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**Article** *in* Proceedings of the Biological Society of Washington · December 2011

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Source: Proceedings of the Biological Society of Washington, 124(4):378-385. 2011.
Published By: Biological Society of Washington
DOI: http://dx.doi.org/10.2988/11-22.1
URL: http://www.bioone.org/doi/full/10.2988/11-22.1

PROCEEDINGS OF THE BIOLOGICAL SOCIETY OF WASHINGTON
124(4):378–385. 2011.

# Two new species of *Branchiosyllis* (Polychaeta: Syllidae) from Western Mexico

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*Abstract.*—*Branchiosyllis* differs from other syllid genera by possessing claw-shaped falcigers. There are 18 valid species in the genus, but only five have been reported from Mexico: *B. diazi* Rioja, 1958, *B. exilis* (Gravier 1900), *B. oculata* Ehlers, 1887, *B. pacifica* Rioja, 1941, and *B. salazari* Ruiz-Ramirez & Harris, 2008. During diverse sampling campaigns along Western Mexico, specimens of two undescribed species were found. *Branchiosyllis sanmartini*, new species, was collected in La Paz Bay, in rocky bottoms. Its body is subcylindrical anteriorly, depressed in median and posterior regions, and with segments that are strongly pigmented black on the dorsal side. The palps are divided by a dorsal groove appearing bilobed; without branchiae; anterior parapodia with bidentate falcigers in dorsal position, ventral ones unidentate, in median parapodia all falcigers unidentate, posterior parapodia with claw-shaped falcigers. This species differs from all others in the genus due to its color pattern, the shape and distribution of falcigers along the body, the subcylindrical shape of the anterior end, and the dorsoventrally flattened shape of the middle and posterior region. *Branchiosyllis riojai*, new species, was collected in *Phragmatopoma* sp. beds in Manzanillo, Colima, and María Madre Island, Nayarit, among algae and sponges. This species has a cylindrical body, without color pattern; branchiae absent; bidentate dorsal falcigers on anterior and median parapodia; claw-shaped falcigers from median chaetigers. *Branchiosyllis riojai* has been reported for the Mexican Pacific as *B. exilis* (Gravier 1900), described from the Red Sea, but it differs from the nominal species in falciger distribution along the body, shape of antennae, tentacular cirri and dorsal cirri, as well as in the number and shape of aciculae. A key to all species of *Branchiosyllis* from Mexican waters is included.

*Resumen.*—*Branchiosyllis* difiere del resto de los géneros de la familia Syllidae en que tiene falcígeros en forma de garra. En el género hay 18 especies válidas pero solo cinco han sido reportadas para México: *B. diazi* Rioja, 1958, *B. exilis* (Gravier 1900), *B. oculata* Ehlers, 1887, *B. pacifica* Rioja, 1941, y *B. salazari* Ruiz-Ramírez & Harris, 2008. Durante diversas campañas de muestreo a lo largo de la costa oeste de México se encontraron varios ejemplares de dos especies no descritas. *Branchiosyllis sanmartini* n. sp. fue colectada en la bahía de La Paz en fondos rocosos. Tiene el cuerpo subcilíndrico anteriormente y aplanado dorsoventralmente en las regiones media y posterior del cuerpo, el dorso está completamente pigmentado de color negro. Los palpos están divididos por un surco dorsal y les da la apariencia de ser bilobulados; sin branquias; parapodios anteriores con

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falcígeros bidentados dorsales y unidentados ventrales, en parapodios medios todos los falcígeros son unidentados, parapodios posteriores con falcígeros en forma de garra. Difiere del resto de las especies en el patrón de coloración, la forma y distribución de los falcígeros a lo largo del cuerpo y en que es la única especie de *Branchiosyllis* que presenta el cuerpo subcilíndrico anteriormente y aplanado en las regiones media y posterior. *Branchiosyllis riojai* n. sp. fue colectado en formaciones de *Phragmatopoma* sp. en Manzanillo, Colima y entre algas y esponjas en la Isla María Madre, Nayarit. Esta especie tiene el cuerpo cilíndrico, no tiene patrón de pigmentación, branquias ausentes; falcígeros dorsales bidentados en parapodios anteriores y medios; falcígeros en forma de garra desde los setígeros medios. *Branchiosyllis riojai* n. sp. ha sido reportada para el Pacífico mexicano como *B. exilis* (Gravier 1900), descrita para el Mar Rojo, aunque difiere de ésta última en la distribución de los falcígeros, forma de las antenas, cirros tentaculares y cirros dorsales, así como también en el número y forma de las acículas. Se incluye una clave a todas las especies de *Branchiosyllis* para aguas mexicanas.

