



Entomofauna

ZEITSCHRIFT FÜR ENTOMOLOGIE

Band 18, Heft 28: 469-476 ISSN 0250-4413 Ansfelden, 30. November 1997

**A New Species of *Heterischnus* WESMAEL, 1859,
From the Western Palearctic Region
(Hymenoptera, Ichneumonidae, Ichneumoninae)**

Jesús SELFA & Erich DILLER

Abstract

Heterischnus novellae spec. nov. is described from the western Palearctic region. The distribution is south of Russia, Slovakia and Spain.

Zusammenfassung

Heterischnus novellae spec. nov. wird aus der westpaläarktischen Faunenregion beschrieben. Das disjunkte Verbreitungsmuster von *Heterischnus novellae* spec. nov. wird durch die bisher bekannten Fundorte aus dem südlichen Rußland, der Slowakei und Spanien nachgewiesen.

Resumen

Heterischnus novellae spec. nov. se describe de la Región Paleártica Oeste. Su distribución se restringe al sur de Rusia, Eslovaquia y España.

Introduction

Heterischnus WESMAEL, 1859 is a Holarctic and Ethiopian genus, belonging to the subtribe Heterischnina, included in the tribe Phaeogenini (DILLER 1981, 1995 and SELFA & DILLER 1994). The subtribe Heterischnina has in common with Stenodontina and Dicaelodontina one tooth of mandibles (DILLER 1981, DILLER & HORSTMANN 1994 and SELFA & DILLER 1994), but many others of the important Heterischnina characters are different from these two subtribes.

From the western Palearctic region are described about 20 species of the genus *Heterischnus* WESMAEL, 1859.

Heterischnus novellae SELFA et DILLER spec. nov.
(Figures 1 - 9)

Type material

HOLOTYPE: SW Caucasus, Krasnaja Poljana, 1-30.VI.1987, leg. A. TERESHKIN (coll. ZSM). - Paratypes: ♀, Slóvákia, Mužla, ČSSR, 2.8.1970, Dr. Z. PÁDR lgt (coll. ZSM); ♀, Univers. Laboral, Spain, Tarragona, 26-8-1961, DOCAVO & CHALVER leg. (coll. UV).

The following institutions contain material of the new species: Zoologische Staatssammlung München/Germany (ZSM); Laboratori d'Entomologia i Control de Plagues, Universitat de València, Burjassot, València/Spain (UV).

Description

Female. - Coloring: Head black; frontal orbits above of the antennal sclerites ivory-yellow spotted (fig. 1), lateral suture of clypeus variable slightly dark reddish-brown or black; mandible ivory-yellow except the black tooth; in the holotype the whole part of supraclypeal area and facial orbits below the antennal sclerites marked dark reddish-brown.

Flagellum bright-red, distally bright-brown, with a weak white stripe on segments 9- (11); scape and pedicel dorsally black and ventrally dark reddish-brown. Palpi ivory yellowish and basally bright-brown.

Thorax and propodeum red; black: a dorsal spot on collar, upper part of propleurum, part behind of the wing-base, epimeron, apical part of mesosternum, a small part on the base of propodeum (sometimes black on suture between thorax and propodeum), ventral part of propodeum; in paratype from Spain more black on prepectus, juxtacoxal area and the base of propodeum; collar, tegula, hind part of mesopleurum, notaulus, scutellum, postscutellum and base of wings ivory-yellow.

Legs yellowish or light-red; in holotype all femora coloured as thorax; hind tibia distally and last segment of hind tarsus bright-brown; remaining segments of hind tarsus distally bright-brown, except in holotype from Caucasus, front femur distally yellow. The hind trochanters are red and the bases of hind tibiae ivory-yellow.

Front stigma of wings yellowish.

Gaster mainly black, but in the holotype from Caucasus mainly red; in paratype from Slovakia red on distal half of petiolus, postpetiolus, central middle part of tergite 2, and two lateral subbasal spots on tergite 3, remaining parts black; in paratype from Spain dark reddish-brown to black. Holotype from Caucasus dark-red on apical half of tergite 4, black on basal part of petiolus, small central basal spot of tergite 2, and the whole tergites 5-7; in all specimens a small distal border of tergites 5-7 ivory-yellow.

