

RANGE EXTENSION AND HOST RECORD FOR
DISSODACTYLUS USUSFRUCTUS GRIFFITH, 1987
(CRUSTACEA: BRACHYURA: PINNOTHERIDAE)

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Abstract.—*Dissodactylus ususfructus* Griffith (Pinnotheridae) was found for the first time in the Gulf of California, Mexico, about 19° of latitude north of its previous northernmost record. Among the five specimens collected, two males and one female were found associated with *Clypeaster speciosus* Verrill.

During sampling activities in 1982 and 1985 in the Gulf of California, Mexico, aboard the R/V *El Puma* of the Universidad Nacional Autónoma de México (UNAM; CORTES Cruises), a small series of specimens of *Dissodactylus* Smith (Crustacea: Pinnotheridae) was found among invertebrates and on freshly captured specimens of *Clypeaster* (Echinoidea: Clypeasteridae). Later examination of these specimens demonstrated that they belonged to an undescribed species of *Dissodactylus* and represented the first positive record of the genus on *Clypeaster* for the Pacific. A preliminary description of this species of pinnotherid was prepared at that time (Hendrickx 1987), but was never published.

The genus *Dissodactylus* was recently reviewed by Griffith (1987a) who described two new species for the Pacific coast of America (*D. schmitti* and *D. ususfructus*).

On reading Griffith's paper, it became evident that the material collected in the Gulf of California belonged to *D. ususfructus*, a species already recognized as new by the late S. A. Glassell in the 1930s in a manuscript that he never published (see Griffith 1987a: 402). This species is known only from three localities between Costa Rica and Ecuador, and has not yet had a host species positively identified.

The discovery of *D. ususfructus* in the Gulf of California provides new information on its distribution and ecology. All the speci-

mens reported herein are held in the reference collection of the Estación Mazatlán, UNAM (EMU).

Dissodactylus ususfructus Griffith, 1987

Dissodactylus ususfructus Griffith, 1987a: 401, figs. 3, 8K, 10B, 12D, 14I; 1987b: figs. 7C, 9C, 13B, 17D.

Material examined.—CORTES 1 Cruise, station 19, 6-V-1982, 28°09'30"N, 112°46'30"W, off Cabo San Miguel, Baja California, Mexico, trawling at 30–35 m, sand, 2 ♂ c.w. 6.7 and 7.6 mm, 1 ♀ c.w. 6.2 mm (EMU-2635).—CORTES 2 Cruise, station 49B, 19-III-1985, 26°59'N, 111°53'30"W, off Bahía Santa Inés, Baja California, Mexico, trawling at 68 m, 1 ♂ c.w. 5.5 mm (EMU-2636A).—CORTES 2 Cruise, station 50, 20-III-1985, 25°46'N, 109°35'W, off Rio Fuerte, Sinaloa, Mexico, trawling at 96–98 m, muddy sand, 1 ♀ c.w. 7.6 mm (EMU-2636B).

Previous records.—SSE of Judas Point, Costa Rica (Zaca station 214; type locality), off Santa Elena Bay, Ecuador, and SW of Secas Islands, Panama (Griffith 1987a).

Remarks.—The present records extend the known distribution of *D. ususfructus* northward about 19° of latitude, to Cabo San Miguel and to off Rio Fuerte, respectively, on the west and on the east coasts of the Gulf of California.

The positive identification of *Clypeaster*

speciosus Verrill, 1870 as a host of *D. ususfructus* (CORTES 1 Cruise, station 19) partly confirms the hypothesis of Griffith (1987a: 403), in that this pinnotherid is associated with *Clypeaster*. The possible association of *D. ususfructus* with another species of *Clypeaster*, *C. europacificus* H. L. Clark, 1944, was suggested by Griffith (1987a) because of the presence of this species of irregular echinoid in successive samples taken by Zaca at station 214, the type locality of *D. ususfructus*, but this had not been confirmed. According to Caso (1980, 1986), both *Clypeaster speciosus* and *C. europacificus* are commonly found throughout the Gulf of California in similar habitats (shallow water to 90 m for *C. speciosus*, 18 to 165 m for *C. europacificus*; mostly on sand). They have also been collected at least once in the same trawl (*Velero III*, station 699-37, Canal Angeles, Gulf of California) (Caso 1980:9, 24), which suggests that they are, at least occasionally, sympatric. The hypothetical association of *D. ususfructus* with two species of *Clypeaster* does not seem unlikely. Indeed, many species of *Dissodactylus* are known to occur on several species or even genera of irregular echinoids (Griffith 1987a, Jangoux 1987).

The bathymetry provided by Griffith (1987a) for *D. ususfructus* is rather imprecise (80–120 m). The present material was found between 30–35 m, at 68 m, and between 96–98 m, on sandy bottom (62 to 100% sand). Other environmental conditions at bottom level were as follows: water temperature, 13.2 to 14.2°C; dissolved oxygen, 1.33 to 3.5 ml O₂/l.

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