

**NEW SPECIES OF CUMACEA (CRUSTACEA: CUMACEA) FROM  
DEEP WATERS OF NW AFRICA: *ALTICUMA BOTNARIUCI* N. SP.,  
*STYLOPTOCUMA MURARIUI* N. SP. AND *STYLOPTOCUMA  
NEGOESCUAE* N. SP.**

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Abstract. Three new cumacean crustacean species were described from a material collected by “Discovery” Expeditions from eastern Atlantic (NW African coast): *Alticum botnariuci* n. sp., *Styloptocuma murariui* n. sp. and *S. negoescuae* n. sp.

Résumé. Trois nouvelles espèces de crustacés cumacés sont décrits d'un matériel collecté par les expéditions «Discovery» de l'est de l'Atlantique (côte NO africaine): *Alticum botnariuci* n. sp., *Styloptocuma murariui* n. sp. et *S. negoescuae* n. sp.

Key words: Cumacea, deep NE Atlantic, new species.

INTRODUCTION

Western coast of Africa (Western Sahara, Mauritania, Senegal, Guinea, Angola Basin) was previously investigated by different authors, describing several species of Cumacea: Băcescu & Muradian (1972 a, b), Ledoyer (1997), Jones (1955, 1956, 1984) and Mühlenhardt-Siegel (2005). Genus *Alticum* was described by Day from South African coasts of Atlantic and Indian Ocean (1978), including in this genus a redescribed species of Zimmer (1921), *Cyclaspis carinata*, based only on South African specimens, never seen the type specimen and a new African species. Genus *Styloptocuma* was described by Băcescu and Muradian from western Atlantic (1974), Jones (1984) added two new species, *Styloptocuma acuminatum* and *S. echinatum* from Eastern Atlantic, African coast and Canary Islands, and finally, Mühlenhardt-Siegel (2005) described *S. pleonserrata* from Angola Basin.

MATERIAL AND METHOD

The material was collected during the “Discovery II” Expeditions, by Woods Hole Oceanographic Institution, from the western coasts of Africa, Canary Islands, Western Sahara and Northern Mauritania and it was deposited in the collections of the Natural History Museum from London.

Collecting stations:

Stations	Position	Depth (in m)	Location	Date
8001	22°37'24" N 17°35'36" W	1457-1460	NE Atlantic (off NW Africa)	July 24, 1972
8012	20°46'12" N 18° 0' 48" W	1238-1285	NE Atlantic (off NW Africa)	July 26, 1972
8524#1	20°45'30" N 22°42'30" W	4412	NE Atlantic (Passage from UK, off NW African continental margin)	June 28, 1974
8524#6	20°44'18" N 22°44'24" W	4414-4416	NE Atlantic (Passage from UK, off NW African continental margin)	June 28, 1974

English translation by Mihaela Barcan Achim.

8976	32°54'36'' N 11°40'24'' W	363	NE Atlantic (Canary Islands)	August 5, 1976
9131#11	20°9'0'' N 21°40'0'' W	3921	NE Atlantic (off NW Africa)	November 20, 1976
9540	20°55'48'' N 18°9'36'' W	2005-2009	NE Atlantic (off NW Africa, 20° N, 21° W, passage to UK)	April 14, 1977
10141#01	24°33'48'' N 19°40'36'' W	3460-3470	NE Atlantic (Rockall Trough, Porcupine Seabight, and NW African coast)	October 3, 1979

The holotypes and most of the paratypes are deposited in the collections of the Natural History Museum from London (BMNH) and one paratype of each new species in the collections of the “Grigore Antipa” National Museum of Natural History from Bucharest, Romania (MGAB).

#### RESULTS

##### Family Bodotriidae

##### Genus *Alticum* Day, 1978

##### *Generic diagnosis emended*

First pedigerous somite visible in both sexes. Articulatory notches on first five pleonites. Second pereopod 7-segmented. Endopod of uropod 2-segmented.

##### *Alticum botnariuci* n. sp.

(Figs 1, 2)

*Material: holotype* ♀, ovigerous, sta. 8012#1 BMNH 2007.304; *paratypes*: 22 ♀♀, 11 immat. ♂♂, sta. 8012#1, BMNH 2007.294-303; 1 ♀, sta. 8012#1, MGAB CUM 1626.

*Type locality*: NE Atlantic (off NW Africa), 20°47'N, 18°2.36'W, Mauritania coast, 1238-1285 m, July 26, 1972.

*Derivatio nominis*. The species is dedicated in the honor of Prof. Dr. Nicolae Botnariuc, member of the Romanian Academy, former professor of Ecology and General Biology at the Faculty of Biology from Bucharest, as a sign of gratitude from the author to whom he owes choosing the biological career and in remembrance of unforgettable courses that the author heard as a student.

##### *Description of female holotype*

*Body* (Fig. 1 A), elongated, with evident highly reticulated integument of carapace. Length: 6.23 mm.

*Carapace* (Fig. 1 A, B), 2.56 times longer than high, not covering any segment of pereon, dorso-ventrally and laterally compressed, 7 middorsal denticles, large and short siphon, antero-ventral corner with short serrated margin.

*Pereon* (Fig. 1 A, B), all five segments are free, not covered or fused with carapace, dorsal serrated crest on whole pereon, lateral crests on segments 4 and 5.

*Pleon* (Fig. 1 A), all five segments with dorsal and lateral serrated crests and lateral articular processes, the 6<sup>th</sup> segment little longer than the 5<sup>th</sup>.

