

*EVOPLOSOMA VIRGO*, A NEW GONIASTERID STARFISH  
(ECHINODERMATA: ASTEROIDEA) FROM THE  
GULF OF MEXICO

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*Abstract.*—*Evoplosoma virgo*, new species, is described from deep water in the Gulf of Mexico. It is the second species of this rare genus known from the Atlantic.

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Among the starfishes collected during a survey of the benthic fauna of the Gulf of Mexico by Dr. Willis E. Pequegnat, Texas A&M University, was a single specimen of an undescribed asteroid of the genus *Evoplosoma* (family Goniasteridae). The specimen was sent to the National Museum of Natural History only a few weeks after the description of another new species of this genus, *E. scorpio* Downey, 1981, was published. *Evoplosoma scorpio*, from Rockall Tough and off the mouth of the English Channel, was the first Atlantic representative of this genus; other species of the genus are from Hawaii and the Indian Ocean.

*Evoplosoma virgo*, new species

Fig. 1

*Holotype.*—USNM E24285.

*Type-locality.*—Alaminos Station 71A8-8, 30 July 1971, northwestern Gulf of Mexico, 26°08'N, 92°43'W, 2056 m.

*Description.*—Disc large, inflated; arms 5, long, more or less square in cross-section, narrow; abactinal plates small, discoidal, covered with uniform ensacculate granules; papular pores between plates single, fairly large; pedicellariae scattered, short, rounded, barely distinguishable from granules; abactinal surface overhanging marginals interradially; marginal plates large but quite thin, square, conspicuous, equal, opposite, covered with granules like those of abactinal plates, many, particularly distally, bearing a short, stout, conical spine; actinal areas rather small, plates slightly larger than abactinal plates, with coarser granulation, many plates bearing a large, flattened felipedal pedicellaria; row of actinal plates adjacent to adambulacral series extending almost to end of arm; adambulacral plates with more or less straight furrow margin bearing 4-5 crowded, flat, truncate spines and, behind, a large, flattened felipedal pedicellaria aligned parallel to furrow, surrounded by bare space and ring of angular granules; mouth plates concealed by thick membrane (in holotype); madreporite small, covered with thick membrane, midway between disc center and margin.  $R = 115$  mm,  $r = 33$  mm,  $R/r = 3.5/1$ ; number of superomarginals = 26,  $R/SM = 4.4/1$ .

*Color.*—Reddish brown (dried).

*Etymology.*—The species is named for the constellation Virgo.

*Discussion.*—This species lacks the abactinal spines, spinelets, or tubercles present in other species of *Evoplosoma*. The demarcation between disc and arms is less abrupt than in *E. forcipiferum* Fisher, from Hawaii, and *E. scorpio* Down-

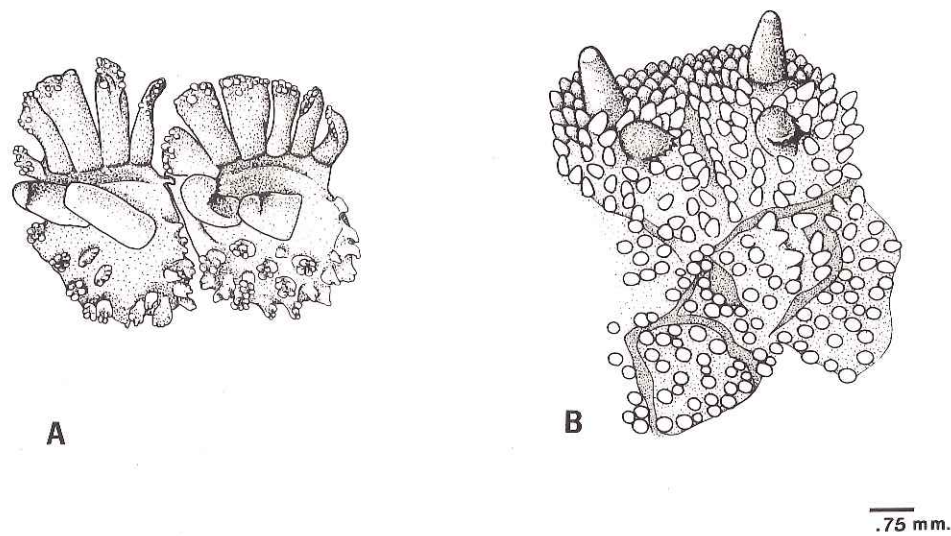


Fig. 1. *Evoplosoma virgo*: A, Two adambulacral plates; B, Two superomarginal plates.

ey, but much more so than in *E. augusti* Koehler, from the Indian Ocean. The membrane covering the individual granules is apparently thicker than that of *E. scorpio*, more like the thick membrane of *E. forcipiferum*, but as the specimen was dried when received, it is difficult to be sure of this comparison. *Evoplosoma virgo* differs from *E. scorpio* in having quite flattened, compressed, truncate, adambulacral furrow spines, but they are not the peculiarly flattened, thin furrow spines with expanded tips present in *E. forcipiferum*. The tiny rounded abactinal pedicellariae and the large, rectangular, very flat actinal pedicellariae are unique to *E. virgo*.

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