

Linzer biol. Beitr.	24/1	97-101	17.7.1992
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**PARASTIGMUS, A NEW GENUS OF THE SUBTRIBE STIGMINA
FROM SOUTH AMERICA**

(HYMENOPTERA: SPHECIDAE: PEMPHREDONINAE)

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A b s t r a c t : *Parastigmus argentinus*, new genus and new species, is described from Argentina. The new genus belongs to the subtribe Stigmina and differs from known genera by comparatively short petiole, large delimited pygidial plate, hindwing media diverging at cu-a, and also by the presence of a sharp tooth in the middle of the inner margin of mandible which is not typical for the subfamily Pemphredoninae.

Introduction

While revising the materials of *Spilomena* received from Dr. A. Willink (Instituto Miguel Lillo, Tucuman, Argentina) a female specimen similar to *Stigmus* but with short petiole was discovered. The detailed studying has revealed, that it belongs to the previously unknown genus of the subtribe Stigmina and possesses features which combination not found in the subtribe and even in any other pemphredonine genera. Below the descriptions of the new genus and species are given.

Parastigmus ANTROPOV, gen.nov.

Generic diagnosis: Mandible with two apical and a minute ventral preapical teeth, inner margin with a sharp tooth in the middle (Fig.1,2). Labrum with two acute apical and two small lateral teeth. Face broad, pressed above antennal sockets; lower frons with a small sharp median

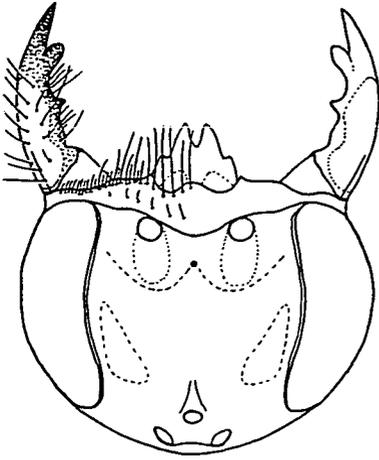


Fig.1: *Parastigmus argentinus* gen. sp. nov., female; head, frontal view



Fig.2: *Parastigmus argentinus* gen. sp. nov., female; left mandible, lateral view.

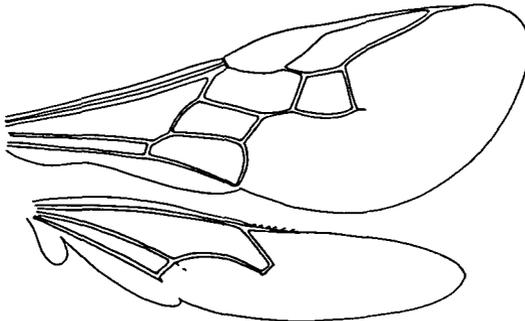


Fig.3: *Parastigmus argentinus* gen. sp. nov., female; right wings

process; clypeus short, without dense silvery hair, only with long preapical setae; eyes broadly separated, very slightly converging above, inner orbits slightly excavated; very narrow smooth grooves along eyes' orbits; head moderately developed behind eyes; occipital carina complete to midventral line of head and separated from hypostomal carina; mandibular socket closed by broad paramandibular process. Pronotum with complete transverse carina; parapsidal lines (= notauli) developed and pitted; omaulus present; episternal sulcus, acetabular carina and subomaulus absent; pitted hypersternaulus present, extending obliquely posterad and joining pitted scrobal sulcus. Foretarsus without a rake; hindtibia without a series of posterior spines. Stigma large, without a fovea, about three times as long as high, covering slightly less area than marginal cell; two submarginal cells; hindwing media diverging at cu-a (Fig.3).

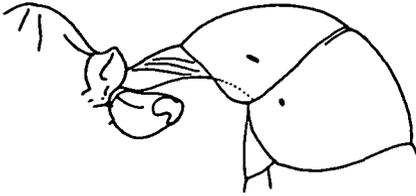


Fig.4: *Parastigmus argentinus* gen. sp. nov., female; hind coxa, petiole and base of abdomen, lateral view

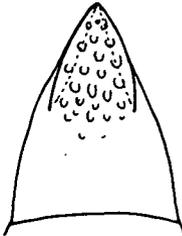


Fig.5: *Parastigmus argentinus* gen. sp. nov., female; tergite VI, dorsal view

Petiole twice as long as its diameter and almost equal to hindcoxa (Fig.4); pygidial plate well developed, oval and acute apically, almost a half length of tergite VI (Fig.5).

Type of genus: *Parastigmus argentinus* ANTROPOV.

Distribution: Monotypic genus known by a single female from central Argentina (Neuquén).

D i s c u s s i o n : The new genus belongs to the tribe Pemphredonini subtribe Stigmina. The most obvious recognition characters are the presence of a sharp tooth in the middle

of the inner margin of mandible, large delimited pygidial plate and also comparatively short petiole and hindwing media diverging at cu-a. It differs from *Paracrabro* by two apical teeth of mandibles (instead of five), by the absence of acetabular carina and a series of posterior spines of hindtibia, by comparatively narrow stigma and developed scrobal sulcus. *Parastigmus* differs from *Stigmus* by the absence of acetabular carina, subomaulus, and stigmal fovea and by comparatively narrow stigma. Finally, it differs from *Carinostigmus* by narrow orbital grooves and the absence of stigmal fovea.