**Keywords:** *Branchiosyllis*, Syllidae, Syllinae, claw-shaped falcigers, ungula, western Mexico

*Branchiosyllis* Ehlers, 1887, is characterized by the presence of claw-shaped falcigers, a unique feature in the family. Another unique character in *Branchiosyllis* that differentiates it from other syllids is the presence, in some species, of protuberances in parapodial lobes of some chaetigers that have been regarded as branchiae. San Martín et al. (2008) divided the species of this genus into two groups depending on the body shape and parapodial features. The first group, which includes *B. lamellifera* Verrill, 1900, *B. oculata* Ehlers, 1887, and *B. pacifica* Rioja, 1941, has species with depressed bodies, branchiae and all chaetae that are claw-shaped. The second group, which is defined by subcylindrical bodies, parapodia without branchiae and the presence of normal and claw-shaped falcigers, includes *B. bathyalis* (Kirkegaard, 1995), *B. carmenroldanae* San Martín et al., 2008, *B. cirropunctata* (Michel, 1909), *B. exilis* (Gravier, 1900), *B. fuscosuturata* (Monro, 1933), *B. lorenae* San Martín & Bone, 1999, *B. maculata* (Imajima, 1966), *B. plessisi* (Rullier, 1972), *B. salazari* Ruiz-Ramírez & Harris, 2008, *B. salina* (Hartmann-Schröder, 1959), *B. thylacine* San Martín et al., 2008, and *B. verruculosa* (Augener, 1913). Three species show intermediate characters and therefore are not easily assigned to either group: *B. baringabooren* San Martín et al., 2008 has a depressed body, no branchiae and normal and claw-shaped falcigers; *B. diazi* Rioja, 1958 has a depressed body, branchiae and normal and claw-shaped falcigers; and *B. orbiniiformis* San Martín et al., 2008 is an atypical species with a laterally compressed body, dorsal cirri, parapodial lobes and dorsally-directed chaetae, lack of branchiae, and all falcigers are claw-shaped. Future studies of new species perhaps accompanied by molecular analyses may provide better evidence for separating *Branchiosyllis* into two or more genera.

## Materials and Methods

Biological materials were collected in several Western Mexico localities such as María Madre Island, Nayarit, Manzanillo, Colima and La Paz bay, Baja California Sur, during several years.

Sampling was made by hand, snorkeling and SCUBA diving. Material of the first new species was collected in the intertidal zone of La Paz bay, among algae in rocky bottoms, whereas the material of the second new species was collected at María Madre Island, taken from sponges and algae from the piles of the main dock of the island, and additional specimens were found in Manzanillo, within *Phragmatopoma* spp. beds located in rocky outcrops in the bay. Organisms were fixed in formaldehyde (10%) and preserved in ethanol (70%). Specimens were deposited in the Colección Poliquetológica, Universidad Autónoma de Nuevo León (UANL), Natural History Museum of Los Angeles County, Allan Hancock Polychaete Collection (LACM-AHF), Zoologisches Museum und Institut, Universität Hamburg, Hamburg (ZMH), Muséum National d'Histoire Naturelle, Paris (MNHN) and Museo Nacional de Ciencias Naturales, Madrid (MNCN).

In this paper, we propose to use the word "Ungula" (from the Latin *Ungis*, nail or claw, and its diminutive *ungula*, little nail or claw) to describe the claw-shaped falcigers present only in species of *Branchiosyllis*, because it is a more compact, precise and concise word for this characteristic type of chaeta.