Morphology: Head brightly punctate; roundly narrowed in frontal view (fig. 1); frons weakly convex and rugose on centre and near antennal socket, punctate reticulate in holotype from Caucasus; vertex and occiput punctate reticulate; temple weakly rounded (fig. 3); distance between lateral ocellus and compound eye 0.36 - 0.42 times as long as eye; temple and gena punctate (fig. 1); face punctate reticulate, 1.80 - 1.85 times as wide as long, supraclypeal area clearly differentiated; clypeus convex and weakly concave on distal middle part, polished and scarcely punctate (fig. 1), the apical margin retracted centrally; malar space coriaceous, 1.45 - 1.50 times as long as width of base of mandible; mandible strongly curved and punctulate, 1.38-1.62 times as long as basal width; genal carina meeting oral carina at some distance from base of mandible (fig. 3).

Antenna long; flagellum with 30 - 34 segments; first flagellar segment 3.15 - 3.30 times as long as wide (fig. 3).

Thorax distinctly polished, punctate and scarcely hairy; pronotum ventrally with carinulae; notaulus impressed to 0.3 of mesoscutum (fig. 9); scutellum strongly convex,

strigose and punctate; prescutellar carina reaching the end of scutellum; mesopleurum punctate reticulate on central part and with carinulae below subtegular ridge; sternaulus deeply impressed and reaching almost the centre of mesopleurum (fig. 9), propleurum flat (fig. 3).

Propodeum with distinct carinae and punctate reticulate (fig. 5); area basalis not clearly differentiated (fig. 5) but with a small central anterior tooth; superomedia, second pleural, third pleural, petiolaris and yuxtacoxal areas distinctly strigose; area superomedia pentagonal (fig. 5), 1.25 - 1.55 times as long as wide.

Hind coxa punctulate; hind femora 4.23 - 4.65 times as long as wide.

Gaster matt, coriaceous and densely punctate; petiolus broad and distally rugulose, postpetiolus broad (fig. 5) laterally rugose and centrally strigose (in holotype from Caucasus completely strigose), fields of postpetiolus not differentiated; second tergite 1.10 - 1.31 times as long as wide, rugulose between the gastrocoeli and punctate between the thyridiae, gastrocoeli deeply marked and strigose (fig. 5) (strigulose in holotype from Caucasus), thyridiae at a distance from base of tergite equal 0.28 - 0.36 times their width, distance between the thyridiae 0.28 - 0.32 times the width of a thyridium (fig. 5); tergites 2-4 centrally punctate reticulate; tergites 6-7 more polished and punctulate; visible part of ovipositor 0.5 times as long as hind basitarsus. Body length: 7 - 9 mm. Fore wing length: 4.5 - 5.5 mm.

Male: Unknown.

Derivatio nominis

This species is dedicated to Mrs. Fanni NOVELL, wife of Dr. J. SELFA.

Discussion

Heterischmus novellae spec. nov. is a species belonging to the species group with partly red thorax, propodeum and usually red hind trochanters and yellow base of hind tibiae. Included in this group are *Heterischmus truncator* (FABRICIUS, 1798) (syn.: *Ichneumon filicornis* GRAVENHORST, 1829; *Ischnus elegans* TISCHBEIN, 1878; *Ischnus montanus* BERTHOUMIEU, 1897; *Ischnus truncator* var. *nigritus* KISS, 1924 and *Heterischmus ridibundus* (COSTA, [1885]) (syn.: *Ischnus balearicus* KRIECHBAUMER, 1894; *Rhexidermus gallicator* AUBERT, 1960).

Heterischmus novellae SELFA et DILLER, spec. nov., is closely related to *Heterischmus ridibundus* (COSTA, [1884]) (figs. 2, 4, 6, 8). The two species can be distinguished by the characters listed in the following table.

