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A NEW SPECIES OF *ACANTHOPS* AUDINETTE-SERVILLE, 1831 FROM ECUADOR (MANTODEA, ACANTHOPINAE)

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Abstract: The description of a new species of the genus *Acanthops* Audinette-Serville, 1831 from Ecuador is given. *A. septemspinosa* **n. sp.** is the eighteenth species of this genus; it is distinctive from the other species known so far because of the unusual shape of the external male genitalia.
Key words: Mantodea, *Acanthops septemspinosa*, new species, Ecuador.

Nueva especie de *Acanthops* Audinette-Serville, 1831 de Ecuador (Mantodea, Acanthopinae)
Resumen: Se presenta la descripción de una nueva especie de *Acanthops* Audinette-Serville, 1831 de Ecuador. *A. septemspinosa* **n. sp.** es la decimoctava especie del género. Se distingue de las restantes especies conocidas por la inusual forma de la genitalia externa masculina.
Palabras clave: Mantodea, *Acanthops septemspinosa,* nueva especie, Ecuador.

Taxonomy/Taoxnomía: *Acanthops septemspinosa* **n. sp.**

Introduction

Among the Acanthopinae belonging to Lombardo's collections I discovered a specimen from Ecuador belonging to the genus *Acanthops* Audinette-Serville, 1831. The different shape of the wings and the external male genitalia has shown notable differences from those of other species of *Acanthops*, therefore it is necessary to institute a new species.

Material and Methods

This study is based upon one single male specimen from Ecuador, the only specimen known until now.

Drawings were made using a Leica M28 stereomicroscope provided with camera lucida. Anatomical terminology follows Snodgrass (1935) except for the copulatory apparatus which follows La Greca (1954). Measurements were made using a Leitz stereomicroscope.

The specimen is deposited in the Museum of the Department of Animal Biology "Marcello La Greca" University of Catania (DBUC).

