

Genus *Amphinema* Haeckel, 1879 (Cnidaria, Hydrozoa): A brief taxonomic review with the description of a new species?

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INTRODUCTION & AIM

Hydromedusae represent the pelagic adult stage in the life cycle of most hydrozoans, whose main function is to produce and release gametes which, after fertilisation, give rise to the planula larva. This larva can develop into a sexual medusa, an asexual polyp (solitary or colonial) or intermediate stages resembling “actinuloid” larvae (Bouillon et al., 2006, Llorente-Vega et al., 2025).

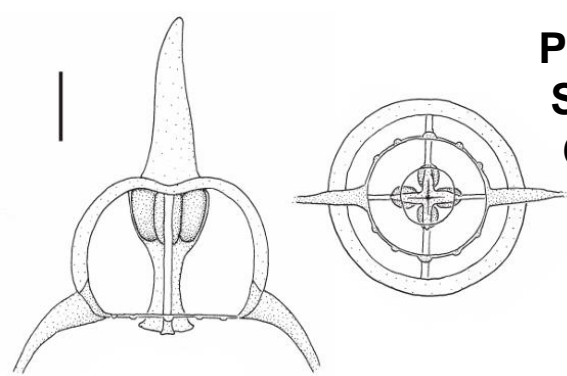


Fig. 1. *Amphinema dinema*. Taken from Schuchert (2007).

Phylum Cnidaria Hatschek, 1888
Subphylum Medusozoa Petersen, 1979
Clase Hydrozoa Owen, 1843
Subclase Hydroidolina Collins, 2000
Orden Anthoathecata Cornelius, 1992
Suborder Filifera Kühn, 1913
Familia Pandeidae Haeckel, 1879
Genus *Amphinema* Haeckel, 1879
17 nominal species.

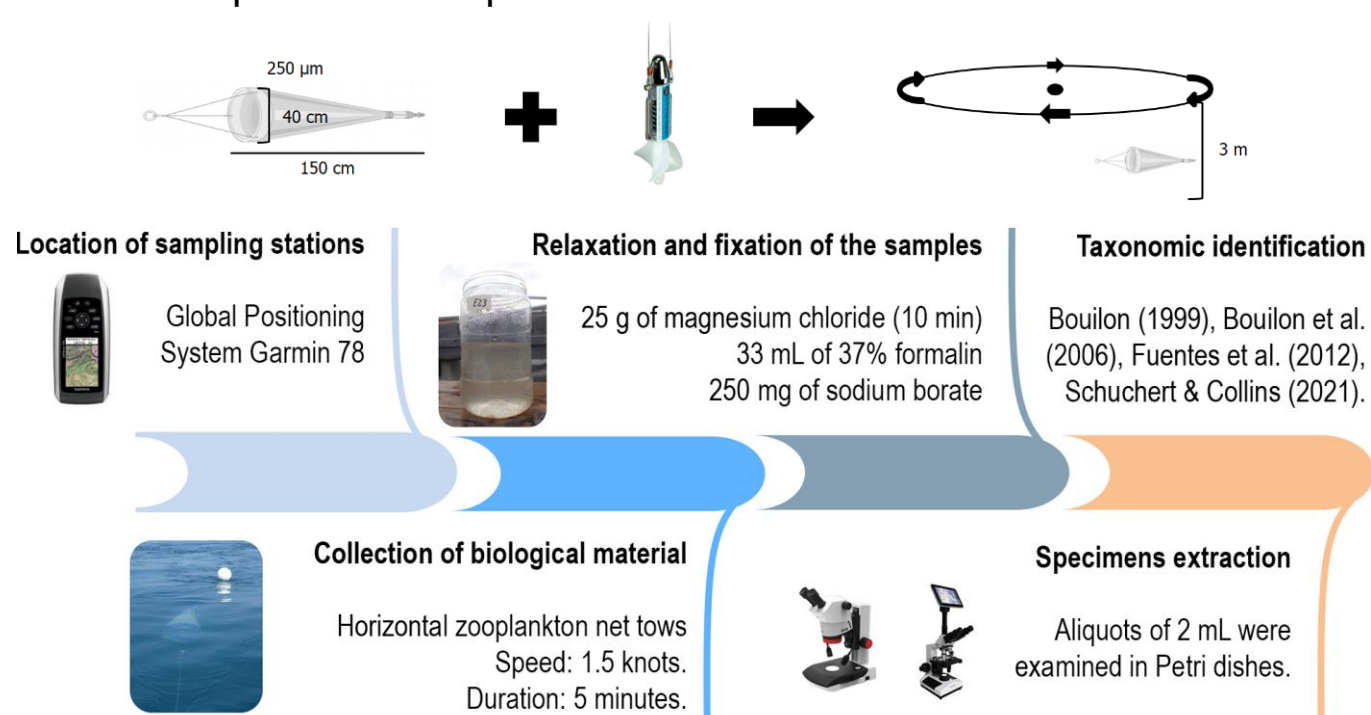
Diagnosis: Medusa with an apical projection; two hollow and opposite marginal tentacles; with or without ocelli; with or without additional marginal small cirri, marginal rudimentary bulbs or warts; a manubrium with four simple lips; gastric peduncle absent; gonads located in adradial, interradial, or perradial positions, which occasionally extend along the radial canals (Schuchert & Collins, 2021).

METHOD



Fig. 2. Study area and geographic location of sampling stations in the coastal zone of the department of Córdoba, Colombia. **Abbreviations:** PE = Puerto Escondido; SA = San Antero.

Field sampling methods: Fifty-six specimens were analyzed from 16 zooplankton samples collected between 2023 and 2025.