## Systematics

### Class Polychaeta Grube, 1850
### Order Phyllodocida Örsted, 1843
### Family Syllidae Grube, 1850
### *Branchiosyllis* Ehlers, 1887

*Type species*.—*Branchiosyllis oculata* Ehlers, 1887.

*Characteristic features*.—With ungulae (claw-shaped falcigers, the blade rotates 180° in opposite direction to the shaft).

*Diagnosis*.—Body of medium to large size, some species subcylindrical, others dorsoventrally flattened or laterally compressed. Four eyes, sometimes with eyespots. Three antennae. Palps fused basally. Nuchal organs usually present. Antennae, tentacular cirri and dorsal cirri clearly articulated. Some species have protuberances on parapodial lobes (branchiae). Chaetae include falcigers with short blades and ungulae, sometimes with falcigers with long blade. Capillary simple chaetae absent (also called dorsal and ventral simple chaetae). Pharynx armed with a mid-dorsal tooth. Two articulated anal cirri.

### ***Branchiosyllis sanmartini***, new species
Fig. 1

*Material examined*.—Holotype (UANL 6785), 5 Paratypes (UANL 6786), 2 Paratypes (LACM-AHF 2898), 2 Paratypes (MNHN 0000), 2 Paratypes (ZMH P-25933), 2 Paratypes (MNCN) Malecón, La Paz Bay, Baja California Sur, México, 24°10′06.6″N, 110°18′38.6″W, among fixed algae to rocks, intertidal, 4 Aug 2004, Coll. S. I. Salazar-Vallejo.

*Additional material examined*.—*Branchiosyllis exilis* (Gravier 1900), Djibouti, Gulf of Aden, Holotype (MNHN 143).

*Characteristic features*.—Body subcylindrical in anterior region and slightly flattened in median and posterior region. Dorsum completely black pigmented. Palps with a longitudinal groove appearing bilobed. Branchiae absent. Short-bladed falcigers and ungulae present. Falcigers bidentate on anterior parapodia and unidentate on median and posterior parapodia. Proventriculum about 1.1 times larger than pharynx, with 42–45 muscle cell rings.

*Description*.—Holotype complete, 8 mm long, 0.7 mm wide, 52 chaetigers. Body subcylindrical, short, slender, with ventrum flattened anteriorly, depressed on middle and posterior regions. Dorsum completely black pigmented along body. Some anterior dorsal cirri with black spots.

Prostomium oval, wider than long. Two pairs of lensed eyes in trapezoidal arrangement. Median antenna inserted on middle of prostomium, between posterior eyes, with 16–17 articles; lateral antennae inserted on anterior margin of