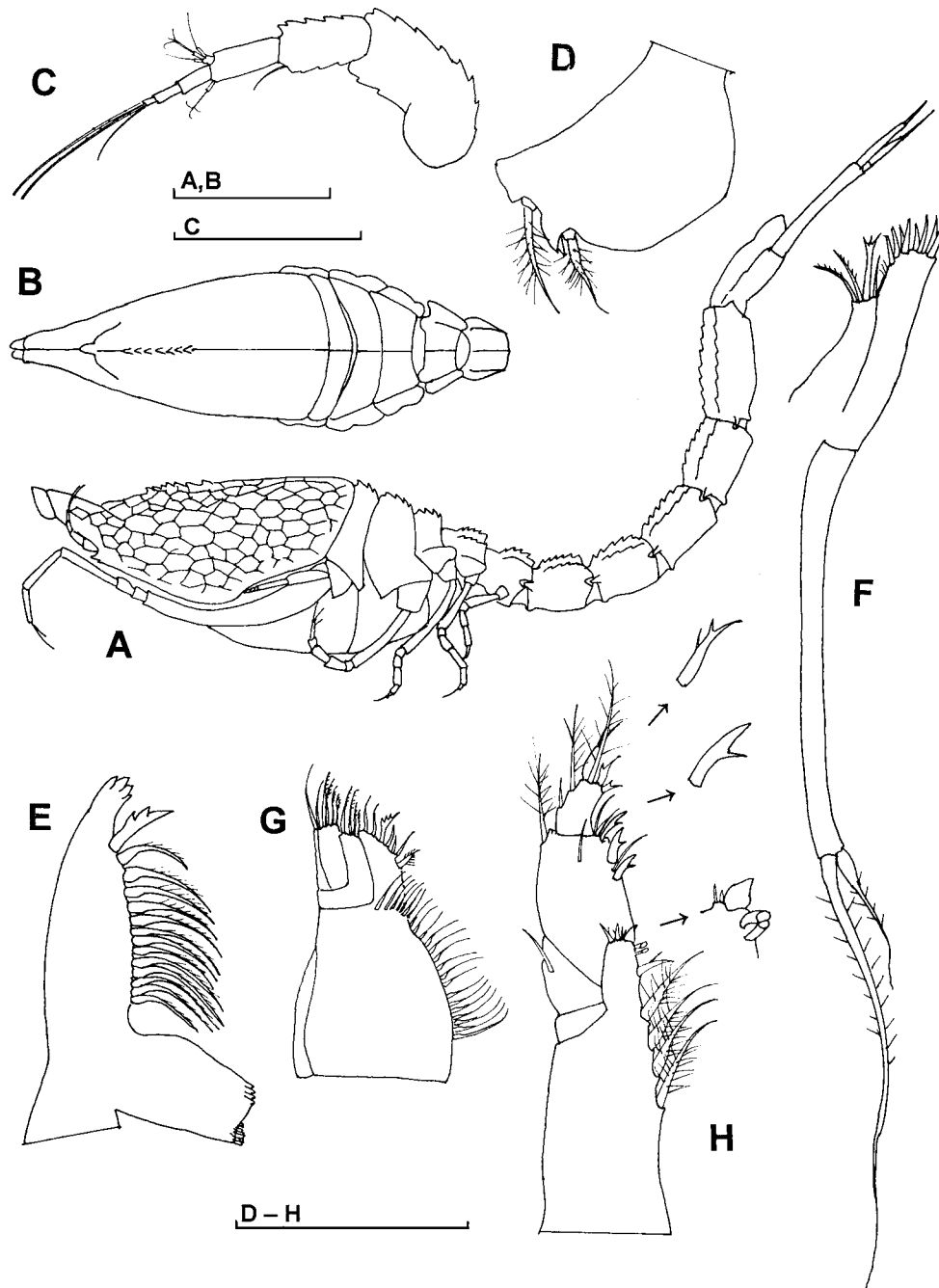


Fig. 1 – *Alticum botnariuci* n. sp., female holotype. A, body, lateral view; B, cephalothorax, dorsal view; C, antenna 1; D, antenna 2; E, mandible; F, maxilla 1; G, maxilla 2; H, maxilliped 1. Scale bars (in mm): A,B 1; C 0.2, D-H 4.8.

*Antenna 1* (Fig. 1 C) with short and robust articles of peduncle, first two of them with serrated margins, main flagellum with 3 segments, accessory one, minute, 1-segmented.

*Antenna 2* (Fig. 1 D), only with a strong basal article, with two feathered setae.

*Mandible* (Fig. 1 E), pars incisiva with four teeth, lacinia mobilis with three teeth, 13 plumose setae between lacinia mobilis and robust pars molaris.

*Maxilla 1* (Fig. 1 F), long downwardbent palp, almost twice longer than protopod, with two unequal glabrous filaments.

*Maxilla 2* (Fig. 1 G), short endites, never exceeding the upper margin of protopod, 24 setae on inner margin of protopod, eight of them between inner margin and basis of inner endite.

*Maxilliped 1* (Fig. 1 H), with four feathered setae on inner margin of basis, three inflated bifid setae on inner margin of carpus, a pappose seta on outer margin, a bifid flattened seta, on inner distal corner of propodus and an outer subterminal and a terminal feathered seta, narrow dactylus with simple terminal setae.

*Maxilliped 2* (Fig. 2 A), long basis, twice as long as rest of articles combined, with a serrated ridge parallel to inner margin delimiting a long sulcus, as long as the entire basis, an inner distal feathered seta, a plumose shorter one on inner distal corner of carpus, two feathered setae on inner margin of carpus, second longest article, two feathered setae on outer margin of propodus, two serrated ones on inner distal corner, dactylus with long terminal simple seta.

*Maxilliped 3* (Fig. 2 B), basis the longest article, 2.35 times longer than remaining articles combined, serration on inner margin, a plumose seta on inner distal corner, outer process reaching meros-carpus articulation, with two plumose setae on its top and other shorter ones on inner margin, merus as long as carpus, with a short outer process with an apical plumose seta reaching half of carpus, carpus with an outer distal plumose seta, longer than propodus, propodus longer than short dactylus, dactylus shorter than its terminal seta. Exopod, slender and long, with five articles.

*Pereopod 1* (Fig. 2 C), basis longer than half of remaining articles combined, ischium little shorter than merus, carpus, longer than ischium and merus combined, as long as propodus, propodus 3 times longer than dactylus, basis to propodus with serrated margins, terminal seta little longer than dactylus. Exopod with long peduncle formed by 5 articles.

*Pereopod 2* (Fig. 2 D), with six articles, basis longer than rest of articles combined, merus as long as carpus, merus and carpus with serrated outer margin, simple seta on outer distal corner of carpus, longer than propodus, dactylus 2.5 times longer than propodus, three subterminal simple setae, terminal seta twice longer than dactylus. Without exopod.

*Pereopod 3* (Fig. 2 E), basis twice longer than rest of articles combined, serrated outer margin, carpus twice longer than merus, long simple seta on distal inner corner of carpus and propodus, propodus as long as dactylus, dactylus with short terminal seta. Without exopod.

*Pereopod 4* (Fig. 2 F), basis shorter than rest of articles combined, with smooth margins, merus longer than in previous pair, as long as carpus, long simple seta on distal inner corner of carpus and propodus, dactylus little shorter than propodus, with terminal simple seta. Without exopod.

*Pereopod 5* (Fig. 2 G), basis much shorter than in previous pairs, carpus longer than merus. Without exopod.