Differential diagnosis

| | |
|--|---|
| <i>Heterischmus novellae</i> spec. nov.: | <i>Heterischmus ridibundus</i> (COSTA, [1884]): |
| Head more transversal in frontal and dorsal view (fig. 1). | Head more subquadratic (fig. 2). |
| Clypeus weakly punctate. | Clypeus punctate. |
| Propodeum flat (fig. 3). | Propodeum bulging (fig. 4). |
| Scutellum weakly punctate. | Scutellum punctate. |
| Propodeum transversal (fig. 5). | Propodeum long and slender (fig. 6). |
| Area superomedia short (fig. 5). | Area superomedia long and slender (fig. 6). |
| Postpetiolus broad (fig. 5). | Postpetiolus slender (fig. 6). |
| Petioli in lateral view long and slender (fig. 7). | Petioli shorter and sturdy (fig. 8). |
| Second gastral tergite broader (fig. 5). | Second gastral tergite slender (fig. 6). |

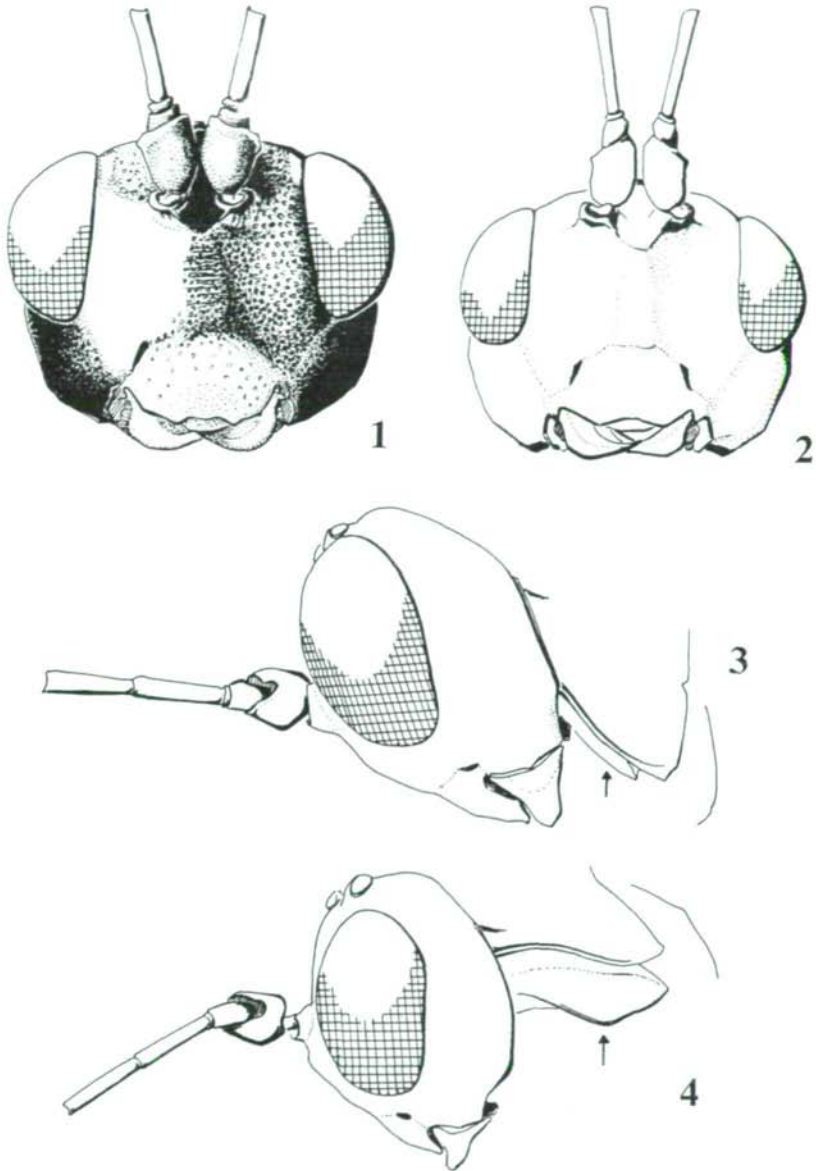


Fig. 1. *Heterischnus novellae* spec. nov. head frontal view.
Fig. 2. *Heterischnus ridibundus* (COSTA, [1884]) head frontal view.
Fig. 3. *Heterischnus novellae* spec. nov. head and propleurum lateral view.
Fig. 4. *Heterischnus ridibundus* (COSTA, [1884]) head and propleurum lateral view.

