Papéis Avulsos de Zoologia

Museu de Zoologia da Universidade de São Paulo

Volume 55(7):103-114, 2015 **www.mz.usp.br/publicacoes**
www.revistas.usp.br/paz
www.scielo.br/paz
ISSN impresso: 0031-1049
ISSN *on-line:* 1807-0205

Morfología comparada del esqueleto axial en la familia de cangrejos de agua dulce Trichodactylidae (Crustacea: Decapoda: Brachyura)

Manuel Pedraza[1,3]
Célio Magalhães[1,4]
Marcos Tavares[2]

ABSTRACT

The axial skeleton is a complex structure of cuticular origin, formed by sclerotic plates of thoracic sternite and pleurites as well as its internal invaginations. The ventral characters of the axial skeleton, reflected externally in the suture lines of the thoracic sternum, are an important classification criteria for the current suprageneric system of Trichodactylidae: (Trichodactylinae & Dilocarcininae (Dilocarcinini + Valdiviini)). In order to test this hypothesis, the internal and external characters of the axial skeleton of 42 adult crabs belonging to 17 species and 10 genera were examined. For the material preparation the crabs were dissected and their skeletons submerged in a hot solution of potassium hydroxide (KOH) for a period of 24 to 48 hours. Variations in the shape, orientation and conformation of the thoracic sternum, pleural roof, ventral and dorsal phragmas and junction plate were described from anatomical preparations. Based on these characteristics, the species were separated into three groups, which are consistent with the proposed classification of Trichodactylidae into subfamilies and tribes. This study highlights the importance of the morphological characteristics of the axial skeleton for Trichodactylidae taxonomy.

Key-Words: Trichodactylidae; freshwater crabs; axial skeleton; junction plate; *sella turcica.*

INTRODUCCIÓN

A diferencia de otros grupos de crustáceos, en los decápodos se destaca la presencia de un complejo sistema esquelético formado a partir de placas esclerotizadas de origen cuticular. Funcionalmente esta armazón provee puntos de anclaje para la inserción de la musculatura de los apéndices torácicos (Drach, 1950; Bitsch & Bitsch, 2002). En conjunto esta estructura recibe el nombre de esqueleto axial (Secretan, 1980; Secretan-Rey, 2002; Guinot *et al.,* 2013). En Brachyura, conforme con el proceso de *"carcinisación"* y reorganización de los órganos internos, las estructuras del esqueleto axial sufrieron marcadas modificaciones tanto en su orientación como en su forma de unión, dando origen a un esqueleto central rígido y metame-

1. Instituto Nacional de Pesquisas da Amazônia (INPA). Avenida André Araújo, 2.936, Petrópolis, CEP 69067-375, Manaus, AM, Brasil.
2. Museu de Zoologia, Universidade de São Paulo. Caixa Postal 42.494, 04218-970, São Paulo, SP, Brasil. E-mail: mdst@usp.br
3. E-mail: manuelpedrazam@gmail.com
4. E-mail: celiomag@inpa.gov.br
http://dx.doi.org/10.1590/0031-1049.2015.55.07