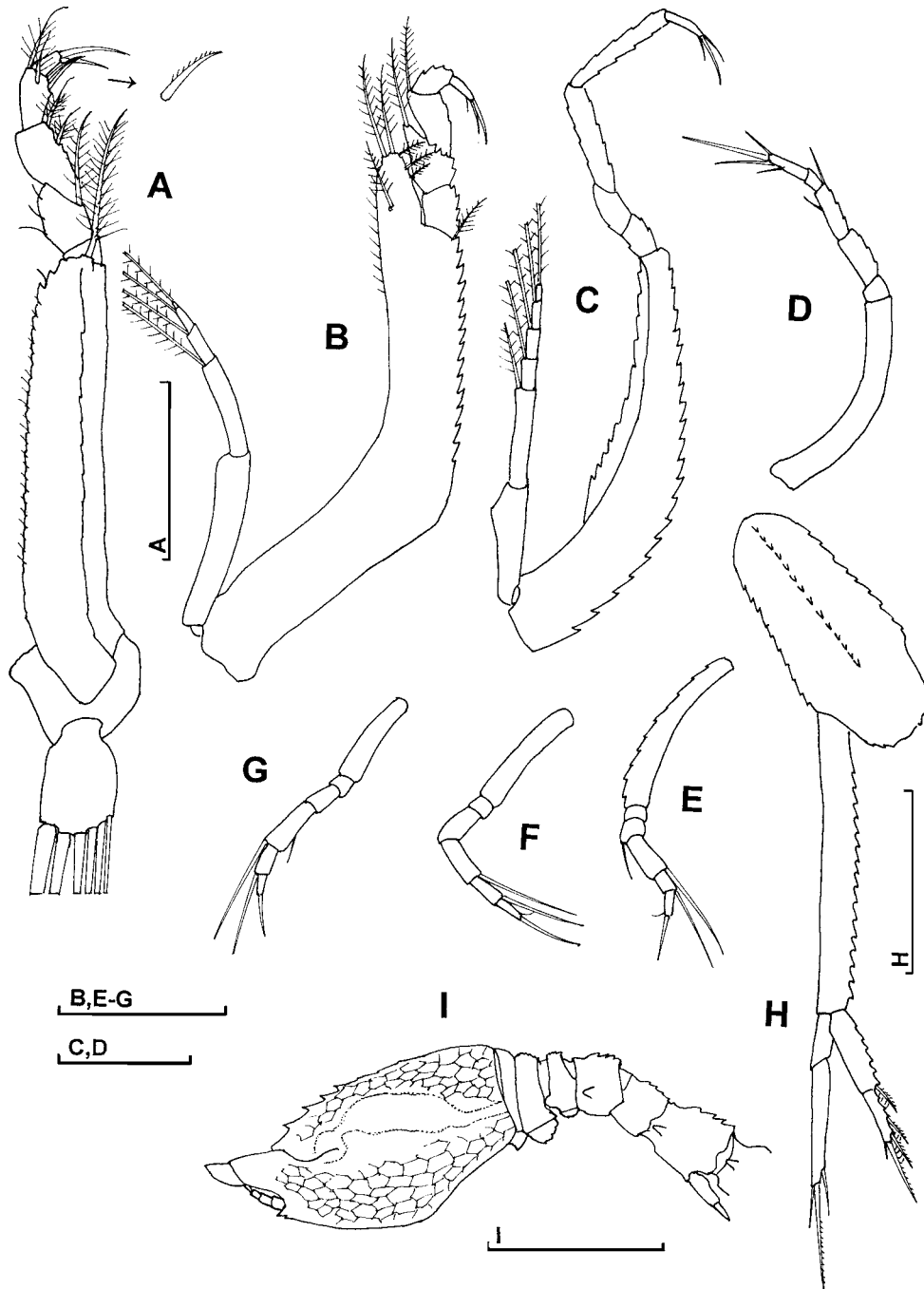


Fig. 2 – *Alticum botnariuci* n. sp., female holotype. A, maxilliped 2; B, maxilliped 3; C-G, pereopods: C, 1; D, 2; E, 3; F, 4; G, 5; H, uropod; male paratype: I, body, lateral view (pleon omitted). Scale bars (in mm): A 0.2; B,E-G 0.3; C,D 0.2; H 0.5; I 1.

*Uropod* (Fig. 2 H), uropodal peduncle 1.3 times longer than 6<sup>th</sup> pleonite, 1.7 times longer than exopod, inner margin serrated, exopod, 2-articled, 1.2 times longer than endopod, with two short subterminal setae and a longer, microserrate terminal one, endopod with two articles, proximal one, with serrate inner margin, 1.5 times longer than proximal article, three microserrate setae on its inner margin, terminal microserrate seta, shorter than seta of exopod.

*Description of immature male paratype* (Fig. 2 I)

Gut, not coiled, better seen in male, by transparency (Fig. 2 I). First segment of pereon partially fused with carapace. Exopods on maxilliped 3 and pereopod 1. Pleopods, five pairs, uncompletely developed. Rest of characters, like in female.

*Distribution*. Known only from the type locality – Eastern Atlantic, coast of Mauritania, 1238-1285 m deep.

*Remarks*

The new species is very close related with *A. carinatum* (Zimmer, 1921) described by Day (1978) from South Africa, than with Kenyan specimen of the same species described by Zimmer and with less resemblance with *A. bellum* also from South Africa (Day, 1978). The morphology of carapace is like that of the SAM specimens of Day, with longer pseudorostral lobes, not acute tip and more dorsal minute teeth. *Discovery* specimens have longer carapace and pseudorostrum, very evident reticulation and pits of carapace integument, eyelobe not elevated above the pseudorostral lobes, all pereon segments are clearly free, longer basis of pereopod 1, shorter ratio peduncle/rami, 1.7 versus 2.5, more setae on distal article of uropodal endopod, 3 versus 2.

Table 1

Comparing selected characters of the *Alticuma* known species.

Characters	<i>botnariuci</i> n. sp. ovigerous female, Mauritania	<i>carinatum</i> (Zimmer, 1921) ovigerous female, South Africa	<i>carinatum</i> (Zimmer, 1921) immat. female, Kenya	<i>bellum</i> Day, 1978 ovigerous female, South Africa
Carapace ornamentation	Reticulation and pits very visible	Translucent with fine reticulations and pits visible at high magnif.	-	transversal ridge, posterior protuberance
Dorsal carina	Mid-dorsal carina with 7 minute teeth, serrate up to pleonite 6	Mid-dorsal carina with 0-2 large teeth, absent on pleonite 6	Lightly serrate in anterior part, weakly on pereon and pleon, absent on pleonite 6	Mid-dorsal carina at least on carapace
Eye-lobe elevated above pseudorostrum	-	+	-	+
Carapace length/ height	2.2	1.8	1.6	2
Length pseudorostrum	1/5.5 of carapace length	1/6 of carapace length	Little more than 1/5 of carapace length	Pseudorostral lobes not meeting in front of eyelobe
Carapace length/deep	2.5	2	1.57	2

Table 1 (continued)

Pereonites	All pereonites clearly free	1 <sup>st</sup> pereonite not visible, 2 <sup>nd</sup> and 3 <sup>rd</sup> apparently fused dorso-lat.	1 <sup>st</sup> pereonite free in middle part	All pereonites clearly free
Abdomen/cephalothorax	1.2	Subequal in length	Little longer	Longer
Maxilliped 3 merus outer process	Not reaching distal tip of carpus	Reaching distal tip of carpus	-	Reaching beyond distal tip of carpus
Length of pereopod 1 basis	1.2	As long as rest of limb	Broken	Less than 2/3 length of rest of limb
Length of pereopod 2 basis	Longer than rest of pereopod	Longer than rest of pereopod	Broken	Subequal in length with rest of limb
Pleonite 5/pleonite 6	1.2	1.1	Subequal	1
Urp. peduncle/pleonite 6	1.2	1.3	Broken	2.2
Urp. peduncle inner margin	Serrate	Serrate	Serrate, beset with small setae	Short stout setae
Urp. peduncle/rami	1.7	2.5	3	1.6
Exopod/ endopod	1.2	Slightly longer	Longer	1.04
No. endopod articles	2	2	1	2
Setae proximal art. endopod	1	1	-	6
Setae distal art. endopod	3	2	3	2
Telson prolongation/ rest of telson	0.33	0.33	0.56	0.5

## Family Nannastacidae

Genus *Styloptocuma* Băcescu and Muradian, 1974***Styloptocuma murariui* n. sp.**

(Figs 3-6)

*Material:* holotype ♀, 5.15 mm, BMNH 2007.290; allotype: ♂, sta. 8012#1, BMNH 2007.289; paratypes: 2 ♀♀, 1 immat. ♂, sta. 8001, BMNH 2007.265-267; 84 ♀♀, 15 immat. ♂♂, sta. 8012#1, BMNH 2007.268-277; 1 ♀, sta. 8012#1, MGAB CUM 1627; 2 ♀♀, 2 ♂♂, sta. 8524#1, BMNH 2007.278-281; 2 ♀♀, sta. 8976, BMNH 2007.287-288; 2 ♀♀, 1 ♂, sta. 9131#11, BMNH 2007.262-264; 2 ♀♀, 1 immat. ♂, sta. 9540, BMNH 2007.284-286.

*Type locality:* NE Atlantic (off NW Africa), 20°47'N, 18°2.36'W, Mauritania, 1238-1285 m, sta. 8524, July 26, 1972.