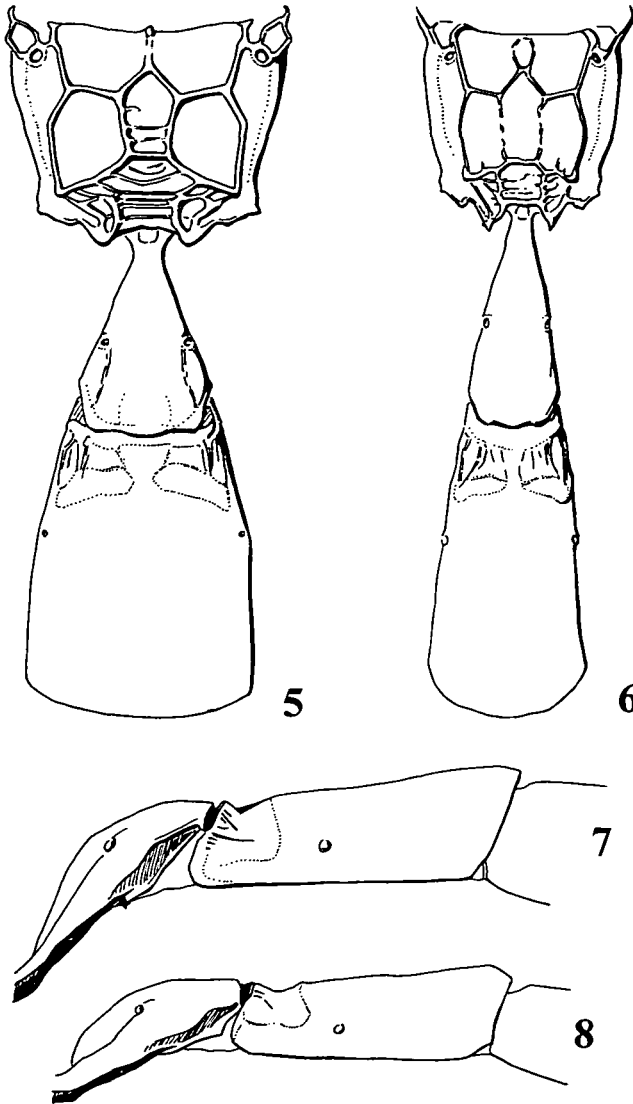


Fig. 5. *Heterischnus novellae* spec. nov. propodeum, petiolus and tergite 2 dorsal view.

Fig. 6. *Heterischnus ridibundus* (COSTA, [1884]) propodeum, petiolus and tergite 2 lateral view.

Fig. 7. *Heterischnus novellae* spec. nov. petiolus and tergite 2 lateral view.

Fig. 8. *Heterischnus ridibundus* (COSTA, [1884]) petiolus and tergite 2 lateral view.