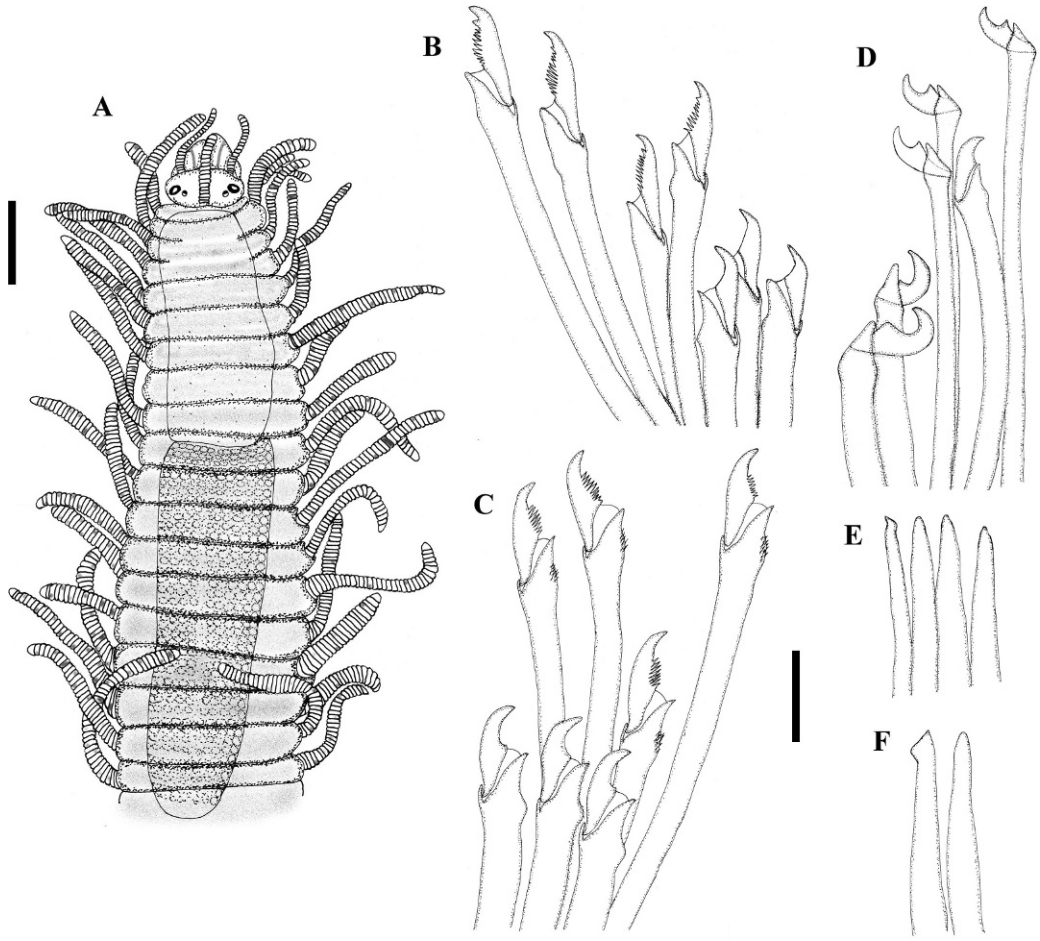


Fig. 1. *Branchiosyllis sanmartini*. A. Anterior end, dorsal view; B. Chaetal fascicle from parapodium 9; C. Chaetal fascicle from parapodium 26; D. Chaetal fascicle from parapodium 50; E. Aciculae from anterior parapodia; F. Aciculae from posterior parapodia. Scales: A = 0.5 mm; B–F = 30 μm.

prostomium, with 14–19 articles, respectively. Palps subtriangular, directed ventrally, fused at bases, longer than prostomium, with longitudinal groove appearing bilobed (Fig. 1A). Nuchal organs located on posterior end of prostomium, arched. Peristomium shorter than first chaetiger, partially covering posterior end of prostomium. Two pairs of articulated tentacular cirri, longer than antennae; dorsal pair with 19–21 articles, ventral ones with 16–17 articles.

Parapodia with dorsal cirri articulated, articles wider than long, anterior ones with black dots, middle and posterior dorsal cirri yellowish, without pigmentation. First 5–6 pairs of dorsal cirri with 26–34 articles; then, alternating long with 32–36, and short with 24–28 articles. In median region of body, dorsal cirri alternate long and short with 36–38 and 24–28 articles, respectively; on posterior region, alternating long with 30–33 and short with 22–24 articles. Parapodial lobe subconical, distally bilobed; prechaetal ligula shorter and thinner than postchaetal. Ventral cirri shorter than parapodial lobe, subtriangular, inserted on middle of parapodial lobe.

Anterior parapodia with 10–12 bidentate falcigers, dorsal ones with marginal short spines, ventral ones shorter, unidentae, forming group of three chaetae

(Fig. 1B). From proventricular chaetigers, upper chaetae become unidentate. Midbody parapodia with 7–9 unidentate falcigers, dorsal ones longer and thinner than ventral ones (Fig. 1C). Posterior parapodia with 3–4 upper ungulae with short blade and two bigger and thicker ventral ungulae (Fig. 1D). In some prepygidal segments all chaetae ungulae, upper ones with short blade, lower ones with longer blades.

