A new species of *Elasmopus* Costa (Amphipoda: Maeridae) from the coast of Rio de Janeiro state, southeastern Brazil

C.S.M. Pereira¹, L.F. Andrade^{2*}, A.R. Senna¹

¹Universidade do Estado do Rio de Janeiro, Faculdade de Formação de Professores, Departamento de Ciências. Rua Dr. Francisco Portela, 1470, Patronato, São Gonçalo, RJ, CEP 24435-005, Brazil.

² Universidade Federal de Pernambuco, Museu de Oceanografia Prof. Petrônio Alves Coelho, Laboratório de Carcinologia. Av. Arquitetura, s/n, Cidade Universitária, Recife, PE, CEP 50740-540, Brazil.

* Corresponding author: lzflp.andrade@hotmail.com Pereira: ORCID https://orcid.org/0000-0002-3766-4260 Andrade: ORCID http://orcid.org/0000-0002-4868-737X Senna: ORCID https://orcid.org/0000-0003-0976-849X

ABSTRACT: A new species of *Elasmopus* Costa, 1853 is described. The material examined was collected by SCUBA diving at the Itaipu and Boa Viagem beaches, municipality of Niterói, Rio de Janeiro state, Brazil. *Elasmopus helenae* sp.n. belongs to the castelloserrate group within the genus and is diagnosed by: antenna I accessory flagellum 2- or 3-articulated; gnathopod II with propodus subovoid and tapering distally, palm presenting two processes, medial one almost subquadrate, subdistal subtriangular but apically rounded; basis of pereopod V with posterior margin weakly serrate; basis of pereopods VI and VII with distal half of posterior margin castelloserrate; uropod I peduncle with two stout basofacial setae; and telson deeply cleft, each lobe apically truncate with an apicolateral and an apicomesial cusp.

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KEY WORDS: Crustacea; Taxonomy; Guanabara Bay; Southwestern Atlantic.

Новый вид *Elasmopus* Costa (Amphipoda: Maeridae) с побережья штата Рио-де-Жанейро, юго-восток Бразилии

К.С.М. Перейра¹, Л.Ф. Андраде^{2*}, А.Р. Сенна¹

¹ Universidade do Estado do Rio de Janeiro, Faculdade de Formação de Professores, Departamento de Ciências. Rua Dr. Francisco Portela, 1470, Patronato, São Gonçalo, RJ, CEP 24435-005, Brazil.

² Universidade Federal de Pernambuco, Museu de Oceanografia Prof. Petrônio Alves Coelho, Laboratório de Carcinologia. Av. Arquitetura, s/n, Cidade Universitária, Recife, PE, CEP 50740-540, Brazil.

* Автор, ответственный за nepenucky: lzflp.andrade@hotmail.com

РЕЗЮМЕ: В работе дается описание нового вида рода *Elasmopus* Costa, 1853. Исследованный материал был собран с использованием водолазного снаряжения на пляжах Итайпу и Боа Виажем, муниципалитет Нитерой, штат Рио-де-Жанейро, Бразилия. *Elasmopus helenae* sp.n. относится к кастеллоцерратной группе видов этого рода и диагностируется следующими признаками: добавочный жгутик антенн I 2-или 3-члениковый; проподус гнатопода II яйцевидный сужающийся дистально, пальмарная поверхность с двумя выростами, почти квадратным медиальным и треугольным субдистальным закругленным на вершине; базис переопода V со слабо зазубренным задним краем; дистальная часть заднего края базиса переопода VI и VII кастеллоцерратный; стебелек уропода I с двумя толстыми базофациальные щетинками; тельсон с глубокой выемкой, каждая лопасть усечена апикально и имеет апиколатеральный и апикомезиальный выступы.

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КЛЮЧЕВЫЕ СЛОВА: ракообразные; птаксономия; залив Гуанабара; юго-западная Атлантика.