Acanthops septemspinosa new species

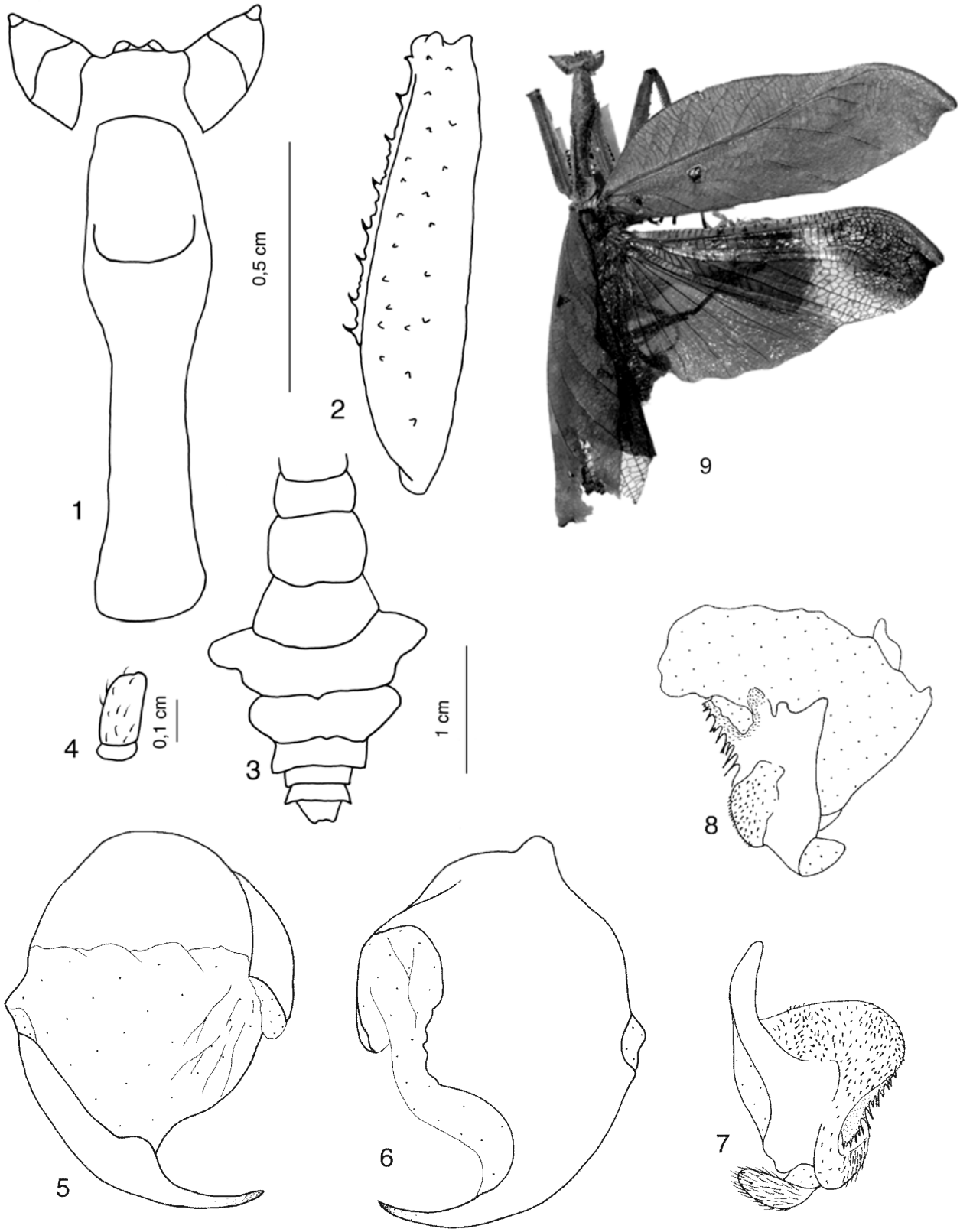
Figs 1-9

DIAGNOSIS. Medium in size, eyes ovoid with a small conical tubercle, pronotum elongated, anterior femora with seven small spines on external margin. Tegminae opaque with anterior margin sinuous with a moderately deep excavation; stigma shiny brown. Abdomen moderately enlarged with a leaf-like lobe on external margin.
Female unknown.

TYPE MATERIAL. Holotypus ♂: Ecuador: Napo, Yasuni, 200m, 10.Nov.1997, Lombardo leg. (DBUC).

ETYMOLOGY. This species is named for the presence of seven spines on the external margin of the anterior femora.

DESCRIPTION.
Head. Chestnut with small brown spots, 1.66 times as wide as pronotal dilatation (Fig.1); eyes conical with distinct apical tubercle; frons concave; antennae short ochreous; ocelli large; fastigium of vertex lower than imaginary line joining apex of eyes; frontal shield transverse, upper margin with two distinct teeth projecting forward; disc granulous; anteclypeus and postclypeus separated by a middle transversal carina. Labial and maxillary palpi ochreous.
Thorax. Pronotum elongated (Fig.1), 1.64 times as wide as minimum width of metazona; smooth lateral margins, disc with numerous scattered granules; supracoxal dilatation moderately enlarged. Prosternum ochreous anteriorly to coxal sulcus and posteriorly dark with light scattered granules. Anterior coxae 0.78 times as long as pronotum, prismatic with a quadrangular section; internal surface with ivory calluses; posterior surface with a mammelliform ivory tubercles; lateral margins spinulated. Trochanter with ochreous granules. Anterior femora (Fig.2) 4.57 times as long as their maximum width; external surface with sparse granules, upper margin straight; 7 external spines, 4 discoidal spines, 17-19 internal spines all ochreous with black apex. Anterior tibiae with 18 internal and 26 external slipped spines all brown with black apex. Middle and hind legs slender with elongated hairs; posterior metatarsa shorter than the other together articles. Wings well developed, extending beyond apex of abdomen. Mesothoracic wings opaque brown, costal margin sinuous with not well developed excavation; apex with small lobe; costal area enlarged to base until to 2/3 of its length. Discoidal area with shiny brown stigma. Metathoracic wings hyaline,



Figs 1-9. *Acanthops septemfasciata* n.sp.: **1.** head and pronotum; **2.** anterior femur; **3.** abdomen; **4.** last segment of cercus. **5-8.** External male genitalia: **5-6** ventral phallomere in dorsal and ventral view; **7-8** left phallomere in dorsal and ventral view. **9.** Habitus.

chestnut in colour except a preapical diaphanous streep (Fig. 9).

Abdomen. Moderately enlarged, 4° urotergites with an enlarged leaf-like lobe on external margin (Fig.3). Supranal plate short, trapezoidal in shape, cerci with long hairs (Fig.4).

External genitalia. Ventral phallomere (Figs 5, 6) longer than wide, anterior process well developed, narrow and with acute apex. Left phallomere well sclerotized: dorsal lamina (Fig.7) not well developed, with a large membrane with numerous hairs of different length; ventral lamina (Fig.8) well developed, left margin with numerous digitations.

REMARKS. This species corresponds well to the diagnosis of the genus *Acanthops* and, in particolar, it is close to *A. tuberculata* Saussure with which it shares the same number of spines on the external margin of the anterior femora, it differs, however, clearly from it for the shape of the wings and genitalia. *A. septemspinosa* n.sp. and *A. tuberculata* are, to our knowledge, the only two species of the genus *Acanthops* that have 7 spines on the external margin of the anterior femora, a characteristic that, for a long time, has been used to distinguish the genera *Acanthops* and *Metilia*. As has recently been observed by Roy (2002) the distinction between these two genera cannot be based only on the number of spines of the anterior femora (six in *Acanthops* and seven in *Metilia*), as this character is quite unstable, but on other characters such as: the shape of the pronotum that in *Acanthops* is never stumpy as in *Metilia*; the frontal shield that in *Acanthops* always has two distinct teeth on the superior margin and the presence of lobular protuberance on the lateral margin of the 4th urosternite that in *Acanthops* is very wide.

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