A NEW SPECIES OF *Perinereis* KINBERG, 1865 (ANNELIDA, NEREIDIDAE) FROM AN INTERTIDAL ROCKY SHORE IN WESTERN MEXICO

Jesús Ángel de León González[1*], María Elena García Garza[2], Norberto Méndez López[3] & María Ana Tovar Hernández[4]

[1-4]*Universidad Autónoma de Nuevo León, Facultad de Ciencias Biológicas, Laboratorio de Zoología de Invertebrados No Artrópodos, San Nicolás de los Garza, Nuevo León, México. * Autor de correspondencia: jesus.deleongn@uanl.edu.mx (ORCID: 0000-0003-2314-240X)*

maria.garciagza@uanl.edu.mx (ORCID: 0000-0002-9022-2728)

norberto.mendezlpz@uanl.edu.mx (ORCID:0009-0008-7003-3242)

maria_ana_tovar@yahoo.com (ORCID: 0000-0002-5263-2830)

ABSTRACT: A new species of ragworm belonging to the genus *Perinereis* is described from South Baja California Peninsula, Mexico. It was discovered in rocky intertidal zone among calcareous algae. The new species is characterized by the presence of a single-shield shaped bar paragnath on area VI and a remarkable development of dorsal cirrophore towards the posterior end. The new species is very close to *P. ponteni* described from Brazil, but they differ in the shape of the bar in area VI and in the relative size between the dorsal cirrus and the anterior part of the dorsal ligule in median parapodia.

Keywords. Intertidal zone, Polychaeta, Baja California Sur, Cabo San Lucas, San José del Cabo

RESUMEN: Se describe una nueva especie de anélido marino perteneciente al género *Perinereis*, del sur de la península de Baja California, México. Fue descubierta en una zona intermareal rocosa entre algas calcáreas. La nueva especie se caracteriza por la presencia de un único paragnato en forma de escudo en el área VI y un notable desarrollo del cirróforo dorsal hacia el extremo posterior. La nueva especie es muy cercana a *P. ponteni* descrita de Brasil, pero se diferencian en la forma de la barra del área VI y en el tamaño relativo entre el cirro dorsal y la parte anterior de la lígula dorsal en parapodios medios.

Palabras clave. Zona de entremareas, Polychaeta, Baja California Sur, Cabo San Lucas, San José del Cabo

INTRODUCTION

The Nereididae de Blainville, 1818 family is one of the most represented among annelids, with more than 703 species included in 45 valid genera (Read & Fauchald 2025a). The species of this family are among the most common and rich in shallow marine habitats, they are found in a wide range of habitats, from the deep sea to estuaries, freshwater streams and even temporary rainwater puddles in humid terrestrial environments (Wilson 2000; Bakken *et al.* 2022). In Mexico they have been located up to an altitude of 2000 meters above sea level in the Sierra de la Laguna in Baja California Sur (Johnson 1903), and in caves located 1650 meters above sea level and 176 km from the coastline (Solís-Weiss & Espinasa 1991).

The genus *Perinereis* Kinberg, 1865 is one of the largest genera among nereidids (Villalobos-Guerrero *et al.* 2021; Conde-Vela 2022). This genus has been recently studied by several authors (Park & Kim 2017; Bonyadi-Naeini *et al*. 2018; Villalobos-Guerrero 2019; Villalobos-Guerrero *et al*. 2021; Conde-Vela 2022; Elgetany *et al.* 2022; Prajapat *et al*. 2023, 2024; Rezzag-Mahcene *et al.* 2023; Hsueh 2024; Teixeira *et al*. 2025). Currently, the genus is composed by 125 species and three subspecies after Read & Fauchald 2025b (118 species), including five species transferred from *Neanthes* by Villalobos-Guerrero *et al*. (2021) and two contained in Conde-Vela (2022): one reinstated within the genus and a new one. For the study and better understanding of the genus, Hutchings *et al*. (1991) separated *Perinereis* into three informal groups (1, 2 and 3) and two subgroups (A, B) based on the number of smooth bars in the

areas VI of the pharynx (with 1 bar, 2 bars and 3 or more bars, respectively) and the relative size of dorsal ligules in posterior chaetigers (not greatly expanded or greatly expanded), of which the *Perinereis* group 1B is focus of the present study.