Introduction

Maeridae Krapp-Schickel, 2008 is an amphipod family considered to be cosmopolitan, being generally found in shallow marine or brackish water habitats, and more rarely in deep waters (Lowry, Hughes, 2009; Hughes, 2015). Among the genera that present a high diversity in tropical and temperate environments are *Ceradocus* Costa, 1853; *Maera* Leach, 1814; *Quadrimaera* Krapp-Schickel et Ruffo, 2000; *Mallacoota* Barnard, 1972; and *Elasmopus* Costa, 1853 (Lowry, Hughes, 2009). The last one stands out as the most diverse genus within the family.

Amphipods belonging to the genus *Elasmopus* can be easily distinguished by morphological features such as: head presenting a lateral notch and well-developed eyes; antenna I with short or minute accessory flagellum; mandible with falcate segment 3; maxilliped palp segment 3 with a narrow distomedial projection; coxa I anteroventrally produced; pleonites and urosomites without dorsal serrations distally; uropod III with well-developed rami, not exceeding twice the peduncle length (Lowry, Hughes, 2009). However, this last character needs to be reassessed, since some species present rami exceeding twice the length of the peduncle (Souza-Filho, Senna, 2009).

The new species described herein belongs to a group within Elasmopus characterized by presenting the posterior margin of the basis of pereopods VI and/or VII with a remarkable type of deeply notched ornamentation, whose apexes can be truncated, sharp or rounded. This group is known as castelloserrate (Krapp-Schickel, Ruffo, 1990) and is currently composed of 12 species: E. canarius Krapp-Schickel et Ruffo, 1990, E. coxacallus Hughes, 2015, E. crenulatus Berents, 1983, E. steelei Appadoo et Myers, 2003, E. fusimanus Oliveira, 1951, E. laufolii Myers, 1986, E. oaxaquensis García-Madrigal, 2010, E. pectenicrus (Spence Bate, 1862), E. serricatus Barnard, 1969, E. spinibasus Sivaprakasam, 1970, E. souzafilhoi Senna, 2011, and E. yunde Barnard, 1974.

To date, there are 14 species of *Elasmopus* recorded along the Brazilian coast (Serejo, Siqueira, 2018; Iwasa-Arai *et al.*, 2021). This is the fifteenth species of the genus known from Brazilian waters and the fifth from the Rio de Janeiro state coast.

Materials and methods

The examined material was collected by SCUBA diving at Itaipu and Boa Viagem beaches, munici-



Fig. 1. *Elasmopus helenae* sp.n., male holotype (UERJ 579): habitus. Scale bar: 2.0 mm. Рис. 1. *Elasmopus helenae* sp.n., голотип самец (UERJ 579): габитус. Масштаб: 2,0 мм.

pality of Niterói, Rio de Janeiro state, Brazil. Itaipu beach is located on the Atlantic coast of the municipality of Niterói, while Boa Viagem beach is in sheltered waters, inside Guanabara Bay. Algae samples were elutriated and then sorted out under a stereomicroscope. Subsequently, the amphipods were anesthetized with 5% ethanol and stored in 93% ethanol. All specimens are deposited in the Crustacea Collection of the Universidade do Estado do Rio de Janeiro (UERJ). For the taxonomic study, appendages and mouthparts were dissected and mounted in glycerine gel slides, drawn under an optical microscope with camera lucida, Motic BA-310, and digitally prepared with CorelDRAW 2018. The setal/spine classification used in this work follows Garm and Watling (2013) and the nomenclature of gnathopod palm is based on Poore and Lowry (1997).

