

ZEITSCHRIFT FÜR ENTOMOLOGIE

Band 21, Heft 18: 229-236

ISSN 0250-4413

Ansfelden, 30. September 2000

Description of the males of

Ulesta nigroscutella TERESHKIN, 1993

and Rhadinodonta rufidens (WESMAEL, 1844)

and a new name for the genus Heinrichia TERESHKIN, 1996

(Hymenoptera, Ichneumonidae, Ichneumoninae Stenopneusticae)

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#### **Abstract**

In this paper the males of the European species *Ulesta nigroscutella* TERESHKIN, 1993 and *Rhadinodonta rufidens* (WESMAEL, 1844) are described. The preoccupied genus *Heinrichia* TERESHKIN, 1996 is given a new name: *Heinrichiella* nom. nov., and new distributional data are added for *Clypeodromus thyridialis* TERESHKIN, 1992.

#### Zusammenfassung

In dieser Arbeit werden die Männchen der europäischen Arten *Ulesta nigroscutella* TERESHKIN, 1993 und *Rhadinodonta rufidens* (WESMAEL, 1844) beschrieben. Die präokkupierte Gattung *Heinrichia* TERESHKIN, 1996 bekommt einen neuen Namen: *Heinrichiella* nom. nov., und neue Verbreitungsdaten für *Clypeodromus thyridialis* TERESHKIN, 1992 werden angefügt.

## Introduction

Both of the below described males were collected in the same biotope, raised bog, and at the same place. Malaise traps have been under operation since 1986 until now with the aim to estimate long term dynamics of ichneumon flies (TERESHKIN 1996). Females of

Rhadinodonta rufidens (WESMAEL, 1844) were collected in 1993 and 1997, a male only in 1997. A male of *Ulesta nigroscutella* TERESHKIN, 1993 was found in 1998, only in a single sample during a 13-years period of uninterrupted observations. This fact seems to indicate an extreme rarity.

# Ulesta nigroscutella TERESHKIN, 1993

Male: Flagellum black, front surface of scape white, head black. White: Face entirely, frontal orbits, spots on vertex and outer orbits seen from below, mandibles with the exception of darkened apex. Thorax entirely black. Middle and hind legs dark rufous with the exception of mainly black tibiae of middle and hind legs seen from above. Front coxae with white spot from below. Abdomen black, tergites 2-3 dark red to black.

Flagellum: Bristle-shaped, with 38 segments, ribbed from segment 6 on; segment 10 square from side; tyloides longish-oval on segments 7-16(17), the most long and reaching the borders of segments.

Head: Temples considerably widened behind eyes seen from above (fig.2), temples in the middle 1,8 times wider than cross diameter of an eye. Head strongly narrowed downwards seen from front. Clypeus slightly separated from face, rounded in front (fig.1); front border thickened; labrum projected out of clypeus. Mandibles almost sickly-shaped; apical tooth long and sharp, subapical one short, moved far to the inner side of mandible (fig.3). Face roughly punctured, diameter of punctures less than intervals between them; vertex and temples with poor developed microsculpture.

Thorax: Mesoscutum densely punctured, mat in front, lateral fields shining, notauli practically absent. Scutellum considerably raised above postscutellum, laterally carinated to the apex of horizontal part. Mesopleura very densely punctured, diameter of punctures less than intervals between them. Areolation of propodeum distinct and complete with the exception of supracoxal carina (juxtacoxal area not separated). Areola long, hexagonal, narrowed in front, 1,25 times longer than the breadth on the level of costulae.

Wings: Stigma dark; areolet pentagonal. Nervellus of hind wing strongly reclival, broken in hind fourth.

Legs: Slender; hind coxae ventrally densely superficially punctured.

Abdomen: Slender; middle field of postpetiolus clearly defined, high elevated, wrinkled. Second tergite square. Gastrocoeli deep. Thyridia distinct, breadth of thyridia three times wider than the interval between them; interval with 6 keels. Tergites 2-3(4) densely wrinkly punctured, tergites 5-7 densely punctured without wrinklening, shining, tergites 6-7 without microsculpture. Sternites 2-5 with longitudinal fold.

Length: Body 11,7 mm; forewing 8,3 mm.

Material examined: Male, Byelorussia, Beresina National Reserve, Postrejie, raised bog (*Pinetum sphagnosum*), Malaise trap, 4.6.-9.7.1998.

The differences between the males of *Ulesta perspicua* (WESMAEL, 1857) and *U. nigroscutella* are as follows.

U. perspicua:

- 1. Temples strongly widened behind eyes (fig.7).
- 2. Lateral borders of clypeus elevated, front margin with excavation (fig.6).
- 3. Mandibles normal, lower tooth of mandible developed and in the same plane as upper one (fig.8).
- 4. Face entirely black, white only spots on inner orbits opposite antenal fossae.
- 5. Notauli present, poorly developed.
- 6. Costulae absent or scarcely expressed.
- 7. Supracoxal carina clearly defined.
- 8. Stigma dark.
- 9. Middle field of postpetiolus with big deep punctures, shiny.
- 10. Body dense and rough punctured.