Regarding to the dorsal ligule, Villalobos-Guerrero *et al.* (2022) proposed a division into two regions: proximal and distal. Soon after, Villalobos-Guerrero *et al.* (2024) corrected that the proximal part of the dorsal ligule is instead the basal part of dorsal cirrus, namely the dorsal cirrophore, and the dorsal cirrus is, therefore, the dorsal cirrostyle, while the distal region corresponds to the dorsal ligule itself.

Thus, species of *Perinereis* belonging to the group 1B are distinguished by the presence of a single bar in area VI, and the cirrophore of the middle and posterior parapodia greatly expanded. This group includes 42 valid species and two subspecies worldwide (Hsueh 2024; Prajapat *et al*. 2024; Teixeira *et al.* 2025).

In the present study, a new species of *Perinereis* with single bar-shaped paragnaths on area VI and a great development of dorsal cirrophore towards the posterior end is described and illustrated from western Mexico.

MATERIAL AND METHODS

Samples of *Perinereis* were collected from El Chileno beach, a location between Cabo San Lucas and San José del Cabo, Baja California Sur, Mexico (23°01′31′′N, 109°42′55′′W). The collection was carried out in the rocky intertidal zone in 1996 by staff of the Laboratorio de Invertebrados Bentónicos, Instituto de Ciencias del Mar y Limnología, Unidad Académica Mazatlán, Universidad Nacional Autónoma de México. The specimens were separated manually from calcareous algae and fixed in 10% formaldehyde. The material was deposited in the Polychaeta Collection of the Universidad Autónoma de Nuevo León, and transferred to 70% ethanol.

Morphological observations were conducted using a stereomicroscope Olympus SZ, and an Olympus BX51 microscope with differential interference contrast (DIC). Photographs were captured using a Nikon 610 digital camera mounted on both microscopes. The figure backgrounds were cleaned and lightened as necessary, and final figures were assembled in a plate using Paint Shop Pro7. Total length (TL), length from the distal end of prostomium to chaetiger 10 (L10), body width at chaetiger 10 (W10) were measured. Also, the total number of chaetigers in complete specimens, the number of teeth on jaws, the paragnaths on all unpaired and paired (‘a’ for left, ‘b’ for right) sides of proboscis regions were counted.

Description of the species is based on the morphology of the holotype, whereas that from paratypes is indicated in parentheses. A section at the end of the description is also included to incorporate the overall variation in the species based on all the type materials. Terminology follows Villalobos-Guerrero & Bakken (2018), Conde-Vela *et al*. (2018) and Conde-Vela (2022).

The holotype and 3 paratypes were deposited in the Polychaeta Collection of the Universidad Autónoma de Nuevo León (UANL), 2 paratypes were deposited in the Colección Regional de Invertebrados Marinos, Instituto de Ciencias del Mar y Limnología, Universidad Nacional Autónoma de México (ICML-EMU).

SYSTEMATICS

Family Nereididae de Blainville, 1818

Subfamily Nereidinae de Blainville, 1818

Perinereis Kinberg, 1865

Perinereis mikeli sp. nov.

Zoobank record: urn:lsid:zoobank.org:act:28D1D951-56C8-4E2F-9177-81528CC83312

Material examined. Holotype (UANL-8188) 3 paratypes (UANL-8189), 2 paratypes (ICML-EMU-14008, ICML-EMU-14009). Intertidal, Playa El Chileno, Baja California Sur, Cabo San Lucas-San José del Cabo Highway, intertidal, between algae attached to rocky substrate, 23°01´31´´N, 109°42´55´´W, 07-20-1996, Coll. Staff of Laboratorio de Invertebrados Bentónicos, Instituto de Ciencias del Mar y Limnología, Unidad Académica Mazatlán, Universidad Nacional Autónoma de México.

Description. Colouration and measurements. Atoke, complete, in good condition, 20 (13−18) mm TL, 3.7 (2.7−4.7) mm L10, 2.5 (1.6−3) mm W10, and 72 (59−65) chaetigers. Body color pale yellow, without evident color pattern (Fig. 1A).

Prostomium. Campanulate; anterior region distally entire, sub-pentagonal, wider than long; anterolateral gap between antenna and palpophore nearly 1 × as wide as basal diameter of antennae. Nuchal organs not seen (Fig. 1B).

Antennae. Conical, tapering, short, 2.8 times longer than wide at basal region; antennae separated by a space as wide as half the basal diameter of the antennae (Fig. 2B).