Anterior parapodia with four aciculae, three relatively thick and one slightly oblique at tip (Fig. 1E), median parapodia with three aciculae; posterior parapodia with two aciculae, one acute and pointed, other subterminally knobbed (Fig. 1F).

Pharynx wide, as long as 7–8 segments, pharyngeal tooth anteriorly, thin, sharp and yellowish, surrounded by crown of ten soft papillae. Proventricle as long as 9–11 segments, with 42–45 muscle cell rings.

Almost all specimens regenerating posterior end, or fragmented. Posterior region with complete pygidium, two articulated anal cirri, similar to dorsal cirri, with 20–22 articles.

*Etymology*.—The species is named in honor of Guillermo San Martín who has been contributing for more than 25 years to the knowledge and better understanding of syllids, a very complex group in polychaetes.

*Remarks*.—*Branchiosyllis sanmartini* differs from all species in the genus by the shape of the body, being cylindrical anteriorly and depressed in the median and posterior regions, and by possessing a longitudinal groove in the palps. Further differences are present in the coloration and the chaetae as noted below for comparison. For example, *B. sanmartini* differs from *B. cirropunctata* because the latter species has transverse, simple black bands, the bidentate falcigers of the anterior chaetigers have subequal teeth, and the ungulae of the posterior chaetigers are shorter. The coloration of *B. sanmartini* also differs from *B. fuscosuturata* with the latter species' color pattern consisting of 2–3 transverse brown bands on the anterior chaetigers, while along the middle region there is a single wide band, which disappears in the posterior segments. *B. sanmartini* differs from *B. lorenae*, found in Venezuela and Cuba, in that this species has anterior segments with two bidentate falcigers of long blades, anterior chaetigers without any color pattern, and anterior and middle regions with three oval stains on each segment. Finally, *B. sanmartini* differs from *B. maculata* and *B. salazari* because both species have simple transverse bands of pigment in the anterior chaetigers, and anterior bidentate falcigers, some of them with very small, proximal teeth.

*Type locality*.—La Paz Bay, Baja California Sur, México.

*Distribution*.—The species is currently known only from the wharf of La Paz, Baja California Sur, México, Southern Gulf of California.

### ***Branchiosyllis riojai***, new species
Fig. 2

*Material examined*.—Holotype (UANL 6787) and one paratype (LACM AHF Poly 2897), Marina Dorada, Escollera Norte, Manzanillo, Colima, México, 19°03′43.4″N, 104°10′13.5″W, 1.5 m depth, 7 Jun 2004, Coll. J. A. de León-González. Four specimens, Balleto Harbor, María Madre Island, Nayarit, México, 21°38′03.5″N, 106°32′11″W, Nov 1979, Coll. S. I. Salazar-Vallejo.

*Additional material examined*.—*Branchiosyllis exilis* (Gravier 1900), Djibouti, Gulf of Aden, Holotype (MNHN 143).

*Characteristic features*.—Body subcylindrical, without color pattern. Branchiae absent. Dorsal falcigers on anterior and median body regions bidentate, ventral ones unidentate. Ungulae present from mid-body. Aciculae 4–2–1 on