*Derivatio nominis.* The species is dedicated in honor of Dr. Dumitru Murariu, General Director of the "Grigore Antipa" National Museum of Natural History, corresponding member of the Romanian Academy, as a sign of homage and deep gratitude.

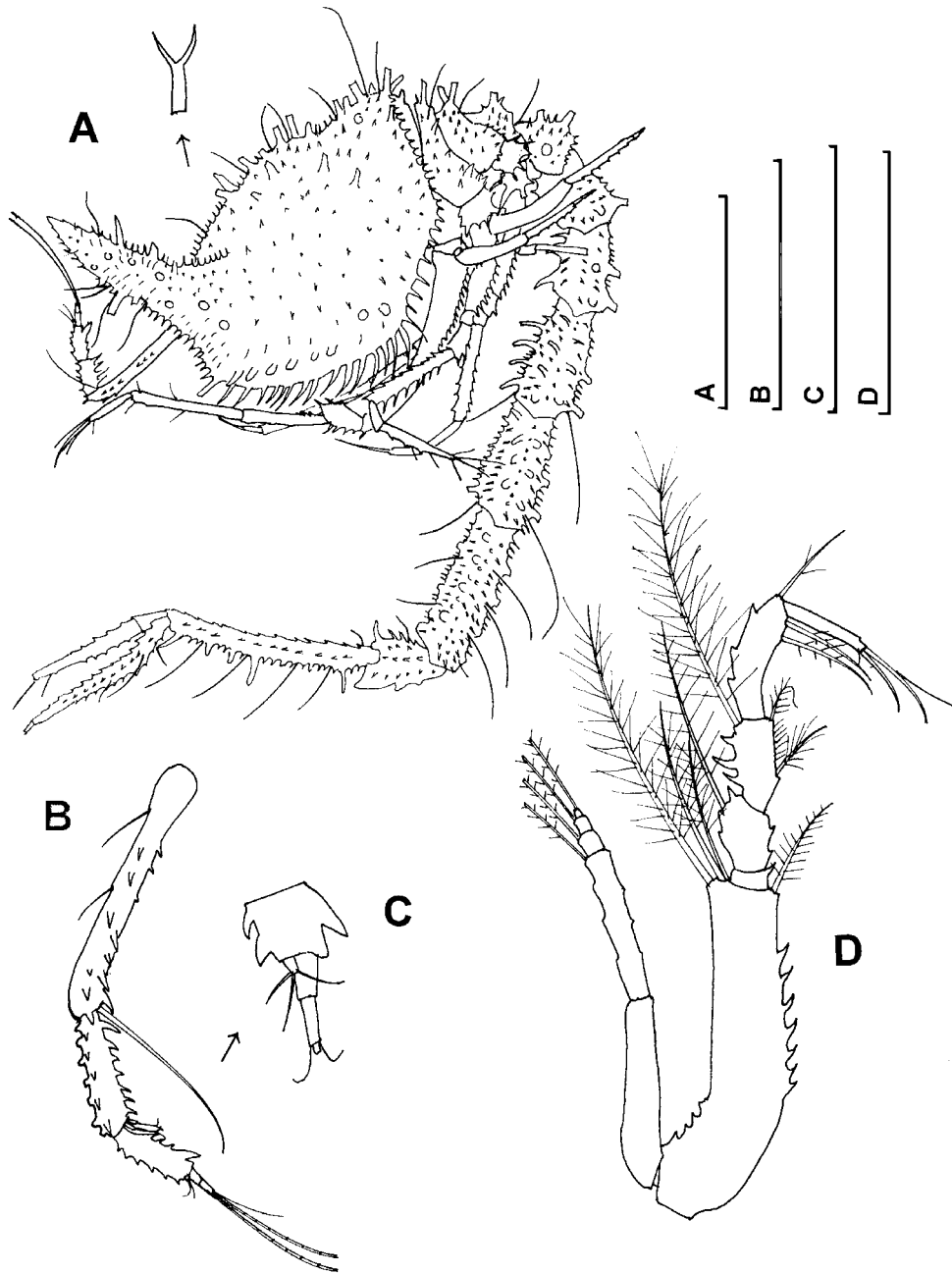


Fig. 3 – *Styloptocuma murariui* n. sp., female holotype. A, body, lateral view; B, antenna 1; C, tip of antenna 1, magnified; D, maxilliped 3. Scale bars (in mm): A 1; B 0.5; C 0.2; D 0.4.

*Description of female holotype* (Figs 3, 4)

*Body* (Fig. 3 A) covered with dense spines and bifid setae, several longer ones. Length: 5.15 mm.

*Carapace* (Fig. 3 A) represents 0.37 of total length, twice longer than deep, long upturned pseudorostrum, half carapace length, a middorsal row of longer spines, a row of six spines close to ventral margin, long and curved numerous spines on ventral margin, antennal notch absent, middorsal and posterior elevation.

*Pereon* (Fig. 3 A), 0.37 of carapace length, cephalothorax subequal little shorter than pleon, first pereonite almost fused with carapace, dorsally and laterally densely beset with spines (most of them broken) and bifid setae, few longer setae.

*Pleon* (Fig. 3 A), with highly setose and spiny integument, with more numerous longer setae on fifth pleonite, the longest.

*Antenna 1* (Fig. 3 B, C), basal article of peduncle longer than rest of articles combined, with rows of small spines, a long simple seta on outer distal corner of basal article, short main flagellum with 3 articles, accessory one, 1-articled.

*Maxilliped 3* (Fig. 3 D), basis little shorter than rest of articles combined, with strong serration on inner margin, a plumose seta on inner distal corner and three pappose ones on outer distal corner, carpus as long as merus and ischium combined, two teeth and a long plumose seta on outer margin of merus, two plumose setae on inner margin of carpus, three longer teeth and pappose outer seta, long propodus, 2<sup>nd</sup> longest article, with large serrate outer margin, 1.4 times longer than dactylus, two plumose setae on inner margin, close to distal extremity.

*Pereopod 1* (Fig. 4 A), basis, 0.38 of entire pereopod length, with serrate inner margin and a middle row of robust, short, setae, merus with serrate margins, carpus 0.74 of very long propodus, with serrate margins, 2.4 longer than dactylus, dactylus with simple terminal seta.

*Pereopod 2* (Fig. 4 B), basis, 0.38 of entire pereopod length, serrate rows on inner margin, mid row of robust, short, setae, merus with a long distal tooth, carpus to dactylus serrate on both margins, a short, simple seta on distal inner corner of carpus, dactylus 5 times longer than propodus, two short setae on inner margin, other two subterminal and a terminal, plumose, long microserrate seta.

*Maxilliped 3* and *pereopods 1, 2*, with exopods.

*Pereopod 3* (Fig. 4 C), basis little longer than rest of articles, with long serrate outer margin, smaller serration on rest of basis, ischium to carpus with serrate margins, carpus, 2.3 times longer than ischium and merus combined, propodus 2.3 times longer than dactylus, dactylus fused with its robust terminal seta.

*Pereopod 4* (Fig. 4 D), longer than the previous one, carpus 2.48 times longer than ischium and merus combined, with serrate margins, propodus 2.3 times longer than dactylus, dactylus fused with its terminal seta.

*Pereopod 5* (Fig. 4 E), the shortest, basis to propodus with serrate margins, carpus 1.3 times longer than propodus, same morphology of dactylus.

*Uropod* (Fig. 4 F), peduncle 2.5 times longer than last pleonite, with double serrate rows on outer margin, strong and long spines interspersed with shorter ones on inner margin, middle row of robust shorter setae, 1.1 of endopod length, exopod shorter than endopod (0.8), with serrate margins and middle serrate row, setae, missing, endopod with similar serrate integument, terminal seta, broken.