Eyes. Two pairs, in quadrangular arrangement, purple, faded by the action of ethanol (Fig. 1B); gap between both pairs 2 × as wide as diameter of posterior pair. Anterior pair in lateral position, oval, with eye diameter 2.3 × as wide than that of antennae, with gap between eyes 7 × as wide as eye diameter; lenses visible, whitish, rounded, placed anterolaterally, covering about 20% of eye. Posterior pair rounded, with diameter 2 × as wide as that of antennae, not covered by tentacular belt; lenses visible, whitish, rounded, placed centrally, covering about 25% of eye.

Tentacular belt. 1.1 × as long as chaetiger 1, with anterior margin slightly convex; dorsum with a pair of longitudinal wrinkles on the lateral edge.

Tentacular cirri. Wrinkled, distinctly segmented distally (Fig. 1B). Anterodorsal cirri extend posteriorly to posterior margin of chaetiger 1. Anteroventral cirri thick, extending to anterior margin of palpostyle. Posterodorsal cirri longest, extending posteriorly to chaetiger 3. Posteroventral cirri slenderest, extended over posterior margin of tentacular belt. Cirrophores of tentacular cirri cylindrical as long as wide.

Proboscis not everted, a ventrodistal incision was needed. Jaws denticulate, light brown amber, 4a-5b (3a-4b−5a-4b) short, with blunt tips; inner margin of fang curved. Paragnaths brownish on maxillary ring, light brown on oral ring; consisting of uniform-base cones, except crescent-shaped bars on area VI and some p-bars on areas VII−VIII. Area I: 8 (8−10), cones of similar size in an oval patch. Areas II (a): 12 (13−18), II (b): 13 (14−17), three irregular rows of cones in oblique patch, distal cones smaller in size, the rest similar in size. Area III: 16 (13−21), three regular transverse rows in oval patch, without isolated lateral paragnaths. Areas IV (a): 18 (19−25), IV (b): 20 (18−25), four irregular rows of cones in crescent patch, cones in middle rows larger; without merged paragnaths. Area V: 1 (0−1), larger cone than those in the rest of the areas, except for the bars in area VI. Areas VI (a): 1, VI (b): 1, shield-shaped bar. Areas VII–VIII: 24 (21–25), paragnaths p-bar in two well-separated anterior and posterior bands; anterior band consisting of two (furrow and ridge) transverse aligned rows, each furrow and ridge areas with only one cone; posterior band with paragnaths only on ridge, one on each one ridge, slightly longer than those of anterior band. Ridge pattern of paragnaths in areas VI-V-VI ɔc-shaped.

Notopodia. Consisting of dorsal cirrophore, dorsal cirrostyle, dorsal ligule, and median ligule in biramous parapodia.

Dorsal cirrophore gradually increases in size towards the posterior part, a dorsal glandular zone is formed in middle and posterior parapodia, in middle parapodia it occupies most of the structure (Fig. 1E), in the posterior ones the cirrophore is greatly expanded, and the glandular zone is limited to the upper half of the structure (Fig. 1F). In first chaetiger the cirrophore is the 0.9 × the dorsal ligule length, in anterior

chaetigers (chaetiger 10) both structures are of similar size, in median parapodia (chaetiger 30) cirrophore is 1.2 × the length of dorsal ligule and in posterior chaetigers (chaetiger 58) the relation is 2.6 ×. Dorsal cirrostyle cirriform, attached dorsally in the border of cirrophore and dorsal ligule in all chaetigers; 3.3 × longer than wide in first chaetiger, attached to a short cirrophore (Fig. 1C); 4.4 × longer than wide in anterior biramous chaetigers (Fig. 1D); 4.2 × longer than wide in median and posterior chaetigers (Fig. 1E-F). Dorsal ligule conical, subequal in length throughout, longer than wide. Notopodial prechaetal lobe absent.

Median ligules. Well-developed throughout, short and triangular in anterior chaetigers (Fig. 1D), becoming slightly longer, subulated in following chaetigers (Fig. 1E-F).

Neuropodia. Consisting of neuroacicular ligule with superior and inferior lobes, ventral ligule, and ventral cirrus; postchaetal lobe reduced throughout (Fig. 2H–L). Neuroacicular ligule. Subconical throughout (Figure 1D-F); 3/4 as long as ventral ligule.

