

BRAZILIAN ROCK SHRIMPS OF THE GENUS *Sicyonia* (DECAPODA: SICYONIIDAE).

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ABSTRACT

The family Sicyoniidae was revised for the Brazilian coast. The family is represented by the following species: *Sicyonia typica* (Boeck, 1864), *Sicyonia laevigata* Stimpson, 1871, *Sicyonia dorsalis* Kingsley, 1878, *Sicyonia parri* (Burkenroad, 1934a), *Sicyonia burkenroadi* Cobb, 1971 and *Sicyonia olgae* Pérez Farfante, 1980. Some of these species have their range of occurrence changed. *S.typica* and *S.laevigata* are recorded for Rio Grande do Sul, *S. parri* is recorded for Rio de Janeiro and São Paulo, and *S. olgae* is a new record for the Brazilian coast.

Keywords: *Sicyonia*, distribution, systematics, key

INTRODUCTION

The Family Scyoniidae is exclusively composed of species of the genus *Sicyonia* H. Milne Edwards, 1830, and has a large distributional range in tropical and temperate oceans (Pérez Farfante & Boothe, 1981). In the Western Atlantic only *Sicyonia brevirostris* has commercial importance. Species of this genus inhabit the continental shelf on a variety of substrates, and some extend their distribution down to the continental slope.

Nine species [*Sicyonia typica* (Boeck, 1864); *Sicyonia laevigata* Stimpson, 1871; *Sicyonia brevirostris* Stimpson, 1871; *Sicyonia dorsalis* Kingsley, 1878; *Sicyonia stimpsoni* Bouvier, 1905; *Sicyonia parri* (Burkenroad, 1934a); *Sicyonia wheeleri* Gurney, 1943; *Sicyonia burkenroadi* Cobb, 1971 and *Sicyonia olgae* Pérez Farfante, 1980], have been cited for the Western Atlantic, while *S. brevirostris* and *S. laevigata* were also cited for the Pacific coast.

The occurrence of this genus for the Brazilian coast is largely confined to citations, the first being *S. cristata* (= *S. typica*) from Bahia (Bate, 1888). Citations of *S. brevirostris* for the Brazilian coast (Souza, 1988; Ramos-Porto et al., 1989) are incorrect, since individuals belonged to *S. olgae* (D'Incao, 1995).

The distribution of *S.typica*, *S.laevigata* and *S.dorsalis* ranges from 32°N (Cape Hatteras, North Carolina) to 28°S (Santa Catarina, Brazil) (Pérez Farfante, 1980, 1985).

In Brazil *S. typica* has been cited for the States of Pará and Maranhão (Nomura & Fausto Filho, 1966), Ceará and Pernambuco (Coelho & Ramos, 1972), Rio Grande do Norte (Coelho et al., 1986), Alagoas and Sergipe (Barros & Jonsson, 1967), Rio de Janeiro (Moreira, 1901), São Paulo (Neiva, 1969), and Santa Catarina (Tremel & Mistakidis, 1965). *Sicyonia laevigata* has been cited for the States of Amapá, Pará, Maranhão, Piauí and Pernambuco (Coelho & Ramos, 1972), Ceará and Rio Grande do Norte (Fausto Filho, 1966a), Alagoas and Sergipe (Barros & Jonsson, 1967), and Santa Catarina (Fausto Filho & Sampaio Neto, 1976). *S. dorsalis* has been cited for the States of Amapá, Maranhão and Piauí (Fausto Filho, 1968), Pará, Rio Grande do Norte, Pernambuco and Bahia (Coelho & Ramos, 1972), Ceará (Fausto Filho, 1966a), Paraíba (Fausto Filho, 1979), Alagoas and Sergipe (Barros & Jonsson, 1967), Rio de Janeiro (Iwai, 1973), São Paulo (Mistakidis & Neiva, 1964), and Santa Catarina (Tremel & Mistakidis, 1965).

Sicyonia burkenroadi is distributed between 32°N (Cape Lookout, North Carolina) to 15°S (Bahia, Brazil) (Pérez Farfante, 1980, 1985). *S. burkenroadi* has been registered in the States of Amapá (Coelho & Ramos, 1972), Alagoas and Sergipe (Barros & Jonsson, 1967).

The distribution of *S. parri* ranges from 32°N (Beaufort, North Carolina) to 12°S (Sergipe, Brazil) (Pérez Farfante, 1980, 1985). In Brazil, this species occurs in the States of Maranhão and Piauí (Fausto Filho, 1968), Ceará, Paraíba, Pernambuco (Coelho & Ramos, 1972), Rio Grande do Norte (Fausto Filho, 1967), Alagoas and Sergipe (Barros & Jonsson, 1967).

MATERIAL AND METHODS

The collections of the following institutions were examined during this study: Universidade Federal da Paraíba (UFPB), Departamento de Oceanografia, Universidade Federal de Pernambuco (DOUFPe), Museu Nacional, Universidade Federal do Rio de Janeiro (MNRJ), Museu de Zoologia Universidade de São Paulo (MZUSP) and Laboratório de Crustáceos Decápodes, Fundação Universidade do Rio Grande (FURG).

The terminology employed in the descriptions is that proposed by Pérez Farfante (1985).

At the material sections, the names of oceanographic vessels are written between quotation marks, the length of the carapace is expressed in millimeters (orbital angle to posterodorsal margin of carapace), and the number of individuals per sex is indicated (f - females; ma - males). The name of the countries cited are in English; otherwise, all geographic features, localities and States are in Portuguese.

RESULTS

Genus *Sicyonia* H. Milne Edwards, 1830

Sicyonia H. Milne Edwards, 1830:339.- 1837:408.- De Haan, 1846:187.- Heller, 1863:290.- Bate, 1888:292.- A.Milne Edwards & Bouvier, 1909:243.- Balls, 1914:14.- Burkenroad, 1945:1.- Barnard, 1950:635.- Holthuis, 1952:339.- Zariquiey Alvarez, 1968:57.- Péres Farfante, 1985:3.

Ruvulus de Natale, 1850:20.

Synhimantites Boeck, 1864:189.

Eusicyonia Stebbing, 1914:25.- Balls, 1925:232.- Burkenroad, 1934a:70.- 1934b:116.- 1945:1.- Kubo, 1949:437.

Type species: *Sicyonia sculpta* H. Milne Edwards, 1830:340 (by monotypy).

Diagnosis.

Body with rigid integument, microscopically setose. Rostrum short, not overreaching distal margin of antennular peduncle, armed with dorsal and apical teeth. Carapace bearing epigastric tooth and variable number of teeth more posteriorly; orbital, postorbital and pterygostomian spines lacking; hepatic spine well developed; cervical sulcus indistinct; hepatic sulcus shallow; hepatic carina weak or indistinct; branchiocardiac carina strong. Abdomen marked by transverse sulci bordered by closely set setae; dorsomedian carina extending for all somites; carina on the first somite usually produced in anterior tooth; sixth somite terminating in strong tooth. Telson armed with pair of subterminal, fixed

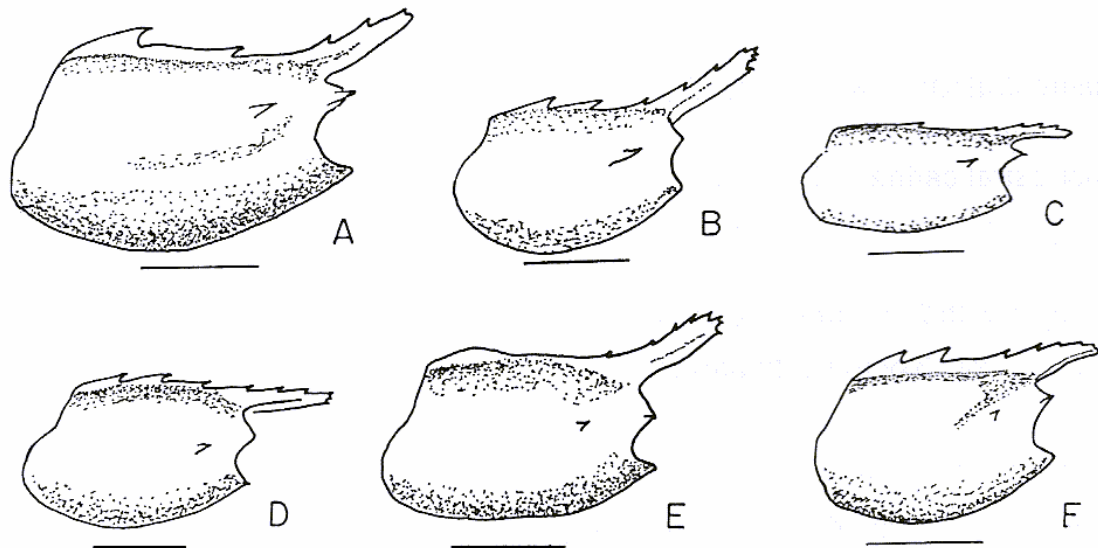


Figure 1. Carapaces of the *Sicyonia* species: A- *S. typica*; B- *S. laevigata*; C- *S. dorsalis*; D- *S. parri*; E- *S. burkenroadii*; F- *S. olgae*. Scale: 5mm.

