

<http://dx.doi.org/10.111646/zootaxa.3666.1.8>  
<http://zoobank.org/urn:lsid:zoobank.org:pub:8030879A-2693-4353-B837-2ABC17A3AC72>

## ***Pinnotheres orcutti* Rathbun, 1918, a new Eastern Tropical Pacific species of *Tumidotheres* Campos, 1989 (Crustacea: Brachyura: Pinnotheridae)**

ERNESTO CAMPOS<sup>1,3</sup> & RITA VARGAS-CASTILLO<sup>2</sup>

<sup>1</sup>*Facultad de Ciencias, Universidad Autónoma de Baja California, Apartado Postal 296, Ensenada, 22800 Baja California, México.*  
*E-mail: ecamps@uabc.edu.mx*

<sup>2</sup>*Museo de Zoología, Escuela de Biología, Universidad de Costa Rica, San Pedro, 11501-2060 San José, Costa Rica.*  
*E-mail: rita.vargas@ucr.ac.cr*

<sup>3</sup>*Corresponding author*

### **Abstract**

The lack of a protuberance in the basal antennal article in the holotype of *Pinnotheres orcutti* Rathbun, 1918, allows its removal from *Pinnotheres* Bosc, 1802 [type species, *P. pisum* (Linnaeus, 1767)]. The species is instead included in *Tumidotheres* Campos, 1989, because of the presence of a thick, tumid and firm carapace, and its surface covered with a short, dense, and deciduous tomentum; the third maxilliped having a propodus larger than the carpus; and the presence of a sub-spatulate dactylus of the third maxilliped medially inserted into a notch on the ventral margin of the propodus. *Tumidotheres orcutti* new combination can be separated from its sole Pacific Ocean congener, *T. margarita* Smith, 1870, by its unique dentition on the inner margin of the cheliped pollex, which is armed with a blunt proximal lobe and a row of small teeth, the two distal teeth being conspicuously the largest. In contrast, the pollex dentition of *T. margarita* consists of very small teeth, all similar in size.

**Key words:** Brachyura, Pinnotheridae, *Pinnotheres orcutti*, *Tumidotheres*

### **Resumen**

La ausencia de una protuberancia en el artejo basal de la antena en el holotipo de *Pinnotheres orcutti* Rathbun, 1918, permite remover esta especie de *Pinnotheres* Bosc, 1802 [especie tipo, *P. pisum* (Linnaeus, 1767)]. La especie es en vez incluida en *Tumidotheres* Campos, 1989, debido a la presencia de un caparazón grueso, túmido y firme, y su superficie cubierta con una pubescencia corta, densa y caediza; el tercer maxilippedo con un propodus más largo que el carpus y un dáctilo subespatulado que se inserta medialmente en una escotadura sobre el margen ventral del propodus. *Tumidotheres orcutti*, nueva combinación, puede ser separado de su congénere en el Océano Pacífico *T. margarita* Smith, 1870 por su exclusiva dentición del margen interno del dedo fijo de la quela, el cual está armado con un diente romo proximal y una fila de dientes pequeños, siendo los dos más distales conspicuamente los más grandes. En contraste, la dentición del dedo fijo en *T. margarita* consiste en dientes pequeños, todos similares.

### **Introduction**

Ongoing studies on the Tropical Eastern Pacific pinnotherid crabs prompted us to evaluate the generic status of *Pinnotheres orcutti* Rathbun, 1918, a species described on the basis of a dried male that was collected in October 1910 from Manzanillo, Colima, México. Subsequent to the original description, Glassell (1938) described the adult female of this species, extending its distribution to Tenacatita Bay, Jalisco and Tres Marias Island, Nayarit, México. More recently Hendrickx (1995) expanded its distribution northward to the upper Gulf of California.

The morphology of *P. orcutti* was studied herein in detail and compared to all known American genera of Pinnotheridae, as well as with the type species of the *Pinnotheres* Bosc, 1802, *P. pisum* (Linnaeus, 1767) (Fig. 1). In addition, an unidentified pinnotherid collected in Cabo Blanco island, Costa Rica and deposited in the Museum