RESULTS & DISCUSSION

Amphinema sp. nov

Morphological description: Umbrella 0.4–1.6 mm in height and 0.5–2.0 mm in diameter, generally wider than tall. Mesoglea thin, with a thickened, arrow-shaped apical region (Fig. 3A). Apical projection broad, rounded distally, with a thick, conical apical canal (Fig. 3B). Four simple, broad radial canals. Manubrium large, occupying most of the subumbrellar cavity, with four folded lips and no peduncle; mouth cruciform. Interradial “gonads” horseshoe-shaped, extending toward the radial canals (Fig. 3C). Two simple, long, hollow marginal tentacles with thin, laterally compressed bulbs. Six brown marginal warts in adradial and interradial positions between the tentacles. Rudimentary bulbs absent (Fig. 3D).

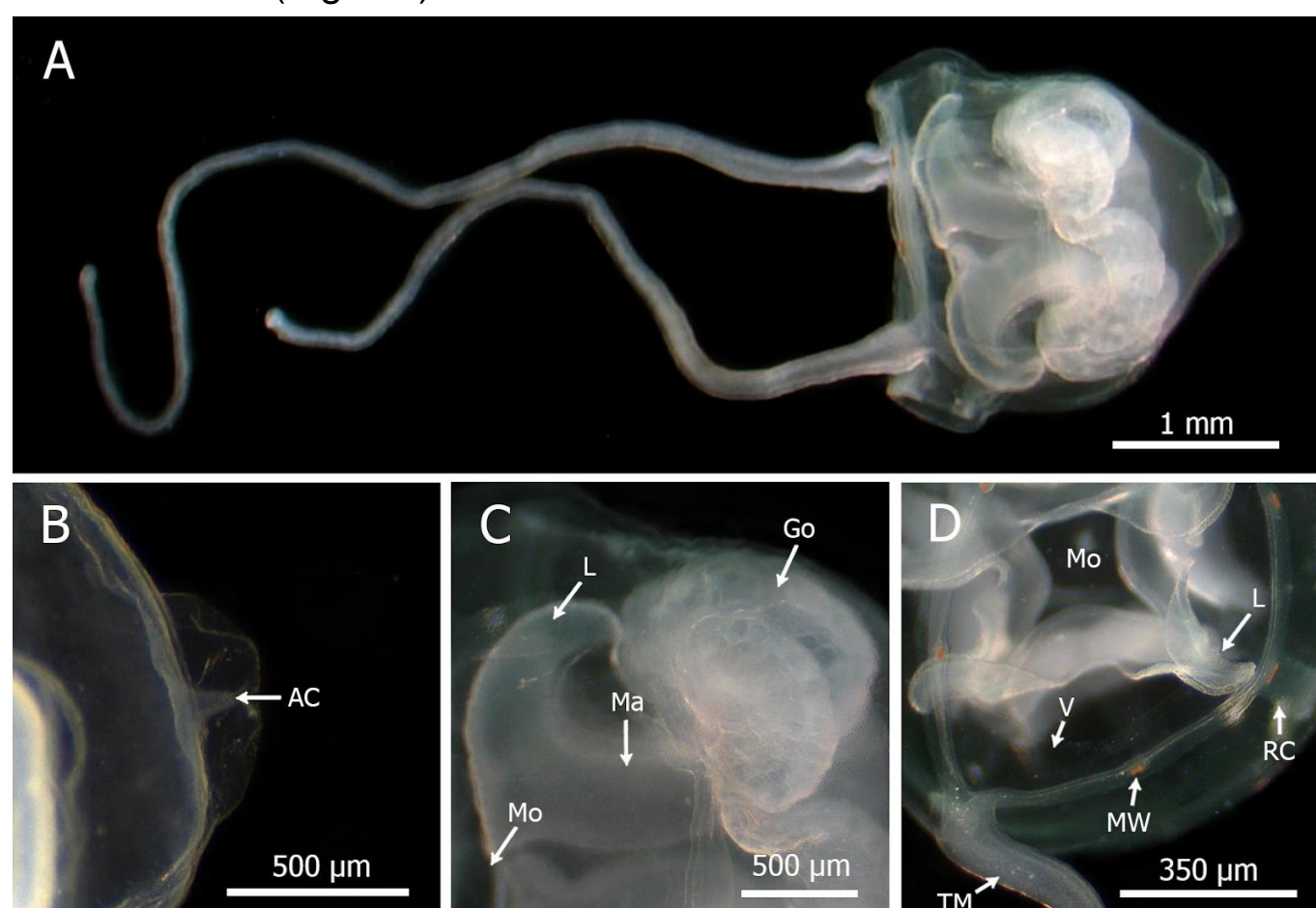


Fig. 3. *Amphinema* sp. nov. **A.** Lateral view; **B.** Apical projection; **C.** Manubrium in lateral view; **D.** Tentacular bulb. **Abbreviations:** AC = apical canal; Go = gonads; L = lip; Ma = manubrium; Mo = mouth; MW = marginal wart; RC = radial canal; TM = marginal tentacle; V = velum.

Remarks: The morphology of the tentacles, apical projection, and manubrium supports assigning the specimens to the genus *Amphinema*. Their morphological and morphometric characteristics were therefore compared with published descriptions of the nominal species of the genus. However, the specimens differ primarily in the shape of the apical projection and “gonads,” as well as in the presence or absence of rudimentary bulbs. **Scan the QR code to see the taxonomic summary of the genus.**



CONCLUSION / FUTURE WORK

The distinctive taxonomic characteristics of the specimens analyzed indicate that they constitute a new species to science. However, given the high morphological plasticity reported for the group, molecular analyses are required to support the taxonomic identification.

REFERENCES

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- Schuchert P, Collins R (2021) Hydromedusae observed during night dives in the Gulf Stream. Revue suisse de Zoologie 128(2): 237–356. <https://doi.org/10.35929/RSZ.0049>