spines. Ocular stylet projecting from anterolateral margin of ocular plate; prosartema rudimentary; stylocerite long, produced as sharp spine; antennular flagella short. Mandibular palp three-jointed, proximal article small and short, distal article large, much larger than median one. Exopods lacking on second and third maxillipeds and in all pereopods. Endopods of pleopods absent except for highly modified ones on first (petasma) and second (appendix masculina) pleopods.

Key to the Western Atlantic species of *Sicyonia*.

1. Postrostral carina with 2 teeth.....2
 1'. Postrostral carina with 3 teeth or more.....6
2. Ventral margin of rostrum straight or convex.....3
 2'. Ventral margin of rostrum concave.....5
3. Rostrum with 2 or, rarely, 1 dorsal tooth.....*S. typica*
 3'. Rostrum with 3 or more dorsal teeth.....4
4. Postrostral carina with the last tooth near posterior margin of carapace.....*S. burkenroadi*
 4'. Postrostral carina with the last tooth until two third of the carapace.....*S. stimpsoni**
5. Postrostral carina with first tooth preceding hepatic spine.....
*S. dorsalis*
 5'. Postrostral carina with first tooth at the same level or back the hepatic spine...
*S. wheeleri**
6. Rostrum with 2 or, rarely, 1 dorsal tooth... ..7
 6'. Rostrum with 3 or more dorsal teeth.....8
7. Antennal spine absent.....*S. laevigata*
 7'. Antennal spine present.....*S. brevirostris**

8. Postrostral carina with first tooth preceding hepatic spine.....*S. olgae*
.....*S. olgae*
- 8'. Postrostral carina with first tooth at the same level or back the hepatic spine
.....*S. parri*

(* - species not cited for Brazil)

Sicyonia typica (Boeck, 1864)
(Fig.1A; 2)

?*Palaemon carinatus* Olivier, 1811:667.

Sicyonia carinata.- H.Milne Edwards, 1830:344.- Kingsley, 1880: 426.- 1899:719.- Bate, 1888:294.

Synhimantites typicus Boeck, 1864:189.

Sicyonia edwardsi Miers, 1881:367.- Milne Edwards & Bouvier, 1909:224,251.

Eusicyonia edwardsi.- Burkenroad, 1934a:71.- Anderson & Lindner, 1945:315.- Lunz, 1945:4.

Sicyonia typica.- Burkenroad, 1945:2.- Hildebrand, 1954:268.- Voss, 1955:11.- Wass, 1955:132.- Menzel, 1956:41.- Springer & Bullis, 1956:10.- Eldred, 1959:5.- Holthuis, 1959:77.- Tabb & Manning, 1961:595.- Tabb et al., 1962:61.- Saloman, 1964: 160.- Bullis & Thompson, 1965:7.- Eldred et al., 1965:3.- Holthuis & Rosa,1965:7.- Tremel & Mistakidis, 1965:2.- Williams, 1965:36.- Barros & Jonsson, 1966:16.- Fausto-Filho, 1966a:32.- 1966b:47.- 1968:70.- Joyce & Eldred, 1966:24.- Mistakidis & Neiva, 1966:434- Nikolic & Garcia, 1969:584.- Rouse, 1969:136.- Lyons et al., 1971:28.- Chace, 1972:11.- Coelho & Ramos, 1972:142.- Iwai, 1973:56.- Wood, 1974:40.- Brusher & Ogren, 1976:158.- Huff & Cobb, 1979:74.- Holthuis, 1980:62.- Pérez Farfante, 1980:773.- 1988:23.- Ramos-Porto, 1980:285.- Rodriguez, 1980:74.- Wenner & Read, 1982:186.- Takeda & Okutani, 1983.- Williams, 1984:49.- Rodrigues et al., 1985:79.- Abele & Kim, 1986:10.- Ramos-Porto et al., 1989:223.- Souza, 1988:120.- Coelho et al., 1990:23.

Sicyonia tropicalis.- Iwai, 1973:44 (*lapsus*).

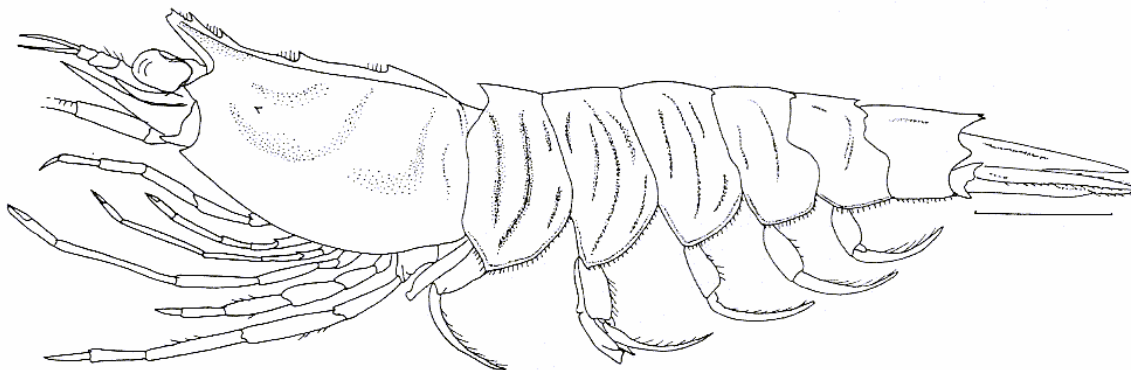


Figure 2. *Sicyonia typica*, male, FURG-1589. Scale: 5mm.

Type-locality. ?Molde Fjord, Norwegian west coast

Diagnosis.

Rostrum elevated in relation to carapace, with 2 dorsal teeth (rarely 1), 2 apical rudimentary teeth, ventral margin straight. Postrostral carina with 2 unequal teeth, epigastric tooth, small, placed posterior to hepatic spine, second tooth near posterior margin of carapace. Antennal spine present. First pereopod without short spine on basis and ischium. Anteroventral margins of abdominal somites 1-4 armed with rudimentary teeth laterally oriented. Dorsal carina of the second abdominal segment not incised. First abdominal somite with 3 sulci. Anterodorsal spine of the first abdominal segment sharp.

Distribution.

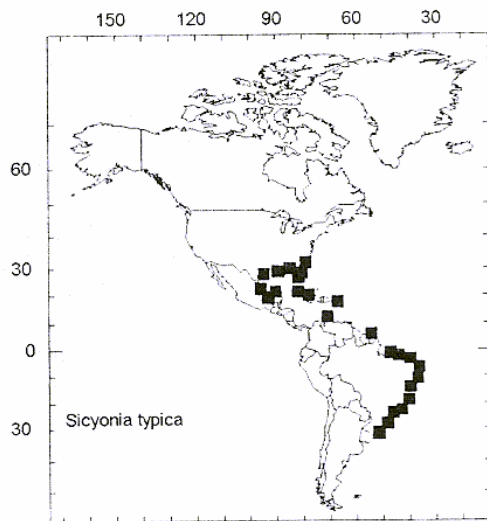


Figure 3. Distribution of *Sicyonia typica*.