Neuropodial superior and inferior lobes as low edges throughout. Ventral ligules well-developed throughout, distinctly slightly longer than median ligule in all chaetigers (Fig. 1D); subulated and thick in anteriormost chaetigers, becoming narrower in following chaetigers (Fig. 1 E-F). Ventral cirri cirriform throughout (Fig. C-F), thick basally on the first chaetiger; three-quarters as long as ventral ligule in anterior chaetigers, 1.2 × shorter in following chaetigers. Aciculae amber throughout. Notoaciculae absent in first 2 chaetigers (Fig. 1C). Notoaciculae and neuroaciculae of same length throughout, neuroaciculae darker than notoaciculae (Fig. 1D-F). Notochaetae all homogomph spinigers throughout; 3 spinigers present in anterior chaetigers, 5 in middle chaetigers, and 3 in posterior chaetigers. Supracicular neurochaetae. Consisting of homogomph spinigers and heterogomph falcigers throughout; 4 spinigers present in anterior chaetigers, 3 spinigers in middle chaetigers, 4 spinigers in following chaetigers; 2 falcigers present throughout. Infracicular neurochaetae consisting of heterogomph spinigers and heterogomph falcigers throughout; 1 spiniger present in all chaetigers; 6 falcigers present in anterior chaetigers, 4 falcigers in middle chaetigers, and 3 falcigers in following chaetigers. Blades of chaetae: Both homogomph and heterogomph spinigers long, finely serrated, with teeth evenly spaced, heterogomph ones are thicker. Heterogomph falcigers tapering with pointed tip and even teeth; slender and of medium length, straight, entirely serrated (Fig. 1G-L). Pygidium. With a pair of lateroventral anal cirri, as long as last 6 chaetigers.

Variation. Total body length: 16–20 mm. Length to chaetiger 10: 2.7-4.7 mm. Body width at chaetiger 10: 1.6-3 mm. Number of total chaetigers: 59-72. Longest tentacular cirri extending to chaetiger 2-3. Jaws with (3-5 a), (4-5 b) teeth. Number and pattern of paragnaths: area I: 8-10; area II: (12-18 a), (13-17 b); area III: 13-21 in central patch; area IV: (18-25 a), (18-25 b); area V: 0-1 (equal number of specimens with a gross paragnaths and without paragnath); areas VII–VIII: proximal row with 9-11 on ridge, distal row 7 on ridge, 5-7 in furrow. Total number of paragnaths: 114–140. Anal cirri as long as last 6-9 chaetigers.

Etymology. The specific epithet is after Ildefonso (Mikel) Liñero Arana, who contributed extensively to the taxonomy and ecology of annelids from Venezuela, and specially as a tribute to his work on polychaete taxonomy and studying of *Perinereis* species. The specific epithet is derived from his nickname, "Mikel", and is a noun in apposition.

Remarks. *Perinereis mikeli* sp. nov. belongs to group 1B because it presents a transverse bar in each area VI, as well as the greatly expanded cirrophore in posterior parapodia. Of the 25 species in this subgroup, six species are characterized by having a transverse bar shield shaped in the Area VI, and by the absence of notopodial prechaetal lobe, these species are *P. falklandica* (Ramsay, 1914) from Falkland Islands, *P. marionii* (Audouin & Milne-Edwards, 1833) from France, *P. pictilis* Glasby, Nu-Wei & Gibb, 2013 from Lizard Island, Queensland, Australia, *P. pseudocultrifera* Hsueh, 2024 from Taiwan, *P. suluana* (Horst, 1924) from Sulu Archipelago, Philippines Islands and *P. tobeloana* (Augener, 1933) from Malay Archipelago. These species as well as *Perinereis mikeli* sp. nov. differ in terms of the