Systematics

Order Amphipoda Latreille, 1816 Suborder Senticaudata Lowry, Myers, 2013 Family Maeridae Krapp-Schickel, 2008 Genus *Elasmopus* Costa, 1853

TYPE SPECIES. *Elasmopus rapax* Costa, 1853. DIAGNOSIS. Lateral cephalic lobe short, anteroventral cephalic notch present. Antenna 1 longer than antenna 2, accessory flagellum with at least 2 articles. Lower lip with present inner lobes. Mandible palp segment 3 falciform. Maxilla 1 inner plate suboval to subrectangular, inner margin not or weakly setose, apical margin with 1–2 plumose setae; outer plate with multi-cuspidate setae apically. Maxilla 2 inner plate without facial setal row. Gnathopods 1–2 subchelate, different in shape and size (male gnathopod 1 much smaller than gnathopod 2), palms acute to extremely acute. Coxae slightly elongate; coxa 4 with rounded to subquadrate posterodistal lobe. Pereopods 5–7 usually short and stout, basis with posteroventral lobe. Uropod 1 peduncle with none to two basofacial setae; rami subequal in size. Uropod 3 rami short, apically truncate, outer ramus broad and strongly setose, 1-articulate or with vestigial article 2. Telson usually deeply cleft (after Senna, Souza-Filho, 2011).

Elasmopus helenae sp.n. urn:lsid:zoobank.org:act:E79A11D2-315A-476C-8C50-2A52E541B8C7 Figs 1–9.

MATERIAL EXAMINED. Holotype: male, 10.5 mm length, dissected and drawn, Itaipu Beach, municipality of Niterói, Rio de Janeiro state, Brazil, 2– 3 m depth, 22°58'26"S 43°02'47"W, A.R. Senna and R. Sorrentino coll., 9 March 2018, on algae (UERJ 579). Paratypes: 1 female, dissected and drawn, same sampling data (UERJ 581); 2 males in 93% ethanol, same sampling data (UERJ 580); 15 females and 2 males, in 93% ethanol, same sampling data (UERJ 582); 11 females, in ethanol 93%, same sampling data (UERJ 583); 1 male, in 93% ethanol, same sampling data (UERJ 584); 1 female, in 93% ethanol, same sampling data (UERJ 585); 58 individuals, in ethanol 93%, Boa Viagem Beach, munici-



Fig. 2. *Elasmopus helenae* sp.n., male holotype (UERJ 579): A — head; B — antenna I; C — accessory flagellum of antenna I; D — antenna II; E — right mandible; F — left mandible; G — lower lip; H — upper lip; I — maxilla II; J — maxilla I; K — maxilliped. Scale bars: A, B, D — 0.5 mm; E, F — 0.2 mm; G, H, I, J — 0.1 mm; K — 0.3 mm.

Рис. 2. *Elasmopus helenae* sp.n., голотип самец (UERJ 579): А — головной отдел; В — антенна I; С — добавочный жгутик антенны I; D — антенна II; Е — правая нижняя челюсть; F — левая нижняя челюсть; G — нижняя губа; Н — верхняя губа; I — максилла II; J —максилла I; К — максиллипед. Масштаб: А, В, D — 0,5 мм; E, F — 0,2 мм; G, H, I, K, J — 0,1 мм; К — 0,3 мм.



Fig. 3. *Elasmopus helenae* sp.n., male holotype (UERJ 579): A — gnathopod I; B — gnathopod II; C — propodus of gnathopod II without setal fringe, lateral view; D — propodus of gnathopod II without setal fringe, mesial view. Scale bars: 0.5 mm.

Рис. 3. *Elasmopus helenae* sp.n., голотип самец (UERJ 579): А — гнатопод I; В— гнатопод II; С — проподус гнатопода II без краевых щетинок, вид сбоку; D — проподус гнатопода II без краевых щетинок. Масштаб: 0,5 мм.



Fig. 4. *Elasmopus helenae* sp.n., male holotype (UERJ 579): A — pereopod III; B — pereopod IV; C — pereopod V. Scale bars: 0.5 mm.

Рис. 4. *Elasmopus helenae* sp.n., голотип самец (UERJ 579): А — переопод III; В — переопод IV; С — переопод V. Масштаб: 0,5 мм.



Fig. 5. *Elasmopus helenae* sp.n., male holotype (UERJ 579): A — pereopod VI; B — pereopod VII. Scale bars: 0.5 mm.