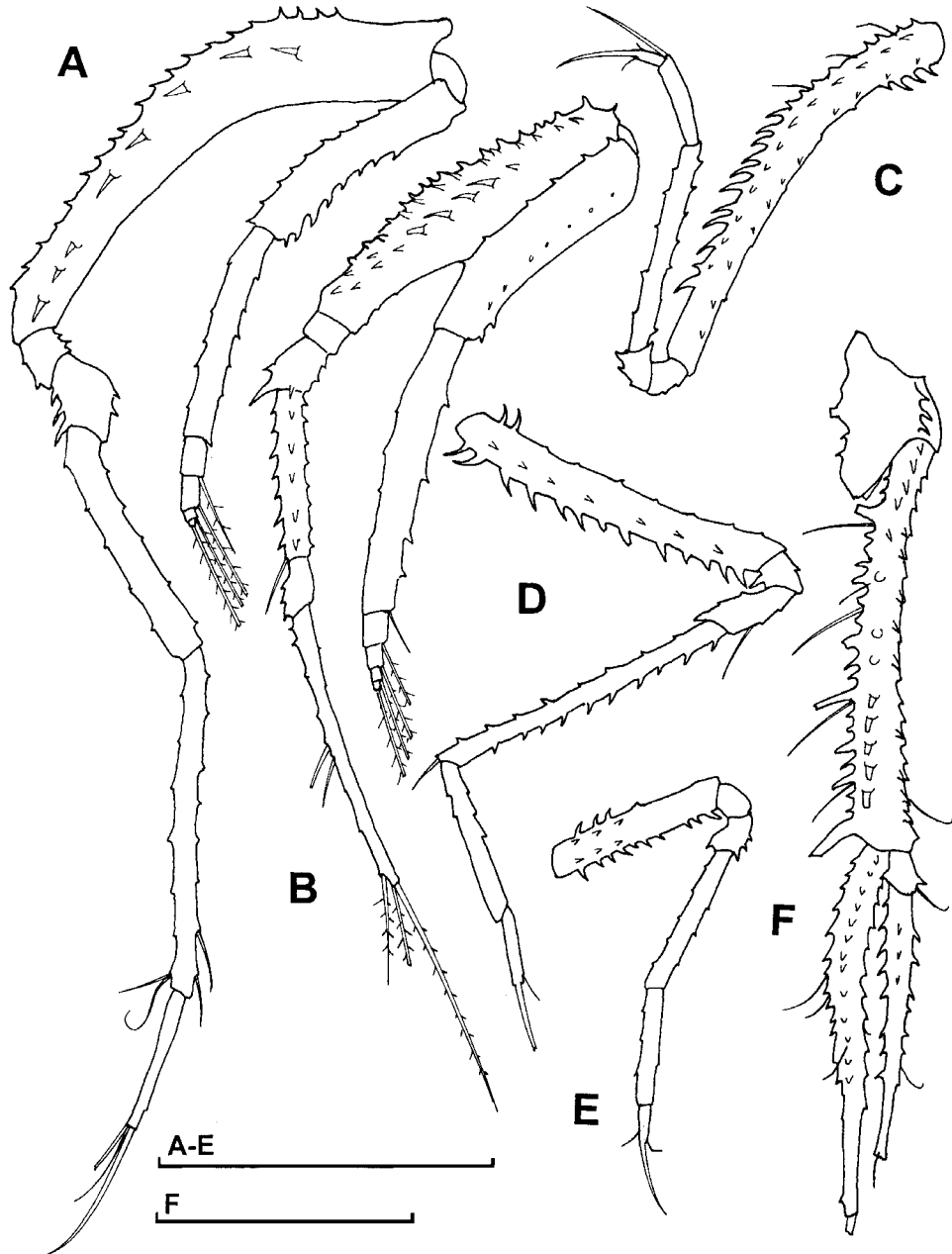


Fig. 4 – *Styloptocuma murarii* n. sp., female holotype. A-E, pereopods: A, 1; B, 2; C, 3; D, 4; E, 5; F, uropod. Scale bars (in mm): A-E 0.5; F 0.5.

*Description of male allotype* (Figs 5, 6)

*Body* (Fig. 5 A), almost like in female, more longer setose and spiny integument, with more longer simple setae than in female, same bifid setae on the whole body. Length: 6.1 mm.

*Carapace* (Fig. 5 A), twice longer than deep, antennal notch more evident than in female, antero-lateral corner more pronounced.

*Pleon* (Fig. 5 A), little shorter than cephalothorax.

*Antenna 1* (Fig. 5 C, D), more spiny peduncle.

*Maxilliped 3* (Fig. 5 E), basis with scaly integument, a pair of large spines on distal inner corner of merus and carpus, propodus without serrate outer margin, three plumose setae on inner margin, dactylus with a long terminal simple seta.

*Pereopod 1* (Fig. 6 A), with serrate basis like in female, with stronger robust setae than in female, pappose setae on basis, ischium and carpus, carpus shorter than propodus (0.8), propodus 3 times longer than dactylus, terminal seta longer than dactylus.

*Pereopod 2* (Fig. 6 B), basis 1/3 of entire pereopod, with much more spiny and setose integument, plumose setae on basis, merus, carpus, dactylus 4 times longer than propodus, with two plumose setae on inner margin and two simple ones on outer margin, long plumose terminal seta.

*Pereopod 3* (Fig. 6 C), basis about 1/2 of entire pereopod, with serrate margins and rows of short setae and spines, three plumose setae on outer margin and a plumose one on outer distal corner, merus longer than ischium, with a simple seta on outer margin, carpus twice longer than ischium and merus combined, propodus 0.4 of carpus length, terminal seta with a clavated tip, fused with dactylus.

*Pereopod 4* (Fig. 6 D), basis shorter than in previous pair, with highly serrate margins, rows of short robust setae, merus with serrate inner margin, carpus 1.7 times longer than ischium and merus combined, propodus 0.6 of carpus length, terminal seta like in previous pair.

*Pereopod 5* (Fig. 6 E), basis shorter than in previous pairs, basis to propodus with serrate margins, carpus 1.7 times longer than ischium and merus combined, propodus 1.6 of carpus length, clavated terminal seta.

*Uropod* (Fig. 6 F), peduncle 4.8 times longer than pleonite 6, serrate outer margin, long broken spines interspersed with shorter ones and simple setae on inner margin, median row of robust short setae, 1.1 times longer than endopod, exopod 2-articled, 0.6 of endopod length, with serrate margins, two fine setae on inner margin, terminal seta, broken, endopod with serrate margins and median serrate rows, four stout setae with broken tips on inner margin, terminal seta also broken, missing.

*Distribution.* Eastern Atlantic, coasts of Western Sahara, Mauritania and Canary Islands, 363-3921 m deep.

*Remarks*

The new species, *Styloptocuma murariui* n. sp. is related with other spiny species from the Atlantic Ocean, especially with *S. echinatum* (Jones, 1984). Main differences: more spiny and setose integument on the whole body and limbs, presence of those bifid setae, antennule with basal article of peduncle, pereopod 5 longer than in pereopods 3 and 4, uropods with shorter peduncle and longer endopod (peduncle/endopod: 1.1 versus 1.5 in *S. echinatum*).