Western Atlantic (north limit: Wrightsville Beach, North Carolina, USA; south limit: Rio Grande do Sul, 32°14'S, 51°23'W, Brazil)

United States (North and South Carolina, Georgia, Florida- east and west coast, Mississippi, Louisiana, Texas), Mexico (east coast to Yucatan), Cuba (Gulf of Batabanó, Manzanillo), Porto Rico (St. Thomas), Antigua, Venezuela, Suriname, French Guiana, Brazil (Pará, Maranhão, Piauí, Ceará, Rio Grande do Norte, Paraíba, Pernambuco, Alagoas, Sergipe, Bahia, Espírito Santo, Rio de Janeiro, São Paulo, Paraná, Santa Catarina e Rio Grande do Sul).

The occurrence of this shrimp along the coasts of Paraíba, Espírito Santo, Paraná and Rio Grande do Sul has not been previously reported.

Material.

BRAZIL. Pará. (2°10'N, 47°43'W), "Alm. Saldanha", est.GM56, 87m, 1 ex.,(DOUFPe); (1°48'N, 48°18'W), "Nissin", 76m, 8f, 16,0-21,3 mm, (FURG-1347). **Maranhão.** (2°03'S, 43°02'W), "Alm. Saldanha", est.7598, 39m, 1f, 7,6mm, (DOUFPe); **Ceará.** (2°15'S, 40°29'W), "Alm. Saldanha", 45m, 5ma, 7,2-11,6mm, 3f, 14,5-16,9mm, (DOUFPe); (3°02'S, 39°16'W), "Alm. Saldanha", est.1709, 20m, mud, 1f, 4,1mm, (DOUFPe); (3°43'S, 38°30'W), Fortaleza, "Canopus", 17m, 1ma, 7,9mm, (DOUFPe); (3°43'S, 38°30'W), 17m, 1ma, 6,3mm, (DOUFPe). **Paraíba.** João Pessoa, Praia de Tambau, 1f, 10,4mm, (UFPB-4846); Rio Paraíba do Norte, Ilha da Restinga, 1ma, 8,2mm, 4f, 6,4-8,2mm, (UFPB-2704); Rio Paraíba do Norte, Ilha da Restinga, 2f, 4,7-6,4mm, (UFPB-2705); Rio Paraíba do Norte, Ilha da Restinga, 1f, 6,2mm, (UFPB-2706); Rio Paraíba do Norte, Praia do Jacaré, 3f, 7.3-8,0mm, (UFPB-2707); Rio

Paraíba do Norte, Praia do Jacaré, 1f, 10,9mm,(UFPB-2708); Rio Paraíba do Norte, 4f, 4,8-7,3mm,(UFPB-2709). **Pernambuco.** (7°46'S, 34°53'W), 5ma, 7,3-8,8mm, 8f, 4,5-10,2mm, (DOUFPe); (7°46'S, 34°53'W), 7ma, 7,2-10,4mm, 9f, 6,0-9,1mm, (DOUFPe); (7°46'S, 34°53'W), 8ma, 4,7-8,6mm, 7f, 6,2-8,7mm, (DOUFPe); (7°48'S, 34°51'W), Itamaracá, Rio Paripe, *Halodule* bed, 1f, 3,8mm, (DOUFPe); (7°48'S, 34°51'W), Itamaracá, Vila Velha, 1ma, 6,1mm, (DOUFPe); (7°48'S, 34°51'W), Itamaracá, Vila Velha, 1f, 8,8mm, (DOUFPe); (8°10'S, 34°55'W), Jaboatão, Piedade, 1f, 7,4mm, (DOUFPe); (8°12'S, 34°55'W), Candeias, 1ma, 3,7mm, (DOUFPe); (8°16'S, 34°51'W), 25m, calcareous algae, 1ma, 5,5mm, 1f, 5,1mm, (DOUFPe); (8°45'S, 35°06'W), Tamandaré, calcareous algae, 2ma, 4,2-5,0mm, (DOUFPe). **Sergipe.** Pirambu, 3f, 15,2-19,5mm, (DOUFPe). **Alagoas.** (9°01'S, 35°06'W), Foz do Rio São Francisco, "Akaroa", 36m, calcareous algae, 1ma, 6,5mm, (DOUFPe); (10°43'S), Foz do Rio São Francisco, "Akaroa", 1f, 24,4mm, (DOUFPe); (10°43'S), "Akaroa", 2ma, 12,2-12,3mm, 1f, 12,5mm, (DOUFPe). **Bahia.** (13°40'S, 38°45'W), "Alm. Saldanha", est.1981A, 49m, muddy sand, 1ma, 15,5mm, (DOUFPe); (13°48'S, 38°39'W). Ilha do Frade, 2ma, 11,2-12,2mm, 4f, 9,9-14,4mm, (DOUFPe); (18°09'S, 35°04'W), 1ma, 14,1mm, (MNRJ-MD1689); (18°09'S, 39°15'W), 1f, 16,8mm, (MNRJ-MD1685); Ilha de Itaparica, Ponta de Areia, 2ma, 11,3-11,8mm, 1f, 16,2mm, (FURG-1290); Ilha de Itaparica, Ponta de Areia, 9ma, 9,0-12,2mm, 13f, 11,1-15,4mm, (FURG-1292); Ilha de Itaparica, Ponta de Areia, 1ma, 8,5mm, 5f, 10,9-16,4mm, (FURG-1293). **Rio de Janeiro.** Cabo de S.Thomé, (22°15'S, 40°54'W), 50m, 1ma, 17,8mm, 2f, 18,6-19,5mm, (MZUSP-10951); Cabo de S.Thomé, (22°15'S, 40°54'W), 50m, 1ma, 17,8mm, (FURG-1479); Rio de Janeiro, Baía de Guanabara, 17ma, 9,4-16,1mm, 47f, 11,4-20,5mm, (MNRJ-MD59); Rio de Janeiro, Ilha do Governador, Praia do Zumbi, 1ma, 7,5mm, 3f, 9,4-15,6mm, (MNRJ-MD61); Rio de Janeiro, 2ma, 12,7-13,3mm, 1f, 14,1mm, (MNRJ-MD63); Rio de Janeiro, 1ma, 12,7mm, 1f, 10,7mm, (MNRJ-MD58); Niterói, Praia Jurujuba, 1ma, 18,4mm, (MNRJ-MD65); (22°30'S, 41°23'W), 48m, mud, 2f, 17,1-19,6mm, (MNRJ-MD62); Ponta de Guaratiba, 35 milhas da costa, "Santo Antonio", 40m, mud, 1f, 15,7mm, (MNRJ-MD64); (23°06'S, 43°15'W), Ilha Redonda, "Malacostraca", 52m, mud, 1f, 12,9mm, (MNRJ-MD1686); (23°06'S, 43°15'W), Ilha Redonda, "Malacostraca", 52m, mud, 3ma, 13,3-15,9mm, 8f, 13,2-20,6mm, (MNRJ-1693); (23°06'S, 43°15'W), Ilha Redonda, "Malacostraca", 52m, mud, 1ma, 15,6mm, 1f, 19,0mm, (FURG-1531); Parati, sul da Ponta de Jucutinga, "Malacostraca", 60m, 1ma, 15,9mm, 4f, 15,0-20,8mm, (MNRJ-MD1694); Ilha da Madeira, 1f, 16,5mm, (MNRJ-MD1687); Ilha Grande, Praia Comprida, Enseada do Abraão, 1ma, 10,4mm, 1f, 11,1mm, (MNRJ-MD1690); Ilha Grande, 1f, 17,2mm, (MZUSP-10953); Ilha Grande, Enseada das Estrelas, 1f, 10,7mm, (MZUSP-10989); Ilha Grande, 1ma, 7,4mm, (MZUSP-11022). **São Paulo.** (22°00'S, 49°00'W), 1ma, 17,5mm, 1f, 20,0mm, (DOUFPe); São Sebastião, 1ma, 5,2mm, 1f, 7,2mm, (DOUFPe); São Sebastião, Praia do Siriuba, 1f, 10,7mm, (MZUSP-10955); Cananéia, Lagoa da Ponte, Bom Abrigo, 3ma, 13,4-16,3mm, (MZUSP-10952); Cananéia, Lagoa da Ponte, Bom Abrigo, 1ma, 16,6mm, (FURG-1474). **Paraná.** (25°20'S, 47°18'W), "W.Besnard", est.592, 51m, 1ma, 13,9mm, 1f, 13,8mm, (FURG-1473); (25°20'S, 47°18'W), "W.Besnard", 4ma, 13,3-14,2mm, 2f, 14,0-21,0mm, (MZUSP-10950). **Santa Catarina.** Santa Catarina, 1ma, 16,1mm, (FURG-1294); Itajaí, 40m, 1ma, 14,2mm, 3f, 16,3-17,4mm, (FURG-1361); Itajaí, 40m, 1ma, 15,7mm, 1f, 18,8mm, (FURG-0209); (26°54'S, 48°12'W), Porto Belo, "Atlântico Sul", 53m, 1f, 11,2mm, (FURG-1590); (26°55'S, 48°14'W), Porto Belo, "Atlântico Sul", 49m, 1ma, 12,4mm, (FURG-1591); Porto Belo, Praia de Araçá, águas rasas, 1f, 12,5mm, (FURG-1350); Florianópolis, Lagoa da Conceição, águas rasas, 1f, 16,2mm, (MZUSP-9893); (27°00'S, 48°15'W), "Atlântico Sul", 48m, 1ma, 16,9mm, 1f, 20,3mm, (FURG-1589); (27°03'S, 48°16'W), "Atlântico Sul", 48m, 1ma, 15,2mm, (FURG-1588); (27°17'S, 48°14'W), "Atlântico Sul", 51m, 1ma, 16,7mm, (FURG-1592). **Rio Grande do Sul.** (32°14'S, 51°23'W), "Larus", 35m, 1ma, 10,8mm, (FURG-0841).