Рис. 5. *Elasmopus helenae* sp.n., голотип самец (UERJ 579): А — переопод VI; В — переопод VII. Масштаб: 0,5 мм.



Fig. 6. *Elasmopus helenae* sp.n., male holotype (UERJ 579): A — epimeral plate I; B — epimeral plate II; C — epimeral plate III; D — uropod I; E — uropod II; F — uropod III; G — telson. Scale bars: A, B, C — 0.5 mm; D, E, F — 0.3 mm; G — 0.1 mm.

Рис. 6. *Elasmopus helenae* sp.n., голотип самец (UERJ 579): А — эпимеральная пластинка I; В — эпимеральная пластинка II; С — эпимеральная пластинка III; D — уропод I; Е — уропод II; F — уропод III; G — тельсон. Масштаб: А, В, С — 0,5 мм; D, E, F — 0,3 мм; G — 0,1 мм.



Fig. 7. *Elasmopus helenae* sp.n., female paratype (UERJ 581): A — antenna I; B — accessory flagellum of antenna I; C — antenna II; D — gnathopod I; E — gnathopod II. Scale bars: A, C — 0.5 mm; D, E — 0.3 mm. Рис. 7. *Elasmopus helenae* sp.n., паратип самка (UERJ 581): A — антенна I; B — добавочный жгутик антенны I; C — антенна II; D — гнатопод I; E — гнатопод II. Масштаб: А, B — 0,5 мм; D, E — 0,3 мм.



Fig. 8. *Elasmopus helenae* sp.n., female paratype (UERJ 581): A — Pereopod III; B — oostegite III; C — pereopod V; D — pereopod VII; E — pereopod VI. Scale bars: A, C, D, E — 0.5 mm; B — 0.2 mm. Рис. 8. *Elasmopus helenae* sp.n., паратип самка (UERJ 581): A — переопод III; B — оостегит III; C — переопод V; D — VII переопод; E — переопод VI. Масштаб: A, C, D, E — 0,5 мм; B — 0,2 мм.



Fig. 9. *Elasmopus helenae* sp.n., female paratype (UERJ 581): A — uropod I; B — uropod II; C — uropod III; D — telson. Scale bars: A, B, C — 0.2 mm; D — 0.1 mm. Рис. 9. *Elasmopus helenae* sp.n., паратип самка (UERJ 581): A — уропод I; B — уропод II; C — уропод III; D — тельсон. Масштаб: A, B, C — 0,2 мм; D — 0,1 мм. pality of Niterói, Rio de Janeiro state, Brazil, 1–2 m depth, 22°54′31″S 43°07′50″W, V.M. Cummings and R. Sorrentino coll., 18 July 2019, on algae (UERJ 1282); 29 individuals, in ethanol 93%, Boa Viagem Beach, municipality of Niterói, Rio de Janeiro state, Brazil, 1–2 m depth, 22°54′31″S 43°07′ 50″W, V.M. Cummings and R. Sorrentino coll., 18 July 2019, on algae (UERJ 1283).

DIAGNOSIS. Antenna I with accessory flagellum of 2–3 articles. Gnathopod II palm bearing a dense fringe of plumose setae, with two processes, medial being almost subquadrate whereas subdistal being subtriangular but apically rounded. Pereopod VI basis posterior margin deeply castelloserrate along distal half. Pereopod VII basis posterior margin weakly serrate proximally and castelloserrate along distal half. Uropod I peduncle with two basofacial stout setae. Telson about 85% cleft, each lobe apically truncate with an apicolateral and an apicomesial cusp.

DESCRIPTION OF MALE. Based on male holotype (UERJ 579).

Habitus as in Fig 1. Head (Fig. 2A) with reniform eyes, lateral cephalic lobe broad, rounded, distally truncated, with anteroventral notch and slit, anteroventral corner rounded.