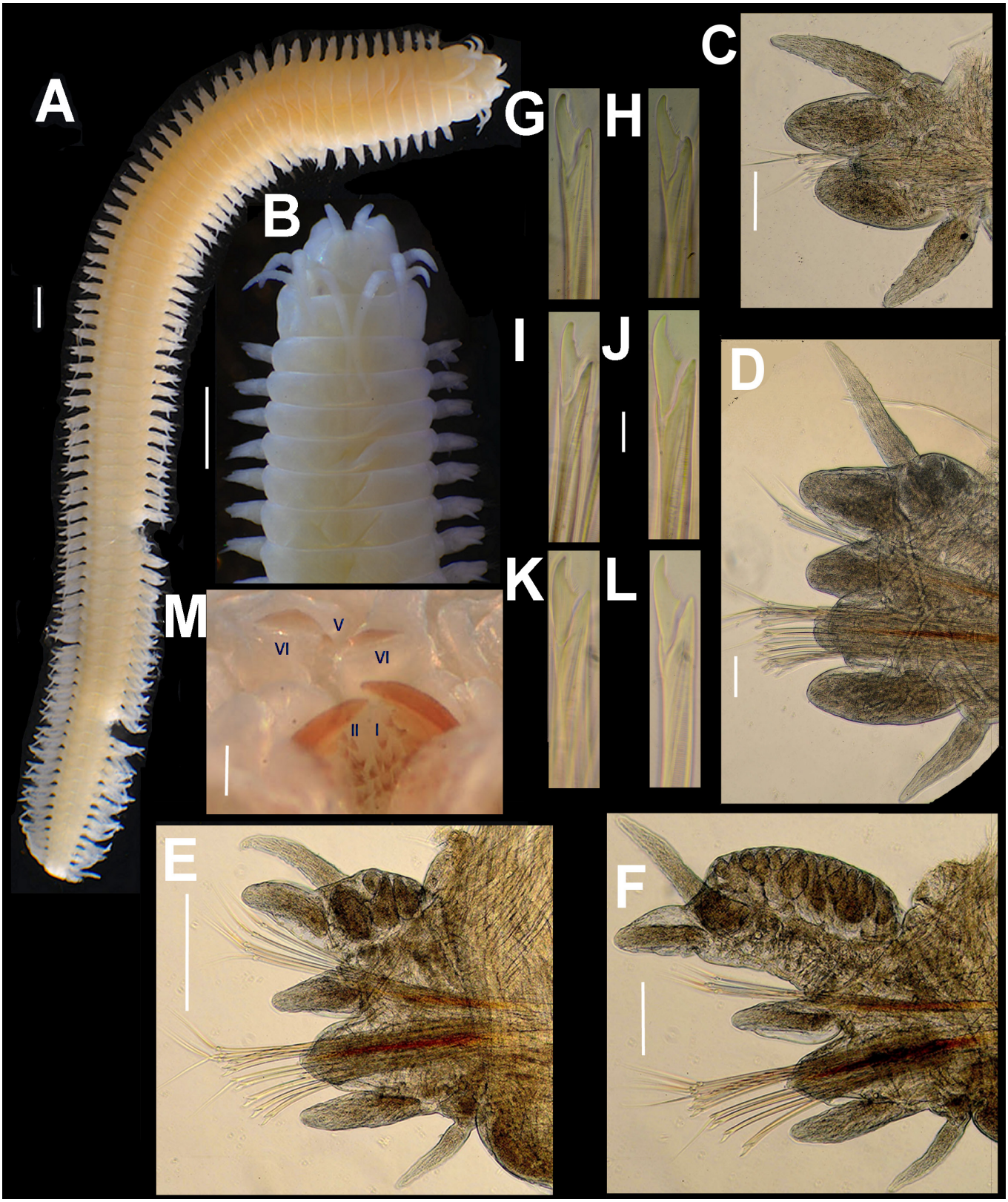

Figure 1. *Perinereis mikeli* sp. nov. Holotype (UANL 8188) A. Whole body, dorsal view. B. Anterior end, dorsal view; C. Parapodium 1, anterior view; D. Parapodium 10, anterior view; E, Parapodium 30, anterior view, F. Parapodium 58, anterior view; G. Heterogomph falcigers from neuropodial supracicular fascicle (chaetiger 10); H. Heterogomph falciger from neuropodial infracicular fascicle (chaetiger 10); I. Heterogomph falciger from neuropodial supracicular fascicle (chaetiger 30); J. Heterogomph falciger from neuropodial infracicular fascicle (chaetiger 30); K. Heterogomph falciger from neuropodial supracicular fascicle (chaetiger 58); L. Heterogomph falciger from neuropodial infracicular fascicle (chaetiger 58); M. close-up of areas I, II, V and VI of the pharynx. Scale bars: A-B= 1mm; C-F= 200 µm; G-L= 25 µm; M= 0.1mm.