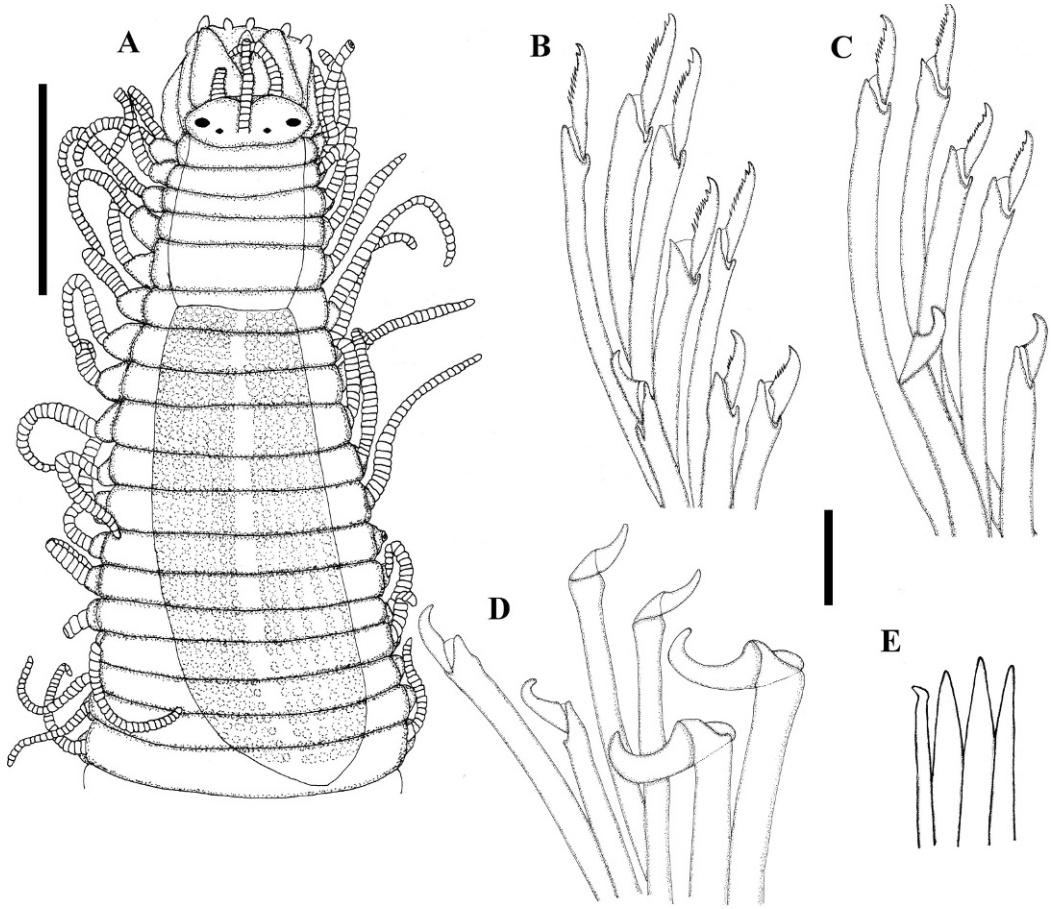


Fig. 2. *Branchiosyllis riojai*. A. Anterior end, dorsal view, partially exposed pharynx; B. Chaetal fascicle from parapodium 9; C. Chaetal fascicle from parapodium 25; D. Chaetal fascicle from parapodium 63; E. Aciculae from anterior parapodia. Scales: A = 0.5 mm; B–E = 30 μm.

anterior, median and posterior setigers, respectively. Proventricle about 1.3 times longer than pharynx, with 35–38 muscle ring cells.

*Description*.—Holotype 7 mm long, 0.4 mm wide, 78 chaetigers. Body short, thin, subcylindrical (Fig. 2A), ventrally depressed, without color pattern. Prostomium oval, wider than long. Four eyes in trapezoidal arrangement, anterior ones larger. Three antennae distinctly articulated, median one inserted between posterior eyes, with 19–22 articles, reaching tips of palps; lateral antennae inserted on anterior margin of prostomium, shorter than median antenna, with 15–17 articles. Palps subtriangular, fused at bases, slightly longer than prostomium. Nuchal organs not observed. Peristomium shorter than subsequent segments, dorsally covering partially prostomium. Two pairs of tentacular cirri, articulated, longer than antennae; dorsal pair with 30–34 articles, ventral pair with 26–27 articles. Parapodia with dorsal cirri articulated, articles wider than long, first 5–6 pairs with 27–35 articles; on middle region alternating long and short with 42–45 and 32–37 articles, respectively, on posterior region alternating long and short with 32 and 25 articles, respectively. Ventral cirri subtriangular, thick, shorter than parapodial lobe.