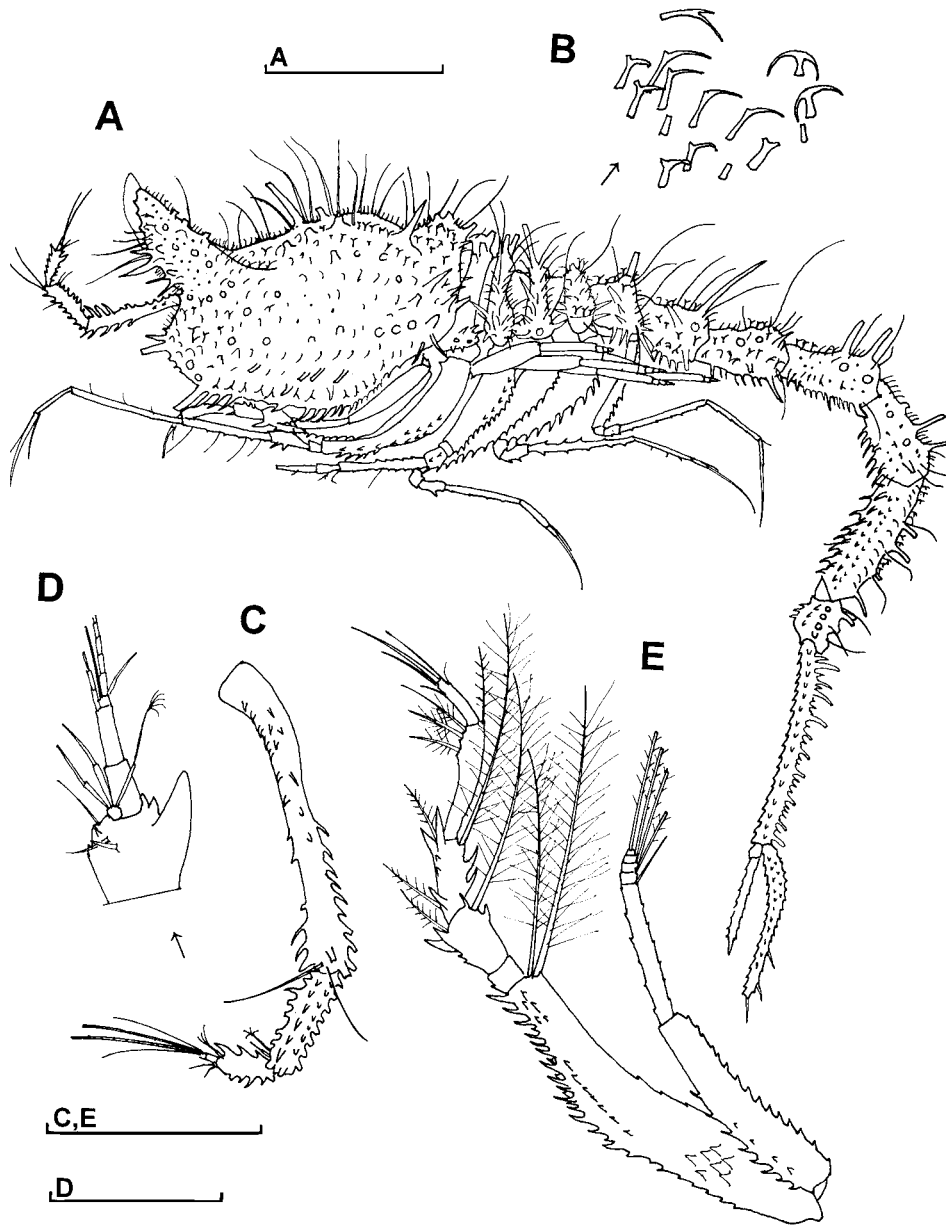


Fig. 5 – *Styloptocuma murariui* n. sp., male allotype A, body, lateral view; B, bifid setae from carapace, magnified; C, antenna 1; D, tip of antenna 1, magnified; E, maxilliped 3. Scale bars (in mm): A 1; C,E 0.5; D 0.2.

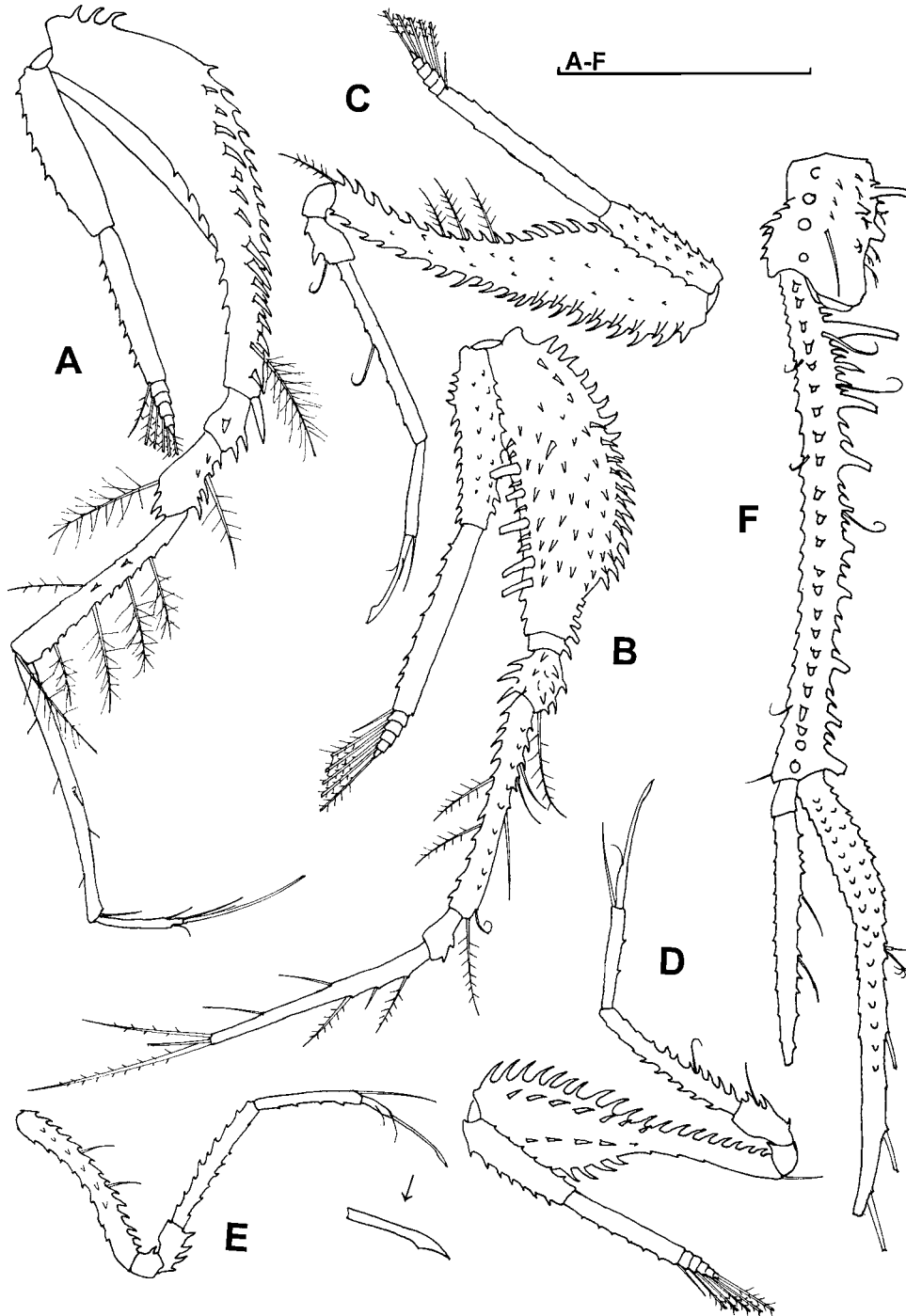


Fig. 6 – *Styloptocuma murarii* n. sp., male allotype. A-E, pereopods: A, 1; B, 2; C, 3; D, 4; E, 5; F, uropod. Scale bar (in mm): A-F 0.5.