Antenna I (Fig. 2B) about $1.8 \times$ longer than antenna II, moderately setose; peduncle segment 1 about $2.9 \times$ longer than wide, dorsal margin with one proximal stout seta and two distal slender setae, ventral margin setose, distally with two stout setae with accessory seta; peduncle segment 2 about $4.3 \times$ longer than wide, slightly longer than segment 1; peduncle segment 3 about $4 \times$ longer than wide, about $0.6 \times$ length of segment 2; primary flagellum 21articulate; accessory flagellum (Fig. 2C) 2-articulate.

Antenna II (Fig. 2D) moderately setose; peduncle segment 1 ordinary (not drawn); peduncle segment 2 short, dorsal margin with two setae; peduncle segment 3 short, with two facial short stout setae; peduncle segment 4 dorsal margin with three sets of medium to long setae, ventral margin moderately setose; peduncle segment 5 dorsal margin with five sets of slender setae, ventral margin moderately setose; flagellum 7-articulate.

Upper lip (Fig. 2H) rounded, apically setulose. Lower lip (Fig. 2G) inner and outer lobes apically and facially setulose.

Right mandible (Fig. 2E) incisor apically bifid; lacinia mobilis apically bifid, with lateral margin multi-cuspidate; molar expanded, triturative, with a long plumose seta; accessory setal row with three stout multi-cuspidate setae; palp, segment 1 short, segment 2 about $2.2 \times$ longer than wide, ventral margin setose, bearing eight proximal slender setae and seven distal pectinate long setae, segment 3 falciform, about $2.8 \times$ longer than wide, ventral margin setose, with a proximal row of minute setules, a medial row of pectinate setae and six slender long setae distally.

Left mandible (Fig. 2F) incisor with three apical spines; lacinia mobilis with four spines; molar triturative, with a long plumose seta; accessory setal row with four multi-cuspidate setae; palp segment 1 short, segment 2 about $2.7 \times$ longer than wide, ventral margin setose, bearing five proximal slender setae and 10 distal pectinate setae, segment 3 about $2.9 \times$ longer than wide, ventral margin setose.

Maxilla I (Fig. 2J) inner plate with two apical plumose setae, lateral and mesial margins slightly setulose; outer plate with eight apical stout setae, three of them multi-cuspidate, three bifid and two serrate; palp 2-segmented, segment 1 short, segment 2 about $1.9 \times$ longer than wide, with 12 slender setae distally.

Maxilla II (Fig. 2I) inner plate mesial margin slightly setulose and with a row of 12 plumose setae extending apically, lateral margin with distal setules; outer plate slightly longer than inner plate, with 10 plumose apical setae, lateral margin distally setulose.

Maxilliped (Fig. 2K) inner plate bearing a facial row of nine plumose setae, mesial margin with five plumose setae; outer plate about twice longer than inner plate, mesial margin bearing nine stout setae, apical margin with six plumose setae; palp segment 2 about $3.5 \times$ longer than wide, mesial margin moderately setose, segment 3 weakly setose, $2.5 \times$ longer than wide, with a facial row of five slender setae, distal lobe produced and setulose, segment 4 narrow, with three apical slender setae; nail present, partially immersed.

Gnathopod I (Fig. 3A) coxa produced anteroventrally, ventral margin bearing nine slender setae. Carpus about $1.8 \times$ longer than wide, with 10 facial rows of plumose setae, posterior margin moderately setose, with plumose setae. Propodus with stout facial seta near dactylus insertion, with three facial rows of long plumose setae and four rows of pectinate setae; palm about $0.4 \times$ length of posterior margin, acute, with short pectinate setae on its margin. Dactylus inner margin with four short setae; nail present. Rest of limb as figured.

Gnathopod II (Fig. 3B) coxa ventral margin rounded with five setules and four setae. Carpus about $1.3 \times$ wider than long, posterior corner weakly produced, with eight setae. Propodus subovoid, tapering, with eight facial rows of slender setae laterally (Fig. 3C) and nine rows placed mesially (Fig. 3D); palm about 1.8× longer than posterior margin of propodus, densely setose with plumose setae, with two processes: medial is subquadrate, subdistal is subtriangular with rounded apex bearing three short stout setae decreasing in length. Dactylus elongated and curved. Rest of limb as figured.