Anterior parapodia with 8–9 falcigers, dorsal ones bidentate, with small secondary tooth, ventral ones unidentate, blades short, margin smooth (Fig. 2B). On parapodia 1 and 2, ventral falcigers are sub-bidentate with secondary tooth very small and blades shorter than dorsal ones. Middle anterior parapodia with 7–8 falcigers, dorsal ones bidentate with small secondary tooth, ventral ones paired, unidentate, shorter and thicker than upper ones (Fig. 2C). Middle posterior parapodia with 7–8 chaetae per fascicle, unidentate falcigers dorsally, ventral ones ungulae. Ungulae with bigger blades on posterior region (Fig. 2D). Anterior parapodia with four aciculae, three thicker, straight, pointed and one thin with curved tip (Fig. 2E), median chaetigers with 2 aciculae, one pointed and one with a curved tip, posterior parapodia with only one acicula, thick, acute and pointed, slightly curved at tip.

Pharynx reddish, as long as 8–9 segments, with mid-dorsal thick tooth close to pharyngeal opening. Proventricle as long as 11–12 segments, 1.3 times longer than pharynx, with 35–38 muscle cell rings.

Pygidium with two articulated anal cirri, each with 21–25 articles.

*Reproduction*.—Acephalous stolon, with eyespots on each side of each segment, dorsal cirri reduced, clearly thinner than dorsal ones of posterior body region of parental, sub rectangular articles, longer than wide, with 10–12 articles.

*Etymology*.—The species is named in honor of Enrique Rioja, who described two species of *Branchiosyllis* from Mexico, and whose contributions to the knowledge of polychaetes in Mexican waters extends back nearly 40 years.

*Remarks*.—*Branchiosyllis exilis* is probably a species complex; it has been reported from the Mediterranean Sea, Australia, Indonesia, Pacific coast of North America, Mexico, Panamá, Galápagos Islands, Caribbean Sea and the Gulf of Mexico. *Branchiosyllis riojai* could be a part of this species complex. The features that define this complex are a subcylindrical body, presence of bidentate, short-blade falcigers and ungulae, with the latter ones from the middle to the end of the body without branchiae. The features to distinguish the different species in the complex include: size and number of articles in the appendages, and the alternation of sizes through the body; shape and number of aciculae in anterior, median and posterior regions; shape and number of falcigers through regions of the body; shape, number and first presence of ungula; size and rate of the pharynx and proventricle, and the number of muscle cell rings.

*Branchiosyllis riojai* can be easily distinguished from *B. exilis* in that the latter one has only bidentate, unmodified falcigers on its anterior segments, while *B. riojai* has uni- and bidentate falcigers. Appendages (antennae, dorsal and tentacular cirri) are shorter in *B. exilis*. Furthermore, the anterior parapodia of *B. riojai* have four aciculae and the posterior parapodia have one, whereas *B. exilis* has 2 aciculae on its anterior parapodia, and only one on its posterior segments.

*Type locality*.—Manzanillo, Colima, México.

*Distribution*.—New species is known from María Madre Island, Nayarit and Manzanillo, Colima.

Key to *Branchiosyllis* species from Mexican waters

1. Branchiae present . . . . . 2
– Branchiae absent . . . . . 4
2. Chaetigers with falcigers and ungulae . . . *Branchiosyllis diazi* Rioja, 1958
– Chaetigers without falcigers, only ungulae along body . . . . . 3
3. Branchiae with one lobe . . . . . *Branchiosyllis oculata* Ehlers, 1887
– Branchiae with two lobes . . . . . *Branchiosyllis pacifica* Rioja, 1941

4. Color pattern absent . . . . . .
. . . . . *Branchiosyllis riojai*
– Color pattern present . . . . . 5
5. Body cylindrical on anterior region and depressed or flattened on middle and posterior region. Dorsum completely colored with black pigment . . . . . *Branchiosyllis sanmartini*
– All body regions cylindrical. Anterior end without color pattern, with a single black transverse band on middle and posterior end . . . . . *Branchiosyllis salazari* Ruiz-Ramirez & Harris, 2008

## Acknowledgments

We wish to thank Sergio Salazar-Vallejo who collected important material for this work, revised the manuscript and provided valuable suggestions. We also thank two anonymous reviewers for their constructive comments on the manuscript. The study was partially financed by FOSEMARNAT 2004-CO1-245, and by grant H-029 from the Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO).

