

## The species of Axiidae (Crustacea: Thalassinidea) from the Pacific coast of Mexico, with a key for their identification\*

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**Resumen:** *Axiopsis caespitosa* y *A. baronai*, dos especies de Axiidae conocidas de la costa Pacífica de Colombia, se registran por primera vez para las aguas del Pacífico Mexicano y del Perú. Se presentan nuevas localidades de colecta de *Axiopsis vivesi* así como una clave de identificación de los Axiidae del Pacífico Mexicano.

Members of the family Axiidae are burrowing thalassinids which are sometimes caught during trawling activities by shrimpers. However, probably because more than half of the species known to occur along the Pacific coast of America are from deep water (about 300 m or more), there are only one or a very few records available for each.

Up to now, only one species of Axiidae has been reported for the Gulf of California [*Axiopsis* (*Neaxiopsis*) *vivesi* (Bouvier)], and although this seems to be a rather common species in the area, there are only a few localities reported in the literature. Another species of this family, *Calastacus stylirostris* Faxon, is known only from off the coast of Acapulco, Guerrero (at 1200 m), Mexico (Faxon, 1893; de Saint Laurent, 1972).

Two species of *Axiopsis* from the Pacific coast of Colombia were recently described (Squires, 1977: 1979), thereby increasing from one to three the number of species of this genus known from the Eastern Pacific Region. Examination of specimens of Axiidae recently collected in the Gulf of California (CORTES Cruises and sampling in the intertidal) and of material held at the National Museum of Natural History (USNM), in Washington,

increase the distribution limits of these two species of *Axiopsis* and increase significantly the number of sampling localities of *A. vivesi*.

Abbreviations used in this paper are as follows: T. L., total length; C. L., carapace length; USNM, National Museum of Natural History, Washington, D. C.; IMARPE, Instituto del Mar del Perú.

*Axiopsis* (*Axiopsis*) *caespitosa* Squires, 1979  
Mud lobster; camarón peludo

*Axiopsis* (*Axiopsis*) *caespitosa* Squires, 1979, p. 1584, figs. 1-3.

**Material examined:** Off Bahía Santa María, Sinaloa, Mexico, 03 May 1982, 1 specimen (T. L. 117.0 mm; C. L. 42.6 mm), in trawl (B/O "El Puma") at 72-77 m; off Bahía Santa María, Sinaloa, Mexico, 10 March 1985, 2 specimens (T. L. 81.6 and 94.5 mm; C. L. 31.1 and 33.7 mm) in trawl (B/O "El Puma") at 112 m; 24 miles S. E. of Rocas Consag, Baja California Norte, Mexico, 16 March 1985, 1 specimen (T. L. 68.7 mm; C. L. 24.4 mm) in trawl (B/O "El Puma") at 93-103 m; off Río Fuerte Sinaloa, Mexico, 20 March 1985, 1 specimen (T. L. 100.6 mm; C. L. 36.2 mm), in trawl (B/O "El Puma") at 97 m; off Perú, 9 September 1970, 2 specimens (USNM 173367 and 173368; T. L.

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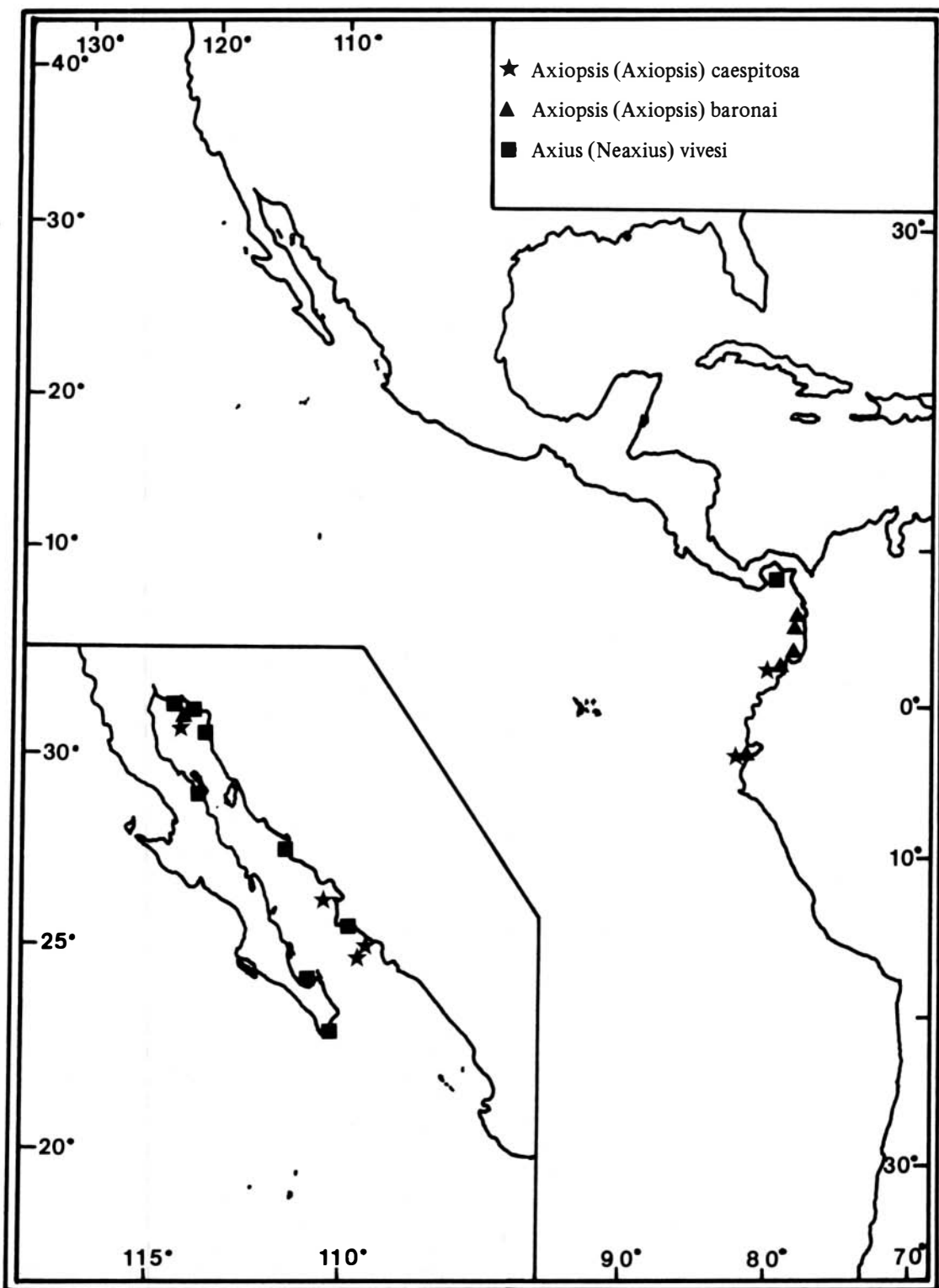