following characteristics: (1) neuropodial postchaetal lobe is present only in *P. mikeli* sp. nov., whereas in the other species this feature is absent; (2) the length of dorsal cirrostyle in *P. mikeli* sp. nov., *P. marionii*, *P. pictilis*, *P. suluana* and *P. pseudocultrifera* is slightly longer or subequal in comparison of dorsal ligule, and notoriously longer in *P. falklandica* and *P. tobeloana*; (3) Area I have numerous paragnaths in *P. mikeli* sp. nov. (8, up to 11 in a circular group) and *P. falklandica* (32-150) while the other species have 1 to 4 paragnaths in several arrangements; however, *P. mikeli* sp. nov. and *P. falklandica* differ in the ridge pattern of areas VI-V-VI, being π-shaped in *P. falklandica* and ɔc-shaped in *P. mikeli* sp. nov.

On the other hand, three species have been previously described from southern Gulf of California (western Mexico): *Perinereis bajacalifornica* De León-González & Solís-Weiss, 1998, from La Paz bay, and *P. elenacasoae* Rioja, 1947 and *P. villalobosi* Rioja, 1947, both from Mazatlán Port. *Perineries mikeli* sp. nov. is also described from the Gulf of California. *Perinereis bajacalifornica*, *P. elenacasoae* and *P. mikeli* sp. nov., belong to the group 1B, whereas *P. villalobosi* belong to the group 1A because it has a single bar in area VI and the cirrophore is not greatly expanded in the posterior parapodia. *Perinereis bajacalifornica* differs from the new species in that it only has a line of 7 small cones in the area VII-VIII (*P. mikeli* sp. nov has 24 cones in two lines). *Perinereis elenacasoae* and *P. mikeli* sp. nov. shares several characteristics such as the extent of the dorsal posterior tentacular cirrus, numerous paragnaths in area I, and a similar number of paragnaths in area III; however, *P. elenacasoae* differs from the new species in that area V can be present from 1 to 4 paragnaths (0-1 in *P. mikeli* sp. nov.), bar in area VI is smooth ribbon shaped (shield shaped in *P. mikeli* sp. nov.), the ridge pattern of areas VI-V-VI, π-shaped (ɔc-shaped in *P. mikeli* sp. nov.), areas VII-VIII present in the middle part a third line with 5 paragnaths (only two lines in *P. mikeli* sp. nov.), and the supracicular neuropodial heterogomphal falciger with a thin anterior tooth directed downwards (entire distally in *P. mikeli* sp. nov.). *Perinereis villalobosi*, in addition to the parapodial structure, differs from *P. mikeli* sp. nov. in the number of paragnaths in area I: 1 (8-11 in *P. mikeli* sp. nov.), as well as in the ridge pattern of areas VI-V-VI, being π-shaped (ɔc-shaped in *P. mikeli* sp. nov).

Perinereis ponteni Kinberg, 1865 is the species morphologically closest to *P. mikeli* sp. nov., however, it differs in that the bars of area VI are ribbon-shaped, thin, and the dorsal cirrostyle is slightly larger than the distal region of the dorsal ligule in median parapodia. In *P. mikeli* sp. nov., the bars of area VI are crescent-shaped, thick, and the dorsal cirrostyle and the dorsal ligule in median parapodia are subequal. In addition, the ridge pattern of areas VI-V-VI in *P. ponteni* is λ-shaped (ɔc-shaped in *P. mikeli* sp. nov).

Distribution. Only known from the type locality.

ACKNOWLEDGMENTS

The authors thanks Michel Hendrickx (ICML, UNAM) who kindly donated several batches of specimens collected in the intertidal zone of the Mexican Pacific. Gael Garcia-Gallegos and Dana Karmina Virgen-Michel (UANL) separated the material to family level. We thank two anonymous reviewers for their useful comments and suggestions.

REFERENCES

Audouin, J. V. & H. Milne-Edwards, 1833. Classification des Annelides, et description de celles qui habitent les cotes de la France. *Ann. Sci. Nat., Paris. Ser.* 1, 27: 337-447 (1827), 28: 187-247 (1833), 29: 195-269, 388-412 (1833), 30: 411-425 (1833).