Biology: Unknown.

***Parastigmus argentinus* ANTROPOV, sp. nov.**

Holotype female: Body length 4,6 mm, forewing length 3 mm.

Colour: Body mainly black; mandibulae apically, scape and pedicellus mainly, middle and hind tibiae and tarsi externally and wing veins brown; scape apically, palpi and labrum, all trochanters, fore tibiae and tarsi, middle and hind tibiae and tarsi internally and lateral margins of pygidial plate ferruginous; pronotal lobes, tegulae, mandibles basally and femora apically whitish.

Structure: Head in frontal view transverse, face broad, distance between antennal sockets more than twice as broad as their diameter and one and a half as the distance between antennal socket and nearest eye; clypeus short, with rounded median lobe and two acute lateral teeth; frons below with small sharp process and above with hardly developed median line; frons in front of median ocellus and vertex on the outside of lateral ocelli obviously pressed; head behind eyes narrowed; occipital carina complete, connected with hypostomal carina by short median ridge; scape ridgeless, its length equal to the distance between lateral teeth of the clypeus; flagellum thin, with segments at least twice as long as their maximal diameter; pronotal collar with complete transverse ridge forming acute lateral angles; scutum and scutellum convex, the latter in its base with transverse furrow divided by short carenulae; postscutellum almost flat. Legs simple, slightly pubescent; fore femora swollen, considerably thicker than middle and hind ones. Petiole comparatively short, twice as long as wide, coarsely coriaceous dorsally and with a few oblique ridges laterally; pygidial plate flat, distinctly outlined laterally and apically.

Sculpture: Head and thorax with similar sculpture; clypeus, scapal basins, occipital-hypostomal interspaces and mesopleurae shining, with very sparse and minute punctures, which mostly visible on mesopleurae ventrally; frons dorsally, vertex, temporis dorsally and scutum with larger and irregular punctures (interspaces between punctures larger than their diameter); pronotum laterally longitudinally ridged, frontal side of pronotal collar coriaceous; propodeum roundly convex, with irregular and moderate reticulate sculpture above and with oblique striae laterally, without delimited dorsal area and lateral carinae; bases of tergites I-VI transversely microstriated; apical parts of tergites I-V polished, regularly and densely punctated; pygidial plate with more dense punctures; abdominal sternites transversely microstriated, without punctation.

Male unknown.

Holotype female: R. Argentina, Neuqu n. Coll n Cur , 19.I.1980 (Willink, Fidalgo, Dominguez, Claps). Type deposited in the collection of Instituto Miguel Lillo, Tucuman, Argentina.

Condition: The type specimen glued on the paper plate by its right side. It is not complete and the following fragments are absent: 7-12 segments of the right antenna which is glued on the same plate separately; 2-5

left fore and right middle tarsomers, 3-5 right fore tarsomers, left middle leg distad of trochanter and left hind leg distad of coxa.

Zusammenfassung

Parastigmus argentinus, nov. gen., nov. spec. ist aus Argentinien beschrieben worden. Die neue Gattung gehört zur Untertribus Stigmina und unterscheidet sich von den bekannten Gattungen durch den vergleichbar kurzen Petiolus, die breit begrenzte Pygidialplatte, die von der cu-a sich abspaltende Media des Hinterflügels und auch durch das Vorhandensein eines spitzen Zahns in der Mitte des inneren Randes der Mandibel, der nicht typisch für die Unterfamilie Pemphredoninae ist.

Literature

- BOHART, R.M., A.S. MENKE, 1976: Sphecoid wasps of the world, a generic revision. - Berkeley, Los Angeles, London. Univ. Calif. Press: 1-695.
- BUDRYS, E.R., 1987: Digger wasps of the genera *Stigmus* PANZER and *Carinostigmus* TSUNEKI (Hymenoptera, Sphecidae) of the Far East of the USSR. - New data on the systematics of insects of the Far East. - Vladivostok: 49-56.
- KROMBEIN, K.V., 1973: Notes on North American *Stigmus* PANZER (Hymenoptera, Sphecoidea). - Proc. biol. Soc. Washington 86(18): 211-229.
- 1984: Biosystematic studies of Ceylonese wasps, XIV: a revision of *Carinostigmus* TSUNEKI (Hymenoptera: Sphecoidea: Pemphredonidae). - Smithsonian Contr. Zool. 396: 1-37.
- TSUNEKI, K., 1954: The genus *Stigmus* PANZER of Europe and Asia with descriptions of eight new species (Hymenoptera: Sphecidae). - Mem. Fac. Lib. Arts, Fukui Univ., Ser. II (Nat. Sci.) 3: 1-38.

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Zeitschrift/Journal: [Linzer biologische Beiträge](#)

Jahr/Year: 1992

Band/Volume: [0024_1](#)

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Artikel/Article: [Parastigmus, a New Genus of the Subtribe Stigmina from South America \(Hymenoptera: Sphecidae: Pemphredoninae\). 97-101](#)