Ecological notes.

The species occurs at depths between shallow-water and 101m, the examination of Brazilian material shows occurrence up to 87m. It occurs on bottoms of mud, sand, shell, and densely covered with algae.

Sicyonia laevigata Stimpson, 1871
(Fig.1B)

Sicyonia laevigata Stimpson, 1871:131.- Kingsley, 1878:69.- 1880:426.- Rathbun, 1901:103 [part.]- De Man, 1911:11.- Bouvier, 1918:6.- Hay & Shore, 1918:379.- Burkenroad, 1945:5.- Wass, 1955:132.- Menzel, 1956:41.- Williams, 1965:33.- 1984:47.- Barros & Jonsson, 1966:16.- Fausto-Filho, 1966a: 32.- 1966b:47.- 1968:73.- Eldred et al., 1965:3.- Joyce & Eldred, 1966:24.- Rouse, 1969:136.- Lyons et al., 1971:28.- Chace, 1972:11.- Coelho e Ramos, 1972:142.- Camp et al., 1977:23.- Rojas-Beltran, 1977:2539.- 1978:1520.- 1981:157.- 1982:26.- Huff & Cobb, 1979:67.- Coelho & Ramos-Porto, 1980:135.- Coelho et al., 1980:63.- Ramos-Porto, 1980:280.- Rodriguez, 1980:70.- Pérez Farfante, 1980:773.- 1985:11.- Burukovskii, 1982:66.- Greening & Livingston, 1982:151.- Coen & Heck, 1983:206.- Hendrickx, 1984:280.- Abele & Kim, 1986:10.- Ramos-Porto et al., 1989:223.- Souza, 1988:110.- Coelho et al., 1990:23.

Sicyonia sculpta var. *americana* De Man 1907:450.

Sicyonia carinata.- De Man 1907:451. [Not *Cancer carinatus* Brünnich, 1768 (= *Sicyonia carinata*).

Sicyonia carinata var. *americana* De Man 1911:10.

Eusicyonia laevigata.- Burkenroad 1934a:76.- 1934b:117.- 1938:80.- Schmitt, 1935:132.- Lunz, 1945:4.- Anderson & Lindner, 1945:316.

Type-locality. Charleston, South Carolina, USA.

Diagnosis.

Rostrum elevated in relation to carapace, with 2 dorsal teeth, 4 apical rudimentary teeth, ventral margin straight. Postrostral carina with 3 unequal teeth, epigastric tooth small and situated in advance of hepatic spine, second tooth placed in middle point of carina and posterior tooth placed near the posterior margin of carapace. Antennal spine absent. First pereopod with short spine on basis and ischium. Anteroventral margins of abdominal somites 1-4 rounded. Dorsal carina of the second abdominal segment incised. First abdominal somite with 2 sulci. Anterodorsal spine of the first abdominal segment sharp.

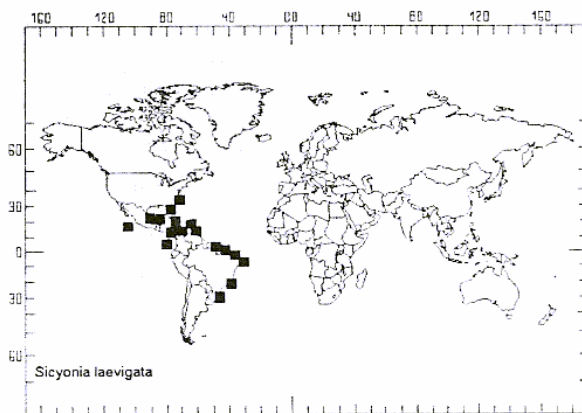


Figure 4. Distribution of *Sicyonia laevigata*.

Distribution.

Western Atlantic (north limit: Beaufort, North Carolina, USA, 35°08'N, 75°10'W; south limit: Rio Grande do Sul, 32°14'S, 51°23'W, Brazil).

United States (North and South Carolina, Florida- east and west coast), Mexico (Gulf of Mexico to Yucatan- north and south coast), Nicaragua, Panama,

Bahamas, Cuba, Jamaica, Haiti, Porto Rico, Virgin Islands, Guadalupe, Colombia, Venezuela and Brazil (Amapá, Pará, Maranhão, Piauí, Ceará, Rio Grande do Norte, Paraíba, Pernambuco, Alagoas, Sergipe, Espírito Santo, Rio de Janeiro, Santa Catarina and Rio Grande do Sul).

Pacific Coast of Central America (north limit: Mazatlan, Mexico, 23°13'N, 106°25'W; south limit: Gulf of Panama, 8°58'N, 79°31'W).

Mexico (Mazatlan - 23°13'N, 106°25'W), Costa Rica (Golfo de Nicoya - 9°56'N, 84°54'W) e Panama (Gulf of Panama - 8°58'N, 79°31'W).

The occurrence of this shrimp along the coast of Paraíba, Espírito Santo, Rio de Janeiro and Rio Grande do Sul has not been previously reported. At this moment we do not have citations for Sergipe, Bahia, São Paulo and Paraná.

Material.

