

Scientific note

Southernmost record of *Egesta solida* (Dall, 1902)

(Mollusca, Bivalvia, Veneridae)

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This record is based on one live specimen of *Egesta solida* (Fig. 1) collected through bottom trawl surveys to assess artisanal coastal fisheries carried out by IMARPE (Instituto del Mar del Perú). Specimen deposited at IMARPE Scientific Collection in Callao, Peru. Ranging from Mexico (28°N) south to Ecuador (0.1°N), all previous records of *E. solida* are based on beached specimens (Coan & Valentich-Scott 2012). This is the first record with known depth, and also the first record in Peruvian waters, extending its southernmost geographical distribution from Ecuador to about 410 km.

Strong external and internal commarginal undulations in the shell of *E. solida* allow to differentiate this species from similar venerids in the area. In contrast to previous descriptions (perhaps due to its larger size), the present specimen has a wider pallial sinus and a more circular outline. It is slightly inequivalve, with the left valve a bit more inflated. It also has a very shallow radial sulcus (vestigial) on the posterodorsal margin forming a vestigial concavity on posterior margin of both valves, a character never described before despite seen in the specimens illustrated by Olsson (1961), Keen (1971), Coan & Valentich-Scott (2012) and in the holotype (USNM 126352; EZID: <http://n2t.net/ark:/65665/m35200efe9-182c-493c-a31a-e8895d04c246>, 4th November 2021) described by Dall (1902). We also noted a thin adherent translucent brownish periostracum and right hinge tooth 3b bifid (Fig. 1D), both never reported before. The present specimen has the largest shell reported in the literature (94 mm), as the previous maximum recorded size was 81 mm (Coan & Valentich-Scott 2012).

Egesta solida probably lives in small patches through its range, which may explain its scarce records, even considering that this species was described more than a century ago (Dall

1902). Its subtidal infaunal habitat may also explain the new record of this rather large clam. However, changes in sea temperature due to warm ENSO (El Niño and the Southern Oscillation) events may also be related to its presence in northern Perú, as the specimen was collected after El Niño 1992-1993. There are a few similar records of tropical molluscs found recently in Perú (Díaz & Ortlieb 1993, Paredes et al. 2004), however the present record reflects the need for further studies in subtidal habitats in the area, which may host a much richer hidden biodiversity.

References

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Fig. 1. *Egesta solida* (Dall, 1902), off Tumbes (03°35.72' S, 80°37.73' W), northern Perú, 12 m depth, december 1995 (IMARPE 04-001900). Length 94 mm, height 74.4 mm, width 51 mm. **A.** EV of RV. **B.** IV of LV. **C.** Detail of teeth in LV. **D.** Detail of teeth in RV. **E.** Dorsal view of shell. Scale bars: A-B, E: cm; C-D: 5 mm. IV, Internal view; EV, External view; LV, Left valve; RV, Right valve. Arrows indicate bifid tooth 3b.

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