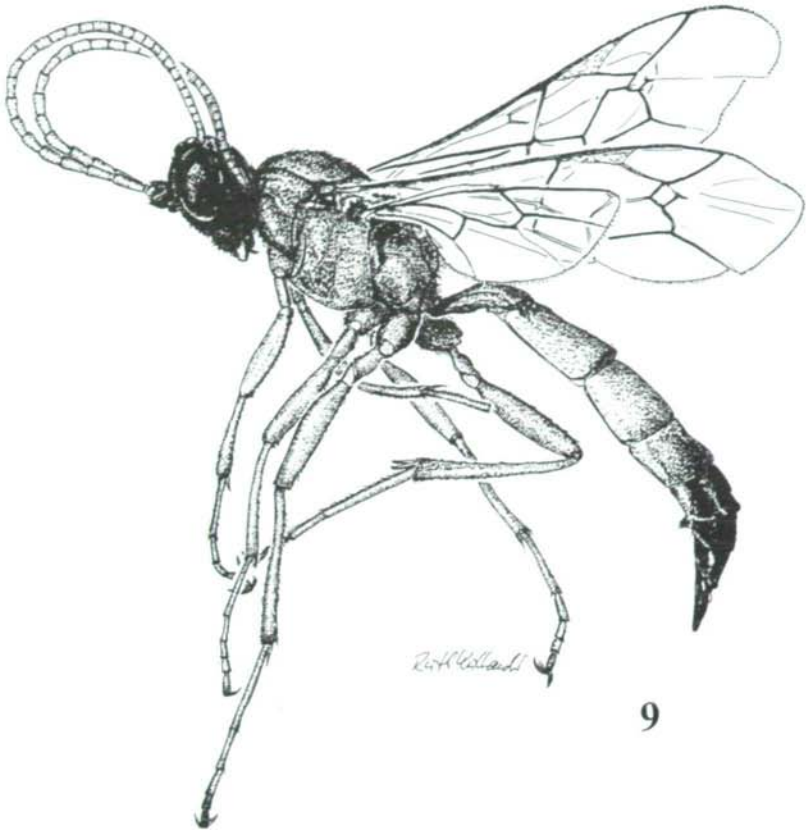


Fig. 9. *Heterischnus novellae* spec. nov. Holotypus.

Acknowledgements

The authors are greatly indebted to Z. PÁDR, A. TERESHKIN, I. DOCAVO and R. CHALVER who collected the material, and Mrs. Ruth KÜHBANDNER (ZSM) for drawing the holotype.

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Literaturbesprechung

STORK, N.E., ADIS, J. & DIDHAM, R.K. (eds) 1997: *Canopy Arthropods*. - Chapman & Hall, London. 567 S.

In gleichem Maße wie Wälder abgeholzt, fragmentiert und verändert werden, werden auch die mit ihnen assoziierten Organismen-Gemeinschaften betroffen. Berechnet man Aussterberaten, basierend auf dem Verlust von Wäldern, so kommt man auf 1% bis 10% pro Jahrzehnt. Die Erforschung von Flora und Fauna im Kronendach von Urwäldern ist noch nicht alt; ins Rampenlicht der Öffentlichkeit kam sie durch die faszinierenden Berichte aus den mittel- und südamerikanischen Tropenwäldern. Die Besonderheit ihrer Erforschung liegt in den speziellen Sammeltechniken und Methoden zur Erfassung ihrer Bewohner. Erst seit wenigen Jahren werden diese Techniken auch zur Erforschung der Kronenfauna der nontropischen Wälder erfolgreich eingesetzt. Dieses Buch faßt das aktuelle Wissen über die im Kronendach lebenden Arthropoden, ihre Erfassung und ihre Biologie zusammen. Teil 1 beinhaltet die Methoden, um Baum-Arthropoden zu untersuchen. Teil 2 widmet sich den Gemeinschaftsstrukturen von Käfergesellschaften; das geographische Spektrum erstreckt sich dabei von südamerikanischen, kanadischen über afrikanische und asiatische bis zu neukaledonischen Wäldern. Der 3. Teil ist Orthopteren, Dipteren, Formiciden, Milben und Collembolen gewidmet. Spezielle Beispiele aus der Biologie von Dungkäfern, Laufkäfern und Collembolen sowie bioakustisches "monitoring" und eine epiphytische Flechte als Lebensraum für Arthropoden sind in Teil 4 unter dem Titel "The Biology of Canopy Arthropods" zusammengefaßt. Im 5. und letzten Teil stehen Management und Naturschutz im Mittelpunkt.

Eine hervorragende Zusammenfassung für Spezialisten, allerdings etwas "mager" illustriert und daher nur mit Einschränkung als lehrbuchhafte Einstiegsliteratur verwendbar.

Roland GERSTMEIER

Druck, Eigentümer, Herausgeber, Verleger und für den Inhalt verantwortlich:
Maximilian SCHWARZ, Konsulent für Wissenschaft der O.Ö. Landesregierung,
Eibenweg 6, A-4052 Ansfelden

Redaktion: Erich DILLER, ZSM, Münchhausenstrasse 21, D-81247 München, Tel. (089) 8107-159

Fritz GUSENLEITNER, Lungitzerstrasse 51, A-4222 St. Georgen / Gusen

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Zeitschrift/Journal: [Entomofauna](#)

Jahr/Year: 1997

Band/Volume: [0018](#)

Autor(en)/Author(s): Selfa Jesus, Diller Erich H.

Artikel/Article: [A New Species of Heterischnus WESMAEL, 1859, from the Western Palearctic Region \(Hymenoptera, Ichneumonidae, Ichneumoninae\). 469-475](#)