BRAZIL. Amapá. (4°46'N, 50°40'W), Cap Orange, "Alm. Saldanha", est.GMIII 181, 1 ex., (DOUFPe); (4°40'N, 51°29'W), "Alm. Saldanha", est.2012, 64m, 1f, 4,2mm, (DOUFPe). **Pará.** (0°25'S, 47°17'W), "Alm. Saldanha", est.1763, 23m, silty mud, 2ma, 4,0mm, 2f, 4,6-5,8mm, (DOUFPe); (1°57'S, 48°08'W), "Alm. Saldanha", est.1893, 56m, silty mud, 1f, 2,2mm, (DOUFPe); (2°28'S, 48°13'W), "Alm. Saldanha", est.1773A, 85m, silty mud, 1ma, 2,5mm, 2f, 1,8-3,1mm, (DOUFPe). **Maranhão.** (0°37'S, 44°40'W), "Alm. Saldanha", est.1751, 44m, silty mud, 1ma, 3,5mm, (DOUFPe); (1°00'S, 45°21'W), "Alm. Saldanha", est.1804B, 21m, silty mud, 1f, 5,8mm, (DOUFPe); (2°07'S, 42°50'W), "Alm. Saldanha", est.DG10, 31m, 1f, 5,5mm, (DOUFPe). **Piauí.** (2°22'S, 41°28'W), "Alm. Saldanha", est.1729A, 35m, silty mud, 3ma, 2,7-3,8mm, 2f, 3,1-5,2mm, (DOUFPe); (2°37'S, 41°27'W), "Alm. Saldanha", est.1730, 21m, calcareous algae, 1ma, 4,6mm, 1f, 3,4mm, (DOUFPe); (2°10'S, 41°27'W), "Alm. Saldanha", est.1729, 53m, silty mud, 1ma, 2,4mm, (DOUFPe). **Ceará.** (2°21'S, 40°29'W), "Alm. Saldanha", est.1719A, 37m, silty mud, 1ma, 3,1mm, (DOUFPe); (2°31'S, 40°22'W), "Alm. Saldanha", est.1720, 23m, silty mud, 1ma, 3,8mm, 1f, 5,4mm, (DOUFPe); (2°44'S, 39°01'W), "Alm. Saldanha", est.1708A, 54m, calcareous algae, 1ma, 4,3mm, (DOUFPe); (3°43'S, 38°30'W), "Canopus", organic debris, 1f, 17m, (DOUFPe). **Rio Grande do Norte.** (4°51'S, 35°23'W), "Alm. Saldanha", est.1676, 34m, sand, 1f, 7,6mm, (DOUFPe); (5°41'S, 35°05'W), "Alm. Saldanha", est.1656, 23m, calcareous algae, 1ma, 4,0mm, (DOUFPe). **Paraíba.** Cabedelo, Praia de Miramar, 1f, 6,4mm, (UFPB-2687); Rio Paraíba do Norte, estuary, 1f, 5,5mm, (UFPB-2688); Rio Paraíba do Norte, 2f, 4,5-5,7mm, (UFPB-2689); Cabo Branco, 1f, 5,6mm, (UFPB-2690); Ponta de Tambau, 2f, 11,2-11,3mm, (UFPB-2758); (6°37'S, 34°54'W), 12m, 1f, 1,7mm, (UFPB-4842); (6°45'S, 34°50'W), 1f, 2,7mm, 19m, (UFPB-2691); (6°52'S, 34°46'W), 18m, 1ma, 3,2mm, (UFPB-2693); (6°55'S, 34°48'W), 12m, 1ma, 4,4mm, 1f, 5,0mm, (UFPB-2692); (7°10'S, 34°54'W), 25m, 1f, 5,0mm, (UFPB-2694). **Pernambuco.** Recife, Ponta de Pedras, 1f, 10,6mm, (MZUSP-10957); (7°46'S, 34°53'W), Itamaracá, 2f, 4,7-5,8mm, (DOUFPe); (7°48'S, 34°50'W), Itamaracá, Forte Orange, 1ma, 6,7mm, (DOUFPe); (7°48'S, 34°50'W), Itamaracá, Forte Orange, 2ma, 2,3-2,8mm, 1f, 1,7mm, (DOUFPe); (7°48'S, 34°51'W), Itamaracá, Canal de Santa Cruz, 2ma, 4,2-4,4mm, 2f, 3,8-4,6mm, (MZUSP-8957); (7°48'S, 34°51'W), Itamaracá, Vila Velha, 1f, 4,1mm, (DOUFPe); (7°48'S, 34°51'W), Itamaracá, Vila Velha, 1 ex. (DOUFPe); (7°48'S, 34°51'W), Itamaracá, Vila Velha, 2ma, 2,9-4,1mm, 1f, 5,4mm, (DOUFPe); (7°48'S, 34°51'W), Itamaracá, Vila Velha, 2f, 6,2-6,5mm, (FURG-1362); (7°48'S, 34°51'W), Itamaracá, Vila Velha, 1ma, 2,8mm, (DOUFPe); (7°48'S, 34°51'W), Itamaracá, Vila Velha, 1f, 4,7mm, (DOUFPe); (7°48'S, 34°51'W), Itamaracá, Vila Velha, *Halodule* bed, 2ma, 2,7-3,5mm, 2f, 4,7-7,2mm, (DOUFPe); (7°48'S, 34°51'W), Itamaracá, Vila Velha, *Halodule* bed, 3ma, 3,8-5,3mm, (FURG-1363); (8°13'S, 34°51'W), calcareous algae, 1f, 5,6mm, 23,5m, (DOUFPe); (8°16'S, 34°51'W), *Halimeda* bed, 1ma, 3,3mm, 1f, 6,1mm, 25m, (DOUFPe); (8°16'S, 34°51'W), calcareous algae, 1ma, 5,1mm, 25m, (DOUFPe); (8°21'S, 34°57'W), Suapé, sand and *Halodule* bed, 1ma, 4,6mm, 3f, 4,6-5,3mm, (DOUFPe). **Alagoas.** (10°43'S), Foz do Rio São Francisco, "Akaroa", 1f, 5,2mm, (DOUFPe); Maceió, 1f, 4,8mm, (MZUSP-9998). **Espírito Santo.** Praia do Pilote, Santa Cruz, 1ma, 6,4mm,

(FURG-1533). **Rio de Janeiro.** Ilha Grande, Praia do Furado, shallow-water, 1f, 11,9mm, (MZUSP-11019); Ilha Grande, Praia do Furado, shallow-water, 1ma, 5,2mm, (FURG-1475). **Rio Grande do Sul.** (32°14'S, 51°23'W), "Larus", 35m, 4f, 5,2-10,5mm, (FURG-0840).

Ecological notes.

The species occurs at depths between shallow-water and 100 m. Only one citation at 275m, off Isla Mujeres, Mexico (Pérez Farfante, 1985) has been previously reported. It occurs on hard bottoms, sand, shell, and algae bed (*Thalassia* and *Halodule*), rarely on mud (Rouse, 1969; Coelho & Ramos, 1972; Huff & Cobb, 1979; Coen & Heck, 1983; Coelho et al., 1986). The collections examined show the occurrence on silty mud in a great number of stations of the northern coast of Brazil.

Sicyonia dorsalis Kingsley, 1878 (Fig.1C)

Sicyonia dorsalis Kingsley, 1878:97.- Hay & Shore, 1918:380.- Rathbun, 1901:103.- Gunter, 1950:30.- Holthuis, 1959:73.- Eldred, 1962:202.- McFarland & Lee, 1963:397.- Williams, 1965:37.- 1984:46.- Mistakidis & Neiva, 1964:474.- 1966:434.- Tremel & Mistakidis, 1965:2.- Barros & Jonsson, 1966:16.- Fausto Filho, 1966a:32.- 1966b:47.- 1968:69.- Chace, 1972: 11.- Coelho & Ramos, 1972:141.- Brusher et al., 1972:75.- Iwaj, 1973:56.- Brusher & Ogren, 1976:161.- Abreu, 1980:3.- Coelho & Ramos-Porto, 1980:135.- Coelho et al., 1980:63.- Gomes-Correa & Brum, 1980:59.- Holthuis, 1980:60.- Pérez Farfante, 1980:773.- Rodriguez, 1980:75.- Burukovskii, 1982: 67.- Wenner & Read, 1982:187.- Takeda & Okutani, 1983.- Rodrigues et al., 1985:79.- Abele & Kim, 1986:10.- Souza, 1988:106.- Ramos-Porto et al., 1989:222.- Coelho et al., 1990:23.

Eusicyonia dorsalis.- Burkenroad, 1934b:121.- 1939:58.- Lunz, 1945:8.- Anderson & Lindner, 1945:316.

Type-locality. Fort Jefferson, Dry Tortugas, Florida, USA.

Diagnosis.

Rostrum not elevated, in the same level of the carapace, with 3 dorsal teeth, 2 apical denticles, ventral margin concave. Postrostral carina with 2 unequal teeth, epigastric tooth small, situated in advance of hepatic spine, and the posterior tooth larger than epigastric, placed around the middle point of carina. Antennal spine present. First pereopod without short spine on basis and ischium. Anteroventral margins of abdominal somites 1-4 angular. Dorsal carina of the second abdominal segment not incised. First abdominal somite with 1 sulci. Anterodorsal spine of the first abdominal segment sharp.

Distribution.

Western Atlantic (north limit: Cape Hatteras, North Carolina, USA; south limit: Baía Norte, Florianópolis, Brazil).

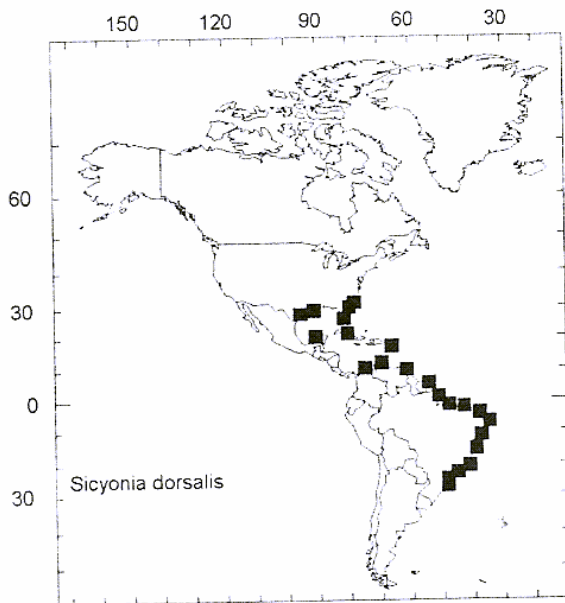


Figure 5. Distribution of *Sicyonia dorsalis*.