*Styloptocuma negoescuae* n. sp.  
(Figs 7, 8)

*Material:* holotype ♀, 4 mm, BMNH 2007.293; paratypes: 2 ♀♀, sta. 10141#1, BMNH 2007.291-292; 1 ♀, sta. 10141#1, MGAB CUM 1628.

*Type locality:* NE Atlantic (off NW Africa), sta. 9129#1, 23°5'42"N, 27°58'42"W, coast of Western Sahara, 5590 m, November 14, 1976.

*Derivatio nominis.* The species is dedicated in honor of Dr. Ileana Negoescu, world specialist in systematic of Anthuridean isopods from the "Grigore Antipa" National Museum of Natural History, as a sign of homage and eternal thanks for advising that I received from her at the beginning of my scientific career and for all the time she spent for correcting my papers in her quality of editorial secretary of our museum's journal, *Travaux du Muséum National d'Histoire Naturelle "Grigore Antipa"*.

*Description of female*

Body (Fig. 7 A), elongated, integument with scales only on pereon and pleon. Length: 4 mm.

*Carapace* (Fig. 7 A), twice longer than deep, with a dorsal carina with nine teeth interspersed with three long simple setae, last posterior two on an elevation, 11 spine-like setae from antero-lateral corner towards posterior end, on ventral and subventral margin, eyelobe long, up to the tip of pseudorostrum, moderate upturned pseudorostrum, 1/3 of entire carapace length, large, not so deep antennal notch, siphon little exceeding tip of pseudorostral lobes.

*Pereon* (Fig. 7 A), 0.6 of carapace length, with scaly integument, all segments free, last three with dorsal spines, long simple seta on posterior end of segments 4 and 5.

*Pleon* (Fig. 7 A), little longer than cephalothorax (1.2), with scaly integument and a strong dorsal serration on whole segments.

*Antenna 1* (Fig. 7 B, C), with long and slender peduncle, basal article little longer than rest of articles combined, a simple seta on inner margin of basal and median articles, a small outer tubercle on outer distal corner of median article, with two sensory setae, main flagellum with three articles and two aesthetascs, accessory one with two articles and terminal sensory setae.

*Maxilliped 3* (Fig. 7 D), basis subequal with rest of articles combined, with an inner distal tooth and a plumose seta, two setae, one pappose and one plumose, on outer distal corner, without process, merus subequal with carpus, with a spine and a pappose seta on outer margin, carpus with two plumose setae on inner margin, a spine and a pappose seta on outer margin, propodus, second longest article of maxilliped, curved, with two forked setae, twice longer than dactylus, stout terminal seta longer than dactylus.

*Pereopod 1* (Fig. 8 A), basis a little longer than 1/3 of entire pereopod, with three spines on inner margin and a plumose seta on outer one, carpus 1.2 times longer than ischium and merus combined, with two simple setae on outer margin, propodus 0.7 of carpus length and twice longer than dactylus, terminal stout simple seta longer than dactylus.

*Pereopod 2* (Fig. 8 B), basis longer than 0.4 of entire pereopod, carpus 1.3 times longer than ischium and merus combined, with a simple seta on outer margin and one simple, one stout, short and one pectinate longer, never exceeding tip of propodus, dactylus 2.8 times longer than propodus, with four simple setae on inner

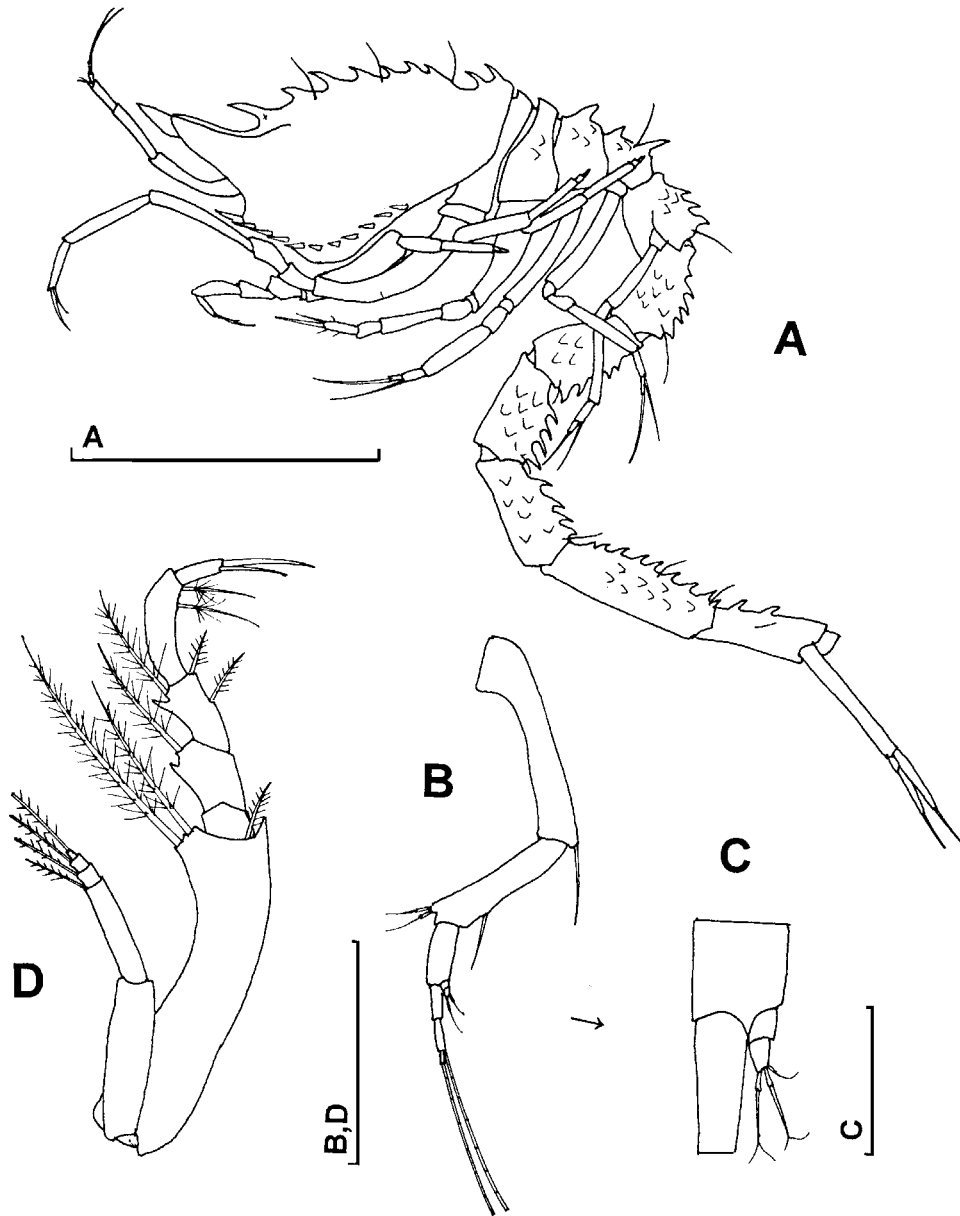


Fig. 7 – *Styloptocuma negoescuae* n. sp., female holotype. A, body, lateral view; B, antenna 1; C, tip of antenna 1, magnified; D, maxilliped 3. Scale bars (in mm): A 1; B, D 0.3; C 0.05.