Fig. 1. Geographic distribution of the species of *Axiopsis* and *Axius* in the Eastern Tropical Pacific.

105.0 and 110.0 mm; C. L. 37.5 and 39.2 mm) collected by IMARPE; off Máncora, Perú, 9 May 1979, 1 specimen (USNM 284208; T. L. 119.4 mm; C. L. 42.1 mm) collected at 200 m (Del Solar).

**Previous record:** The type-locality, off Río San Juan del Sur, Colombia (Squires, 1979).

**Distribution:** The present records extend considerably the distribution limits of *Axiopsis caespitosa*, from the upper Gulf of California (30°59' N), México, to Máncora (03°35' S), Perú (Fig. 1).

*Axiopsis (Axiopsis) baronai* Squires, 1977  
Camarón rayado

*Axiopsis (Axiopsis) baronai* Squires, 1977, p. 1885, figs. 1-3.

**Material examined:** Barra de Tecate, Puerto Peñasco, Sonora, México. 1 February 1949, 1 specimen (USNM 205678; T. L. 108.2 mm; C.L. 36.6 mm) probably obtained from a shrimper (F. López); off Caleta La Cruz, Perú (date unknown), 1 specimen (USNM 284208; T. L. 111.2 mm; C. L. 36.0 mm) (Del Solar); off the coast of Perú (locality and collecting date unknown), 1 specimen (USNM 173365) (M. Méndez).

**Previous record:** The type-locality, Togorama, Colombia; Tumaco, Naya and Pizarro, Colombia (Squires, 1977).

**Distribution:** *Axiopsis baronai* is now known from the upper Gulf of California (31°18' N) to Perú, at least to Caleta La Cruz (03°38' S) (Fig. 1).

*Axius (Neaxius) vivesi* (Bouvier, 1895)  
Ghost shrimp; camarón fantasma

*Eiconaxius vivesi* Bouvier, 1895, p. 7  
*Neaxius vivesi*.— Berrill, 1975, p. 92.  
*Axius (Neaxius) vivesi*.— De Man, 1925 a, p. 56; 1925 b, p. 14.- Steinbeck and Ricketts, 1941, p. 450.- Westervelt, 1967, p. 66.- Brusca, 1973, p. 221; 1980, p. 258, pl. 13.

**Material examined:** Isla Contreras, Panamá, 20 September 1981, 2 specimens (USNM 189040); Bahía de Los Angeles, Baja California, México, 23 July 1985, 1 specimen (USNM 211371) (M. Timmons and B. Kensley). The species was also observed in the field at Topolobampo, Sinaloa and Guaymas, Sonora, México.

**Previous records:** Cabo San Lucas, Baja California, Puerto Peñasco, Bahía de Chola and Bahía San Evaristo, Sonora (Brusca, 1980); Bahía de Chola (Westervelt, 1967); Guaymas, Sonora (Berrill, 1975); La Paz, Baja California (Steinbeck and Ricketts, 1941).

**Distribution:** Throughout the Gulf of California, and south to Isla Contreras, Panamá (Fig. 1).

**Key to the species of Axiidae from the Pacific Coast of México**

1. Eyes lacking pigment; rostrum styliiform, unarmed, with only two basal spines (deep water). . . . . *Calastacus stylirostris*
- Eyes with pigment; rostrum armed on both sides with many spines . . . . . 2
2. Uropodal exopode without a transversal suture (very shallow water). . . . . *Axius vivesi*  
Uespadal exopode with a strong transversal suture (distal part articulate). . . . . 3
3. Edge of abdominal pleura 1 to 5 spiny or tuberculate. . . . . *Axiopsis caespitosa*  
Edge of abdominal pleura 1 and 2 smooth, of pleura 3 to 5 with one accessory spine . . . . . *Axiopsis baronai*

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