United States (North and South Carolina, Georgia, Florida-east and west coast, Dry Tortugas, Louisiana, Texas), Mexico (to Campeche), Cuba, Porto Rico (St. Thomas), Colombia, Venezuela, Suriname, French Guiana and Brazil (Amapá, Pará, Maranhão, Piauí, Ceará, Rio Grande do Norte, Paraíba, Pernambuco, Alagoas, Sergipe, Bahia, Espírito Santo, Rio de Janeiro, São Paulo, Santa Catarina).

The occurrence along the coast of Espírito Santo has not been previously reported, we do not have citations for Paraná and Rio Grande do Sul.

Material.

BRAZIL. Amapá. Rio Amazonas mouth, between Salinópolis and Orange, 1ma, 7,3mm, (FURG-1532); Rio Amazonas mouth, between Salinópolis and Orange, 10f, 9,2-12,4mm, (MNRJ-1656); (5°09'N, 51°28'W), "Alm. Saldanha", est.1797, 69m, sand, 1 ex., (DOUFPe); (4°29'N, 50°12'W), "Alm. Saldanha", est.1793B, 103m, silty mud, 1ma, 5,6mm, (DOUFPe); (4°13'N, 50°26'W), "Alm. Saldanha", est.1793BII, 75m, sand, 1ma, 7,3mm, 2f, 10,5-11,8mm, (DOUFPe); (4°13'N, 50°26'W), "Alm. Saldanha", est.1793BII, 75m, sand, 1ma, 14,3mm, 1f, 13,4mm, (FURG-1366); (4°13'N, 50°31'W), off Cabo Cassiporé, "Alm. Saldanha", 1ma, 6,4mm, 2f, 6,3-7,4mm, (MNRJ-MD68); (1°48'N, 48°18'W), "Nissin", 76m, 8ma, 7,9-11,5mm, 13f, 9,0-13,8mm, (FURG-1348); (2°20'S, 48°01'W), 1ma, 9,1mm, (MNRJ-1688); (4°08'S, 50°35'W), "Alm. Saldanha", est.1794, 52m, mud, 1ma, 5,4mm, (DOUFPe); (between 3°07'N e 2°48'S, 41°37'W e 50°37'W), "Alm. Saldanha", 6f, 13,5-15,7mm, (DOUFPe); Salinópolis and Orange, 2ma, 7,4-9,7mm, 12f, 9,6-14,6mm, (MNRJ-MD1656). **Pará.** (0°37'N, 47°51'W), "Alm. Saldanha", est.GM47, 43m, mud, 1ma, 5,5mm, (DOUFPe); (0°31'N, 47°49'W), "Alm. Saldanha", est.1765A, 39m, sandy mud, 1ma, 10,4mm, 5f, 6,4-11,1mm, (DOUFPe); (0°20'N, 46°03'W), "Alm. Saldanha", est.GM28, 51m, sand, 1 ex., (DOUFPe); (0°28'S, 47°27'W), "Alm. Saldanha", est.GM35, 27m, sand, 2f, 7,3-8,5mm, (DOUFPe). **Maranhão.** (2°09'S, 44°10'W), "Alm. Saldanha", est.1741, 29m, sand, 1 ex., (DOUFPe). **Ceará.** Fortaleza, Praia do Murcuripe, 1f, 8,2mm, (MNRJ-MD67); Praia de Meireles, 2f, 10,0-11,1mm, (FURG-1373); Praia de Meireles, 1ma, 8,1mm, 12f, 7,7-11,5mm, (UFPB-4843). **Rio Grande do Norte.** (4°44'S, 36°03'W), "Alm. Saldanha", est.1687, 73m, organic debris, 1ma, 3,9mm, (DOUFPe). **Paraíba.** Rio Paraíba do Norte, 1ma, 5,5mm, 11f, 4,8-8,0mm, (UFPB-2695); Rio Paraíba do Norte, Ilha da Restinga, 2ma, 7,3-7,7mm, (FURG-1374); Rio Paraíba do Norte, Ilha da Restinga, 4f, 8,6-10,9mm, (UFPB-2696); Rio Paraíba do Norte, Ilha da Restinga, 25 ex., (UFPB-2697); Rio Paraíba do Norte, Ilha da Restinga, 30 ex., (UFPB-2698); Rio Paraíba do Norte, Canal Forte Velho, 30 ex., (UFPB-2700); Rio Paraíba do Norte, Canal Forte Velho, 54 ex., (UFPB-2701). **Pernambuco.** (6°14'S, 38°48'W), "Canopus", est.92, 65m, 3ma, 3,4-4,3mm, (DOUFPe); (7°46'S, 34°53'W), Itamaracá, 2f, 5,0-8,9mm, (DOUFPe); (7°48'S, 34°50'W), Itamaracá, Forte Orange, 1f, 6,1mm, (DOUFPe); (8°10'S, 34°34'W), "Canopus", est.81, 54m, 1ma, 2,6mm, (DOUFPe); Maria Farinha, 1f, 9,8mm, (DOUFPe). **Alagoas.** Maceió, zona costeira, 12f, 8,0-11,3mm, (FURG-1387); Maceió, Lagoa Mundau-Manguaba,

1f, 8,8mm, (FURG-1388); (9°15'S, 35°14'W), "Akaroa", est.21, 35m, calcareous algae, 1f, 4,0mm, (DOUFPe); (10°11'S, 36°05'W), "Akaroa", est.84, 29m, sand, 1f, 5,4mm, (DOUFPe); (10°35'S, 36°45'W), "Akaroa", est.179, 64m, mud, 1ma, 4,4mm, (DOUFPe); (10°43'S), Foz do Rio São Francisco, 3f, 9,0-12,4mm, (DOUFPe). **Bahia.** (13°36'S, 38°45'W), "Alm. Saldanha", est.1981All, 49m, 1f, 8,2mm, (DOUFPe); Bahia, 2ma, 4,8-5,4mm, 3f, 5,4-7,4mm, (MZUSP-10277). **Espírito Santo.** Praia do Pilote, Santa Cruz, 1ma, 6,3mm, (MNRJ-1695); Baía de Camburi, 3f, 6,4-10,0mm, (FURG-1402). **Rio de Janeiro.** Atafona, 500m to 1000m off Rio Paraíba do Sul mouth, 1f, 10,1mm, (MNRJ-MD1662); Rio de Janeiro, 1f, 11,2mm, (MNRJ-MD1629); Ilha Grande, Praia do Furado, 1f, 5,7mm, (MZUSP-10990); Ilha Grande, 1ma, 3,6mm, (MZUSP-11015). **São Paulo.** Santos, 1f, 9,5mm, (MNRJ-MD66). **Santa Catarina.** Porto Belo, Praia de Araçá, 1f, 10,6mm, (FURG-1349); Baía Norte, Florianópolis, 2ma, 9,1-9,5mm, 5f, 9,5-13,2mm, (FURG-1471); Armação da Piedade, Baía Norte, 2f, 9,9-15,0mm, (FURG-1472); (26°53'S, 48°32'W), "Atlântico Sul", 3f, 10,2-12,3mm, (FURG-1587).

Ecological notes.

The species occurs at depths between 3 m and 100 m (Pérez Farfante, 1980), and its highest abundance was recorded at 80 m (Holthuis, 1959; Brusher & Ogren, 1976). On the Brazilian coast the material shows only one occurrence out of this range, at 103 m off Amapá. The species occurs on mud, sand, organic debris and calcareous algae (Holthuis, 1959; Coelho & Ramos, 1972; Coelho et al., 1980; Souza, 1988).

Sicyonia parri (Burkenroad, 1934) (Fig.1D)

Eusicyonia parri Burkenroad, 1934a:80.- Lunz, 1945:5.- Anderson & Lindner, 1945:315.