Pereopod III (Fig. 4A) coxa subrectangular, ventral margin with 15 setae. Carpus $2.8 \times$ longer than wide, about $0.7 \times$ as the length of propodus, posterior margin with five setae. Propodus $4.9 \times$ longer than wide, posterior margin with six setae. Dactylus about 45% of the length of propodus, posterior margin with one short seta distally; nail present. Rest of limb as figured.

Pereopod IV (Fig. 4B) coxa ventral margin with 18 short setae, posterior margin weakly excavate. Carpus 2.3× longer than wide, about 0.6× as long as propodus, posterior margin with six setae. Propodus 4.4× longer than wide, posterior margin with eight setae. Dactylus about 40% of the length of propodus, anterior and posterior margins with one short seta each; nail present. Rest of limb as figured.

Pereopod V (Fig. 4C) coxa bilobated, posterior lobe with nine setae. Basis 1.2× longer than wide, posterior margin weakly serrate. propodus 4.8× longer than wide, with five facial sets of stout setae (3-3-4-4-2). Dactylus about 30% of the length of propodus, posterior margin finely combed, with a distal short seta; nail present. Rest of limb as figured.

Pereopod VI (Fig. 5A) coxa excavate ventrally, anterior margin with two setae, posteroventral margin bearing six setae. Basis $1.5 \times$ longer than wide, posterior margin castelloserrate on distal half, with weak posterodistal lobe bearing three slender setae. Propodus $5.5 \times$ longer than wide, with six facial sets of stout setae (2-3-4-4-3-3). Dactylus about 30% of the length of propodus, finely combed anteriorly and facially, anterior margin with four short setae, posterior margin with one plumose seta. Rest of limb as figured.

Pereopod VII (Fig. 5B) coxa ventral margin convex, weakly expanded posteriorly, posterior margin with four short setae. Basis 1.2× longer than wide, posterior margin castelloserrate along distal half. Propodus 5.1× longer than wide, with six facial sets of stout setae (2-3-3-4-4-2). Dactylus about 35% of the length of propodus, finely combed anteriorly and facially, anterior margin with three setules, posterior margin one plumose and one short slender seta. Rest of limb as figured.

Epimeral plate I (Fig. 6A) ventral margin smooth, with three setae; posteroventral corner rounded; posterior margin slightly convex, with two setae.

Epimeral plate II (Fig. 6B) anterior margin slightly concave; ventral margin smooth, with two sets of three setae; posteroventral corner subquadrate; posterior margin weakly crenulate.

Epimeral plate III (Fig. 6C) ventral margin with three sets of two setae each; posteroventral corner subquadrate; posterior margin weakly crenulate.

Uropod I (Fig. 6D) peduncle $3.9 \times$ longer than wide, with two stout basofacial setae, dorsolateral margin with six stout setae, dorsomedial margin with eight stout setae; outer ramus subequal in length to inner counterpart, with three marginal stout setae and four disposed apically; inner ramus with seven marginal and five apical stout setae.

Uropod II (Fig. 6E) peduncle $1.8 \times$ longer than wide, dorsolateral margin with 3 stout setae, dorsomedial margin with 3 serrate stout setae; outer ramus about $0.8 \times$ as long as inner ramus, with seven marginal stout setae and four disposed apically; inner ramus with six marginal and five apical stout setae.

Uropod III (Fig. 6F) peduncle $1.4 \times$ longer than wide, with one stout seta ventrally, dorsolateral margin with apical three stout setae, distoventral corner and dorsomedial margin with three stout setae each; outer ramus about $1.5 \times$ longer than inner ramus, apically truncated with ten stout setae, marginally with two sets of six and seven stout setae, respectively; inner ramus with two marginal stout setae and four disposed apically.