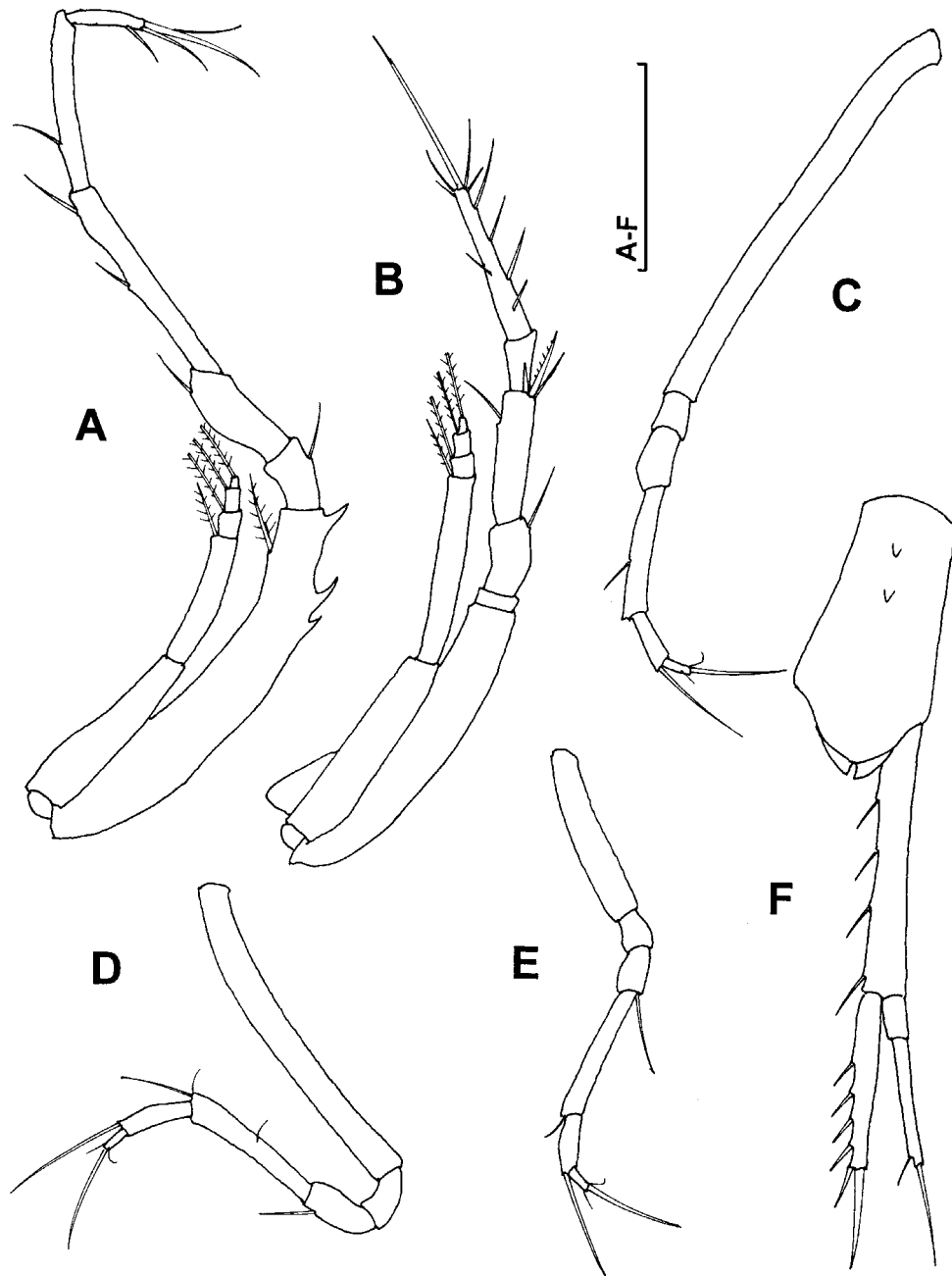


Fig. 8 – *Styloptocuma negoescuae* n. sp., female holotype. A-E, pereopods: A, 1; B, 2; C, 3; D, 4; E, 5; F, uropod. Scale bar (in mm): A-F 0.3.

margin and a fine seta on outer margin, four subterminal ones and one terminal, little longer than dactylus.

*Maxilliped 3* and *pereopods 1, 2* with exopods.

*Pereopod 3* (Fig. 8 C), basis 1.4 longer than rest of articles combined, carpus 1.3 times longer than ischium and merus combined, propodus twice longer than dactylus, terminal stout seta.

*Pereopods 4* and *5* (Fig. 8 D, E), basis progressively shorter and carpus longer (carpus/ ischium + merus: 1.6 in 5<sup>th</sup> pair).

*Uropod* (Fig. 8 F), peduncle as long as pleonite 6, with four simple setae on inner margin, 1.5 times longer than rami, exopod, 2-articled, as long as endopod, with a subterminal fine seta and a terminal simple seta, shorter than of exopod, endopod, 1-articled, with five stout short setae on inner margin and a terminal seta, outer than seta of exopod.

*Male*, unknown.

*Distribution*. NE Atlantic (Rockall Trough, Porcupine Seabight, and NW African coast), coasts of Canary Islands and Western Sahara, 3460–5590 m.

#### Remarks

*Styloptocuma negoescuae* n. sp. is closer related to *S. pleonserrata* Mühlenhardt-Siegel from Angola basin (2005). Common features: dorsal teeth on carapace, dorsally serrate pereon and pleon. It differs by: 1) absence of antero-lateral tooth; 2) longer carapace; 3) all segments of pleon dorsally serrate versus segments 1–4 in *S. pleonserrata*; 4) shorter uropodal peduncle (peduncle/ pleonite 6: 1 versus 1.4 in Mühlenhardt-Siegel); 5) shorter ratio peduncle/endopod (1.6 versus 2.3); 6) five setae versus three on inner margin of uropodal endopod.

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NOI SPECII DE CUMACEE (CRUSTACEA: CUMACEA) DIN APELE ADÂNCI DIN NV AFRICII: *ALTICUMA BOTNARIUCI* N. SP., *STYLOPTOCUMA MURARIUI* N. SP. ȘI *STYLOPTOCUMA NEGOESCUEAE* N. SP.

#### REZUMAT

Sunt descrise trei specii de cumacee aparținând Muzeului de Istorie Naturală din Londra: *Alticum botnariuci* n. sp., *Styloptocuma murariui* n. sp. și *Styloptocuma negoescuae* n. sp. Materialul a fost colectat de expediția „Discovery II” a Woods Hole Oceanographic Institute din Statele Unite ale Americii din Oceanul Atlantic de Est, de la coastele Insulelor Canare, ale Saharei de Vest și ale Mauritaniei.

Sunt făcute completări ale diagnozei genului *Alticum* Day, 1978 și o comparație a speciilor cunoscute aparținând acestui gen cunoscut până acum doar din apele sudice ale Oceanului Atlantic (coastele Africii de Sud) și din cele vestice ale Oceanului Indian (coastele Kenyei).

Cele două specii noi de *Styloptocuma* se aseamănă cu specii descrise de asemenea din Oceanul Atlantic, *S. echinatum* (Jones, 1984) și *S. pleonserrata* Mühlenhardt-Siegel, 2005.

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