Sicyonia parri.- Williams, 1965:34.- 1984:48.- Barros & Jonsson, 1966:16.- Fausto-Filho, 1966b:47.- 1968:73.- Chace, 1972:11.- Coelho & Ramos, 1972:141.- Rojas-Beltran, 1978:1520.- Coelho & Ramos-Porto, 1980:135.- Ramos-Porto, 1980:280.- Coelho et al., 1980:48.- Pérez Farfante, 1980:774.- Burukovskii, 1982:67.- Abele & Kim, 1986:10.- Souza, 1988:116l.- Ramos-Porto et al, 1989:222.- Coelho et al., 1990:23.

Cicyonia parri [sic].- Fausto Filho, 1967:11 (error).

Type-locality. Crooked Island, Bahamas.

Diagnosis.

Rostrum elevated in relation to carapace, with 3 dorsal teeth, 3 apical denticles, and ventral margin straight. Postrostral carina with 3 subequal teeth, epigastric tooth situated at the level of hepatic spine, middle tooth larger than epigastric, placed around the middle point of carina, posterior tooth positioned in advance of posterior margin of carapace. Antennal spine absent. First pereopod with short spine on basis and ischium. Anteroventral margins of abdominal somites 1-4 rounded. Dorsal carina of the second abdominal segment incised. First abdominal somite with 3 sulci. Anterodorsal spine of the first abdominal segment sharp.

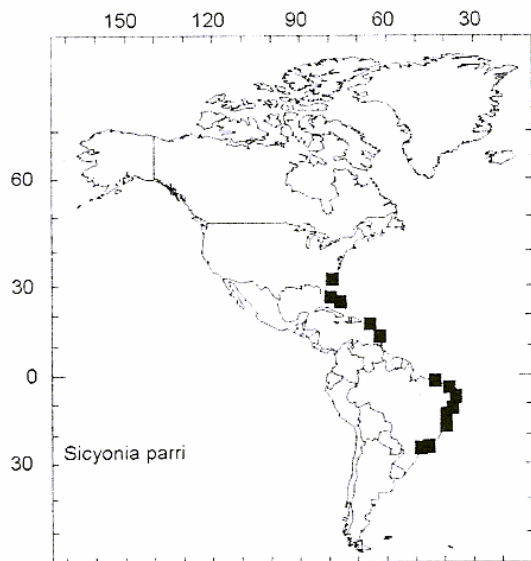


Figure 6. Distribution of *Sicyonia parri*.

Distribution.

Western Atlantic (north limit: Beaufort, North Carolina, USA; south limit: São Paulo, 25°02'S, 44°54'W, Brazil).

United States (North and South Carolina, Florida), Bahamas, Porto Rico, Tortola, Barbuda, Dominica, Saint Lucy Island, Tobago and Brazil (Maranhão, Piauí, Ceará, Rio Grande do Norte, Paraíba, Pernambuco, Alagoas, Sergipe, Bahia, Rio de Janeiro, São Paulo).

The occurrence along the coast of Rio de Janeiro and São Paulo has not been previously reported, no citations for Amapá, Pará,

Espírito Santo, Paraná, Santa Catarina and Rio Grande do Sul. The distribution range was enlarged to São Paulo, Brazil.

Material.

BRAZIL. Maranhão. (1°29'S, 43°19'W), "Alm. Saldanha", est.1813, 83m, organic debris and calcareous algae, 1 ex., (DOUFPe). **Piauí.** (2°22'S, 41°28'W), "Alm. Saldanha", est.1792A, 53m, sand, 1f, (DOUFPe). **Ceará.** (2°39'S, 39°45'W), "Alm. Saldanha", est.1710, 17m, sand, 1f, (DOUFPe). **Rio Grande do Norte.** (5°11'S, 35°09'W), "Alm. Saldanha", est.1675A, 33m, calcareous algae, 2f, 4,0-4,1mm, (DOUFPe); (6°04'S, 34°59'W), "Alm. Saldanha", est.1655, 25m, calcareous algae, 1ma, 4,7mm, 4f, 3,9-6,1mm, (DOUFPe). **Paraíba.** (6°35'S, 34°44'W), "Canopus", est.94, 54m, calcareous algae, 1f, 3,8mm, (DOUFPe); (6°36'S, 34°48'W), 22m, 1ma, 5,3mm, 2f, 5,1-6,7mm, (UFPB-2669); (6°40'S, 34°52'W), 15m, 2f, 6,0-8,3mm, (UFPB-2671); (6°40'S, 34°53'W), 10m, 1f, 7,2mm, (UFPB-4841); (6°43'S, 34°45'W), 22m, 1ma, 4,1mm, 1f, 4,5mm, (UFPB-2672); (6°46'S, 34°53'W), 10m, 1f, 5,5mm, (UFPB-2673); (6°52'S, 34°46'W), 18m, 1f, 4,2mm, (UFPB-2674); (6°55'S, 34°43'W), 21m, 1f, 4,0mm, (UFPB-2675); (6°55'S, 34°48'W), 12m, 1f, 7,0mm, (UFPB-2676); (6°57'S, 34°41'W), 26m, 1f, 4,2mm, (UFPB-2677); (7°01'S, 34°45'W), 25m, 1ma, 3,8mm, (UFPB-2678); (7°10'S, 34°38'W), 25m, 1f, 4,6mm, (UFPB-2679); (7°12'S, 34°39'W), 20m, 1f, 3,9mm, (UFPB-2670); (7°13'S, 34°42'W), 20m, 1f, 4,3mm, (UFPB-2680); (7°15'S, 34°36'W), 28m, 2ma, 4,3-4,8mm, 1f, 5,5mm, (UFPB-2681); (7°18'S, 34°36'W), 14m, 1f, 4,6mm, (UFPB-2682); (7°28'S, 34°34'W), 30m, 1f, 3,6mm, (UFPB-2683); (7°31'S, 34°42'W), 16m, 1f, 4,2mm, (UFPB-2684); (7°34'S, 34°36'W), 1ma, 6,7mm, 33m, (UFPB-2685); (7°34'S, 34°45'W), 11m, 1f, 5,1mm, (UFPB-2686); (7°34'S, 34°45'W), 1f, 6,2mm, (UFPB-2668). **Pernambuco.** (7°45'S, 34°46'W), 14m, sand, 1f, 6,6mm, (DOUFPe); (7°46'S, 34°53'W), Ilha de Itamaracá, Canal de Santa Cruz, 1f, 7,1mm, (MZUSP-11036); (8°00'S, 34°45'W), 23m, calcareous algae, 1 ex., (DOUFPe); (8°01'S), Olinda, 1m, 3,8mm, (DOUFPe); (8°02'S, 34°46'W), calcareous algae, 1f, 5,4mm, 21m, (DOUFPe); (8°10'S, 34°45'W), 30m, calcareous algae, 1ma, 5,6mm, (FURG-1365); (8°16'S, 34°51'W), 26m, calcareous algae, 1 ex., 3,0mm, (DOUFPe); (8°45'S, 35°06'W), Tamandaré, 3ma, 3,8-4,0mm, 8f, 3,8-6,0mm, (DOUFPe); (8°45'S, 35°06'W), Tamandaré, 1f, 7,3mm, (FURG-1364); (8°45'S, 35°06'W), Tamandaré, 1ma, 6,3mm, (MZUSP-8958). **Alagoas.** (9°06'S, 35°08'W), "Akaroa", est.11, 36m, calcareous algae, 1ma, 4,2mm,

(DOUFPe); (9°20'S, 35°00'W), "Akaroa", est.25, calcareous algae, 53m, 1f, 3,5mm, (DOUFPe); (9°20'S, 35°05'W), "Akaroa", est.26, 45m, calcareous algae, 1f, 6,8mm, (DOUFPe); (9°27'S, 35°17'W), "Akaroa", est.37, 31m, 1f, 6,6mm, (DOUFPe); (10°43'S), "Akaroa", 1f, 12,5mm, (DOUFPe). **Bahia.** (16°02'S, 38°28'W), "Alm. Saldanha", est.1967, 47m, calcareous algae, 1f, 8,4mm, (DOUFPe); Ilha de Itaparica, Ponta de Areia, 1f, 8,7mm, (FURG-1291). **Rio de Janeiro.** Ilha Grande, Praia do Furado, 1f, 7,6mm, (MZUSP-11020); Ilha Grande, Praia do Furado, 1f, 7,7mm, (MZUSP-10956). **São Paulo.** (25°02'S, 44°54'W), 1f, 17,3mm, (MZUSP-10954).