Telson (Fig. 6G) slightly wider than long, cleft to about 83% of the length, each lobe apically truncate with a lateral and a mesial cusp, bearing two long and two short stout setae, and a subapical short seta; dorsolateral margin with two short plumose setae on each side.

FEMALE (Figs 7–9). Based on female paratype (UERJ 581). Mainly as male except for the following features: antenna I accessory flagellum (Fig. 7B) 3-articulate, being the last segment minute. Gnathopod II (Fig. 7E) propodus with palm margin devoid of outgrowths and much less setose than male counterpart. Oostegites (Fig. 7B) narrow with subparallel margins.

ETYMOLOGY. This species is named after the first author's daughter, Helena.

TYPE LOCALITY. Itaipu Beach, municipality of Niterói, Rio de Janeiro state, Brazil.

Discussion

Among the species of the castelloserrate group, *E. canarius* is the one that mostly resem-

bles E. helenae sp.n. Both species present a subdistal subtriangular process on the palm of gnathopod II. Although the processes are similar, the new species can be distinguished by a stout apical seta plus two smaller ones (versus four to five short setae in E. canarius). Furthermore, the setae of the dense setal fringe covering the palm of gnathopod II are plumose in E. *helenae* sp.n., whereas they are simple in E. canarius. Another difference between both species pertains to the ornamentation of the posterior margin of the basis of pereopods V-VII. Thus, the new species displays more remarkable serrations and notches on percopod V; less notches on percopod VI; and percopod VII presents a weak serration proximally and a castelloserrate distal half. In addition, the castelloserration is deeper on pereopod VI than on pereopod VII in E. helenae sp.n., while in E. canarius it is the opposite.

Other species of the group share with the new species a similar subdistal subtriangular process on the palm of the gnathopod II, including E. coxacallus, E. crenulatus and E. pectenicrus. However, significative differences can be observed between E. helenae sp.n. and the aforementioned species. Thus, the new species presents a 2-articulate accessory flagellum on antenna I, whereas E. coxallus shows a 3-articulate accessory flagellum. Furthermore, E. coxacallus has an exceptional, unique feature among the group, which is a castelloserrate posterior margin of coxa VII. Elasmopus crenulatus has two subacute processes placed close to the insertion of dactylus on gnathopod II, in a way incompatible with our species, where the processes are subequal and rounded. Moreover, E. pectenicrus differs from E. helenae sp.n., in showing only the basis of pereopod VI provided with castelloserrations, instead of both pereopods VI and VII like in the new species. In addition, the setae of the dense setal fringe that covers the palm of gnathopod II are plumose, whereas they are simple on the other three mentioned species.

Species such as *E. laufolii*, *E. serricatus*, *E. steelei*, *E. souzafilhoi* and *E. oaxaquensis* have a rounded subdistal process on the palm of

gnathopod II. Furthermore, all of them (except *E. laufolii*) have only the basis of pereopod VII castelloserrate. These features contrast with the condition of the new species, where the palmar process is subtriangular and both pereopods VI and VII are castelloserrate.

The new species differs from *E. fusimanus*, *E. spinibasus* and *E. yunde* since these species do not present an apically rounded subtriangular subdistal process on the palm of gnathopod II. In addition, they have only pereopod VII castelloserrate.

Finally, *E. helenae* sp.n. shows two exclusive features within the castelloserrate group: the presence of a subquadrate process on the palm of gnathopod II and the presence of two stout basofacial setae on the peduncle of uropod II. Usually, some species of the genus do not display basofacial setae on peduncle of uropod I.

DISTRIBUTION AND ECOLOGY. The species is known from two localities, Itaipu Beach and Boa Viagem Beach, both located in the municipality of Niterói, state of Rio de Janeiro, Brazil. *Elasmopus helenae* sp.n. was found associated to algae on rocky shores, ranging from 1 to 3 meters depth.

Compliance with ethical standards

CONFLICTS OF INTEREST: The authors declare that they have no conflicts of interest.

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