Augener, H. 1933. Polychaeten aus den Zoologischen Museen von Leiden und Amsterdam. *Zool. Meded. Leiden*, 15 :107-260

Bakken, T., C. J. Glasby, C. S. G. Santos & R. Wilson. 2022. *Nereididae Blainville, 1818*. In: *Handbook of Zoology*. *Pleistoannelida: Errantia II*. Purschke, G., M. Böggemann & W. Westheide. Ed. Walter De Gruyter GmbH, Berlin/Boston. 4: 259-307. https://doi.org/10.1515/9783110647167-010

Bonyadi-Naeini, A., N. Rastegar-Pouyani, E. Rastegar-Pouyani, J. C. Glasby & H. Rahimian. 2018. Intertidal polychaetes from Abu Musa Island, Persian Gulf, with a new species from the *Perinereis cultrifera* species complex (Annelida: Nereididae). *J. Mar. Biol. Ass. U. K.* 98(8): 1965–1976. https://doi.org/10.1017/S0025315417001564

Conde-Vela V. M. 2018. New species of *Pseudonereis* Kinberg, 1865 (Polychaeta: Nereididae) from the Atlantic Ocean, and a review of paragnath morphology and methodology. *Zootaxa* 4471 (2): 245–278. https://doi.org/10.11646/zootaxa.4471.2.2

Conde-Vela, V. M. 2022. Reinstatement of *Perinereis bairdii* (Webster, 1884) and description of *P. websteri* sp. nov. from Bermuda, including the reproductive morphology of two Atlantic *Perinereis* species (Annelida: Errantia: Phyllodocida). *Eur. J. Tax.* 787: 104–145. https://doi.org/10.5852/ejt.2021.787.1619

De Blainville, H. M. D. 1818. Mémoire sur la classe des Sétipodes, partie des Vers à sang rouge de M. Cuvier, et des Annélides de M. de Lamarck. *Bull. Sci. Soc. Phil. Paris* 1818: 78-85.

De León González, J. A & V. Solís-Weiss. 1998. The genus *Perinereis* (Polychaeta: Neredidae) from Mexican littoral waters, including the description of three new species and the redescriptions of *P. anderssoni* and *P. elenacasoae*. *Proc. Biol. Soc. Wash.* 111(3): 674-693.

Elgetany, A. H., T. H. Struck & C. J. Glasby. 2022. Tree new species of the genus *Perinereis* (Annelida, Nereididae) from Egyptian coasts. *ZooKeys* 1132: 163–188. https://doi.org/10.3897/zookeys.1132.87629

Glasby, C. J., N. V. Wei & K. S. Gibb. 2013. Criptic species of Nereididae (Annelida: Polychaeta) on Australian coral reefs. *Invert. Syst*. 27: 245-264.

Horst, R. 1924. Polychaeta errantia of the Siboga-Expedition. Part III. Nereidae and Hesionidae. *Siboga Exped. Leyden* 24C: 145–198.

Hsueh, P. W. 2024. Polychaete Worms of the Genus *Perinereis* (Annelida, Nereididae) from Taiwan, with Description of 17 New Species. *Zool. Stud*. 63:39.

Hutchings, P. A., A. Reid & R. S. Wilson. 1991. *Perinereis* (Polychaeta, Nereididae) from Australia, with redescriptions of six additional species. *Rec. Aus. Mus*. 43(3): 241–274. https://doi.org/10.3853/j.0067-1975.43.1991.47

Johnson H. P. 1903. *Fresh-water nereids from the Pacific coast and Hawaii, with remarks on fresh-water Polychaeta in general*. In: *Mark Anniversary Volume. To Edward Laurens Mark, Hersey Professor of Anatomy and Director of the Zoölogical Laboratory at Harvard University, in Celebration of Twenty-five Years of Successful Work for the Advancement of Zoölogy, from His Former Students, 1877□1902*. Ed. G. H. Parker. Henry Holt and Co., New York, USA, pp 205–222.

Kinberg J.G.H. 1866. Annulata Nova. *Öefv. Vet. Akad. Stockholm, Förh.,* 22, 167–179.