## Literature Cited

Augener, H. 1913. Polychaeta I, Errantia. Pp. 65–304, *in* W. Michaelsen and R. Hartmeyer, eds., Die Fauna Südwest-Australiens. Ergebnisse der Hamburger südwest-australischen Forschungsreise 1905. Vol. IV, Lieferung 5. Gustav Fischer, Jena.

Ehlers, E. 1887. XXXI. Report on the annelids. Reports on the results of dredging, under the direction of L. F. Pourtalès, during the years 1868–1870, and of Alexander Agassiz, in the Gulf of Mexico (1877–78), and in the Caribbean Sea (1878–79), in the U.S. coast survey steamer "Blake".—Memoirs of the Museum of Comparative Zoology at Harvard College 15:1–335.

Gravier, C. 1900. Contribution à l'étude des Annélides Polychètes de la Mer Rouge.—Nouvelles Archives du Muséum d'Histoire Naturelle, Ser. 4, 2:137–282.

Hartmann-Schröder, G. 1959. Zur Ökologie der Polychaeten des Mangrove-Estero-Gebietes von El Salvador.—Beiträge zur neotropischen Fauna 1(2):69–183.

Imajima, M. 1966. The Syllidae (Polychaetous Annelids) from Japan. V. Syllinae (?).—Publications of the Seto Marine Biological Laboratory 14(4):253–294.

Kirkegaard, J. B. 1995. Bathyal and abyssal polychaetes (errant species).—Galathea Report 17:7–56.

Michel, A. 1909. Sur les divers types de stolons chez les Syllidiens, spècialement sur une nouvelle espèce (*Syllis cirropunctata*, n. sp.) à stolon acèphale, et sur la rèobservation du stolon tétracère de *Syllis amica* Quatrefage.—Comptes Rendus de l'Académie des Sciences 148:318–320.

Monro, C. C. A. 1933. The Polychaeta errantia collected by Dr. C. Crossland at Colón, in the Panama Region, and the Galapagos Islands during the expedition of the S.Y. 'St. George'.—Proceedings of the Zoological Society of London 103:1–96.

Rioja, E. 1941. Estudios anelidológicos. III. Datos para el conocimiento de la fauna de Poliquetos de las costas del Pacífico de México.—Anales del Instituto de Biología, Universidad Nacional Autónoma de México 12:669–740.

———. 1958. Estudios anelidológicos. XXII. Datos para el conocimiento de la fauna de anélidos poliquetos de las costas orientales de México.—Anales del Instituto de Biología, Universidad Nacional Autónoma de México 29:219–301.

Ruiz-Ramírez, J. D., & L. H. Harris. 2008. *Branchiosyllis salazari* sp. n. (Polychaeta, Syllidae) del Caribe noroccidental y comentarios sobre el material tipo de *B. exilis* (Gravier, 1900).—Animal Biodiversity and Conservation 31(2):1–9.

Rullier, F. 1972. Annélides Polychètes de Nouvelle-Calédonie recueillies par Y. Plessis et B. Salvat. Expédition Française sur les récifs coralliens de la Nouvelle-Calédonie, Vol. 6. Editions de la Fondation Singer-Polignac, 169 pp.

San Martín, G., & D. Bone. 1999. Two new species of *Dentatisyllis* and *Branchiosyllis* (Polychaeta: Syllidae: Syllinae) from Venezuela.—Proceedings of the Biological Society of Washington 112:319–326.

———, P. Hutchings, & M. T. Aguado. 2008. Syllinae (Polychaeta, Syllidae) from Australia. Part 1. Genera *Branchiosyllis*, *Eurysyllis*, *Karroonsyllis*, *Parasphaerosyllis*, *Plakosyllis*, *Rhopalosyllis*, *Tetrapalpia* n. gen., and *Xenosyllis*.—Records of the Australian Museum 60:119–160.

Associate Editor: Rick Hochberg.