Ecological notes.

The species occurs at depths up to 87 m, but the most important distribution area is between 14 m and 54 m (Coelho & Ramos, 1972; Souza, 1988). It occurs on sand, organic debris and bottoms covered with algae (Chace, 1972; Coelho & Ramos, 1972; Coelho et al., 1986; Souza, 1988).

Sicyonia burkenroadi Cobb, 1971 (Fig.1E)

Sicyonia dorsalis.- Rathbun, 1901:103 [part.]- Verrill, 1922:50 [part.][not *Sicyonia dorsalis* Kingsley, 1878].

Eusicyonia stimpsoni.- Burkenroad, 1934b:123 [part.]- 1939:57.- ?Pearson, 1939:60 [mysis I e II].- Lunz, 1945:10 [part.][not *Sicyonia stimpsoni* Bouvier, 1905].

Sicyonia stimpsoni.- Springer & Bullis, 1956:10.- Holthuis, 1959:75.- Bullis & Thompson, 1965:7 [part.]- Williams, 1965:33 [part.]- Barros & Jonsson, 1966:16.- Rodriguez, 1980:72 [not *Sicyonia stimpsoni* Bouvier, 1905].

Sicyonia burkenroadi Cobb, 1971:104.- Coelho & Ramos, 1972:141.- Huff & Cobb, 1979:65.- Holthuis, 1980:59.- Coelho et al., 1980:39.- Pérez Farfante, 1980:774.- Burukovskii, 1982:68.- Takeda & Okutani, 1983.- Williams, 1984:46.- Abele & Kim, 1986:10.- Souza, 1988:103.- Ramos-Porto et al., 1989:222.

Type-locality. Gulf of Mexico, Porto Isabel, Texas (26°13'S, 96°45'W), USA.

Diagnosis.

Rostrum elevated in relation to carapace, with 3 dorsal teeth (rarely 4), 2 apical denticles (eventually 3), ventral margin convex. Postrostral carina with 2 unequal teeth, epigastric tooth situated in advance of hepatic spine, posterior tooth positioned in advance of posterior margin of carapace. Antennal spine present. First pereopod without short spine on basis and ischium. Anteroventral margins of abdominal somites 1-4 armed with denticles. Dorsal carina of the second abdominal segment not incised. First abdominal somite with 2 sulci. Anterodorsal spine of the first abdominal segment sharp.

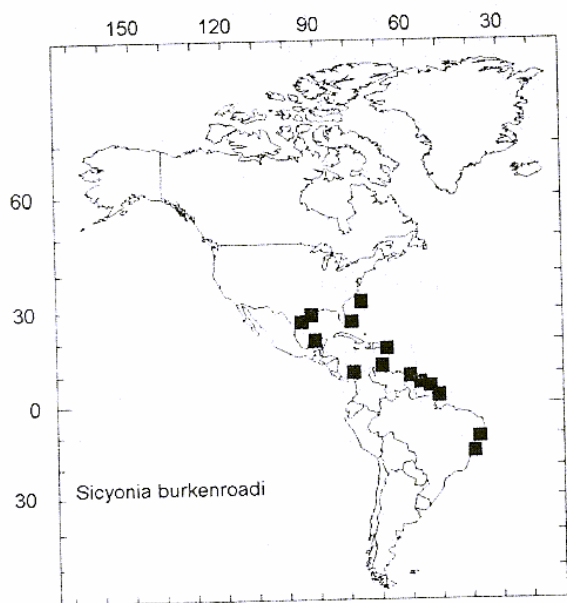


Figure 7. Distribution of *Sicyonia burkenroadi*.

Distribution.

Western Atlantic (north limit: Cape Lookhout, 34°12'N, 76°11'W, North Carolina, USA; south limit: Ilha de Itaparica, Bahia, Brazil).

United States (North Carolina, Florida-west coast, Dry Tortugas, Louisiana, Texas), Mexico (Gulf of Campeche), Porto Rico, Panama, (east coast) Colombia, Venezuela, Guiana, Suriname, French Guiana and Brazil (Amapá, Sergipe, Alagoas, Bahia).

The occurrence along the coast of Brazil is not frequent, only one occurrence was recorded in the collections examined.

Material.

BRAZIL. Amapá. (4°22'N, 50°27'W), "Alm. Saldanha", est.2007A, 84m, sand, 1f, 9,0mm, (DOUFPe).

Ecological notes.

The species occurs at depths between 20 m and 585 m (Pérez Farfante, 1980), but the most important distribution area is between 33 m and 118 m. It occurs on mud, organic debris, sandy mud and sand (Cobb, 1971).

Sicyonia olgae Pérez Farfante, 1980
(Fig.1F)

Sicyonia olgae Pérez Farfante, 1980:775.

Sicyonia brevirostris.- Souza, 1988:99.- Ramos-Porto et al., 1989:221.

Type-locality. Off Paramaribo, (6°37'N, 55°36'W), Suriname.

Diagnosis.

Rostrum not elevated in relation to carapace, with 3 dorsal teeth (rarely 4), 2 apical denticles (eventually 3), ventral margin straight. Postrostral carina with 3 unequal teeth, epigastric tooth, small, situated in advance of hepatic

spine, middle and posterior teeth subequal and larger than epigastric, placed back at the middle point of carapace. Antennal spine present. First pereopod without short spine on basis and ischium. Anteroventral margins of abdominal somites 1-4 angular. Dorsal carina of the second abdominal segment not incised. First abdominal somite with 2 sulci. Anterodorsal spine of the first abdominal segment sharp.

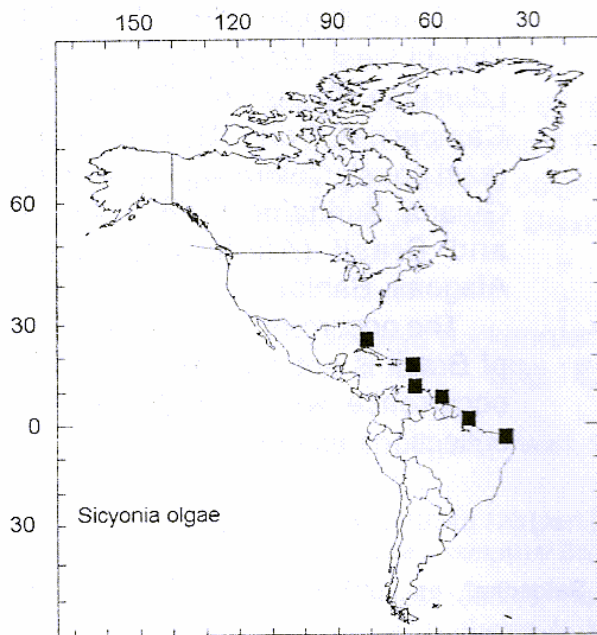


Figure 8. Distribution of *Sicyonia olgae*.

Distribution.

Western Atlantic (north limit: Dry Tortugas, Florida, USA; south limit: Ceará, 3°09'S, 38°45'W, Brazil).

United States (Florida - Dry Tortugas), Porto Rico (Punta las Tunas - 18°31'N, 66°47'W), Venezuela (Ilhas Los Testigos - 11°40'N, 62°33'W), Guiana (NE of Georgetown - 7°40'N, 57°34'W), Suriname (Paramaribo - 6°37'N, 55°36'W), and Brazil (Amapá - 2°20'N, 48°00'W e Ceará - 3°09'S, 38°45'W).

The occurrence of this species was cited by Pérez Farfante (1980). One exemplar was cited like *S. brevis* (Souza, 1988;

Ramos-Porto et al., 1989). The examination of this exemplar shows that, in fact, it belongs to *S. olgae*.

Material.

BRAZIL. Amapá. (2°20'N, 48°00'W), "Nissin", 76m, calcareous algae and organic debris, 1ma, 6,4mm, (FURG-1534). Ceará. (3°09'S, 38°45'W), "Canopus", est.59, 81m, calcareous algae, 1f, 7,6mm, (DOUFPe).

Ecological notes.

The species occurs at depths between 33 m and 622 m, but the most important distribution area is between 33 m and 70 m, on bottoms of mud, shell and coral (Pérez Farfante, 1980). Off the coast of Brazil, it occurs in calcareous algae bottoms.

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