Park, T. & W. Kim. 2017. Description of a new species for Asian populations of the "Cosmopolitan" *Perinereis cultrifera* (Annelida: Nereididae). *Zool. Sci.* 34(3): 252–260. https://doi.org/10.2108/zs160154

Prajapat, V., T. F. Villalobos-Guerrero & K. D. Vachhrajani. 2023. A new species of *Perinereis* Kinberg, 1865 (Annelida: Nereididae) and invalidation of two congeners from Western India. *Zootaxa* 5330(3): 398–412. https://doi.org/10.11646/zootaxa.5330.3.4

Prajapat, V., T. F. Villalobos-Guerrero & K. D. Vachhrajani. 2024. Two new species of *Perinereis* Kinberg, 1865 (Annelida: Nereididae) from the rocky shore of Maharashtra, India, including notes and an identification key to Group 1. *Eur. J. Tax.* 935: 256–282. https://doi.org/10.5852/ejt.2024.935.2561

Ramsay, L. N. G. 1914. Polychaeta of the family Nereidae, collected by the Scottish National Antarctic Expedition (1902-1904). *Trans. R. Soc. Edinburgh* 50(1-3): 41-48.

Read, G. & K. Fauchald. 2025a. World Polychaeta Database. Nereididae Blainville, 1818. Accessed through: World Register of Marine Species at: https://www.marinespecies.org/aphia.php?p=taxdetails&id=22496 on 2025-02-24

Read, G. & K. Fauchald. 2025b. World Polychaeta Database. *Perinereis* Kinberg, 1865. Accessed through: World Register of Marine Species at: https://www.marinespecies.org/aphia.php?p=taxdetails&id=129380 on 2025-02-24

Rezzag-Mahcene, H., T. Villalobos-Guerrero, G. Kurt, F. Denis & T. Daas. 2023. A new species of *Perinereis* Kinberg, 1865 (Annelida: Nereididae) from the western Mediterranean Sea revealed by morphological and molecular approaches. *Med. Mar. Sci.* 24(2): 454–460. https://doi.org/10.12681/mms.33969

Rioja, E. 1947. Estudios anelidológicos. XIX. Observaciones sobre algunos nereidos de las costas de Mexico. *An. Inst.Biol. México* 18(2): 527-535.

Solís-Weiss, V. & L. Espinasa. 1991. *Lycastilla cavernicola*, a new freshwater nereidid from an inland Mexican cave (Polychaeta: Nereididae: Namanereidinae). *Proc. Biol. Soc. Wash.* 104(3): 631-639.

Teixeira, A. L., J. Langeneck, M. Grosse, P. E. Vieira, J. C. Hernández, B. R. Sampieri, P. Kasapidis, T. Bakken, S. Carvalho, A. Ravara, A. Nygren & F. O. Costa. 2025. A sea of worms: the striking cases of the European *Perinereis cultrifera* and *P. rullieri* (Annelida: Nereididae) species complexes, with description of 13 new species. *Invertebr. Syst.* 39, IS24059. doi:10.1071/IS24059

Villalobos-Guerrero, T. F. 2019. Redescription of two overlooked species of the *Perinereis nuntia* complex and morphological delimitation of *P. nuntia* (Savigny in Lamarck, 1818) from the Red Sea (Annelida, Nereididae). *Zoosystema* 41(24): 465–496. https://doi.org/10.5252/zoosystema2019v41a24

Villalobos-Guerrero, T. F. & T. Bakken. 2018. Revision of the *Alitta virens* species complex (Annelida: Nereididae) from the North Pacific Ocean. *Zootaxa* 4483(2): 201–57.

Villalobos-Guerrero, T. F., T. Park & I. Idris. 2021. Review of some *Perinereis* Kinberg, 1865 (Annelida: Nereididae) species of Group 2 *sensu* Hutchings, Reid & Wilson, 1991 from the Eastern and South-eastern Asian seas. *J. Mar. Biol. Assoc. U. K.* 101(2): 279–307. https://doi.org/10.1017/S0025315421000126

Villalobos-Guerrero, T. F., V. M. Conde-Vela & M. Sato. 2022. Review of *Composetia* Hartmann-Schröder, 1985 (Annelida: Nereididae), with the establishment of two new similar genera. *J. Nat. Hist.* 55: 2313–97.

Villalobos-Guerrero, T. F., S. Huč, E. Tilic, A. S. Hiley& G. W. Rouse. 2024. A remarkable new deep-sea nereidid (Annelida: Nereididae) with gills. *PLoS ONE* 19(3): e0297961

Wilson, R. S. 2000. *Family Nereididae*. In: *Polychaetes and Allies: the Southern synthesis.* Eds. P.L. Beesley, G. J. B. Ross & C. J. Glasby. CISRO Publishing, Melbourne: 138-141.

Recibido: Noviembre 2024.

Aceptado: Enero 2025