopod 2; B, pereopod 3; C, pereopod 4; D, pereopod 5; E, last pleonite and right uropod. Scale bar (in mm): A-E, 0.3.

Leucon tener Hansen, 1920*Leucon tener* Hansen, 1920: 9-10, fig. 2.*Material*: 1 ♂, sta. C 12-2.*Remarks*

First record out of previously known distribution area: North West Atlantic coast (Băcescu, 1988).

Leucon turgidulus Bishop, 1982*Leucon turgidulus* Bishop, 1982: 346-348, fig. 1.

Material: 1 ♀, sta. B 3-3; 1 ♀, sta. C 4-3; 1 ♂, sta. C 4-5; 1 immat. ♂, sta. C 12-5; 2 manca, sta. MT 2-5; 1 manca, sta. MT 3-4; 1 ♀, sta. MT 1-1; 2 ♀♀, sta. MT 3-5; 1 ♀, sta. RW 1-5; 1 ♀, sta. RW 5-2; 1 ♀, sta. RW 6-4; 1 ♀, sta. S 36-4; 1 ♀, sta. S 37-3.

Remarks

First mention from the Gulf of Mexico.

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NOI LEUCONIDE DIN GOLFUL MEXIC
(CRUSTACEA: CUMACEA: LEUCONIDAE)

REZUMAT

Este cea de a doua lucrare conținând specii de Leuconidae din Golful Mexic.

A fost studiat materialul provenind din 54 stații, colectate aproximativ din mijlocul Golfului Mexic, vest de Florida, de la adâncimi între 213 și 3316 m, în anii 2000, 2001 și 2002, de Minerals Management Service, S. U. A.

Au fost găsite 13 specii, patru dintre ele fiind noi pentru știință: *Leucon papadopoli* n. sp., *L. andreia* n. sp., *L. radulez* n. sp. și *L. serafimae* n. sp.

Alte opt specii și două subgenuri, *Crymoleucon* Watling, 1991 și *Macrauloleucon* Watling, 1991 sunt menționate pentru prima oară din această zonă a Golfului. O singură specie a fost regăsită, *Leucon americanus* Zimmer, 1943.

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Iorgu Petrescu

Muzeul Național de Istorie Naturală "Grigore Antipa"

Șos. Kiseleff nr.1, 011321 București 2, România

e-mail: iorgup@antipa.ro

Richard W. Heard

Gulf Coast Research Laboratory Campus, 703 East

Beach Drive, University of Southern Mississippi, Ocean Springs, MS 39564, U. S. A.

e-mail: richard.heard@usm.edu