U. nigroscutella:

- 1. Temples less widened behind eyes (fig. 2).
- 2. Lateral borders of clypeus not elevated, front margin without excavation (fig.1).
- 3. Mandibles more narrow, lower tooth considerably shorter than upper one, moved far to inner side of mandible (fig.3).
- 4. Face entirely, frontal orbits, spots on vertex and outer orbits from below white.
- 5. Notauli absent.
- 6. Costulae clearly defined, behind middle of areola.
- 7. Supracoxal carina absent.
- 8. Stigma light.
- 9. Middle field of postpetiolus wrinkled.
- 10. Body dense but finely punctured.

#### Rhadinodonta rufidens (WESMAEL, 1844)

Male: Head black; face, clypeus, spots on scape from below white. Thorax entirely black, abdomen black, tergites 2-3 red.

Flagellum: Bristle-shaped, with 28 segments; segment 1 approximately 1,4 times as long as wide at the apex seen from side, segment 6 square from side; tyloides long and narrow on segments 6-13 (fig.9).

Head: Slightly narrowed behind eyes. Temples 1,1 times wider than cross diameter of an eye. Middle field of face slightly convex above lateral fields. Clypeus broad and flat, 1,8 times wider than long, lateral borders thickened, front margin with poor developed tooth at the middle. Mandibles sickly-shaped without traces of lower tooth. Occipital carina joins with carina oralis at considerable distance from the base of mandible.

Thorax: Mesonotum and mesopleurae densely punctured, interspace between them narrower than the diameter of a puncture, shining; notauli slightly developed only in front third. Scutellum considerably raised above postscutellum, laterally not carinated. Areolation of propodeum distinct and complete; areola hexagonal, transverse, 1,3 times wider than length (fig.10); basal area without protuberance.

Wings: Stigma light, in the middle; areolet pentagonal. Nervellus of hind wing reclival, broken in hind third.

Legs: Slender; hind coxae ventrally densely punctured. Coxae and trochanteres 1 of all legs black; trochanteres 2 rufous; femora, tibiae and tarsi of front and middle legs rufous; hind femora black with the exception of rufous base; hind tibiae rufous with black apical third; hind tarsi darkened.

Abdomen: Median field of postpetiolus clearly defined, high elevated above lateral fields, transverse wrinkled; lateral field wrinkled. Gastrocoeli and thyridia distinct, inter-

val between them wider than breadth of thyridia. Second tergite medially roughly wrinkled, third tergite wrinkly punctured, shiny between punctures; tergites 4-5 with shallow punctures, shining.

Length: Body 8,8 mm; forewing 5,6 mm

Material examined: Male, Byelorussia, Beresina National Reserve, Postrejie, rased bog (Pinetum sphagnosum), Malaise trap, 7.7.-11.8.1997.

The differences between the males of Rhadinodonta flaviger (WESMAEL, 1844) and R. rufidens are as follows.

## R. flaviger:

- 1. Tyloides very narrow, light, on segments 9-13(14).
- 2. Mandibles sickly-shaped with a little dent at the place of lower tooth.
- 3. Postgenae reach practically to the base of 3. Postgenae far removed from the base of mandibles.
- 4. Scutellum with two white spots at the 4. Scutellum black.
- 5. Areola half-moon-shaped (fig. 5).
- 6. Sigma black.
- 7. Mesonotum mat, with highly developed microsculpture.
- 8. Median field of postpetiolus slightly defined with sparse punctures, lateral fields punctured.

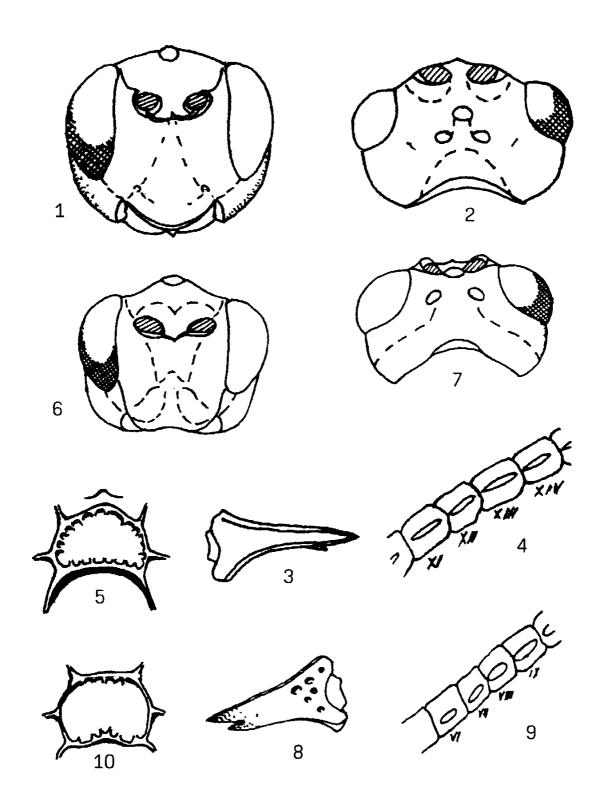
## R. rufidens:

- 1. Tyloidés more wide, black, on segments 6-13.
- 2. Mandibles sickly-shaped, without traces of lower tooth.
- mandibles.
- 5. Areola hexagonal, transverse (fig. 10).
- 6. Stigma light.
- 7. Mesonotum shiny between punctures.
- 8. Median field of postpetiolus clearly limited, high elevated above lateral fields, median and lateral fields roughly wrinkled.

#### Nomenclatural and zoogeographical notes.

I was kindly informed by Mrs Joan Thorne, Zoological Record, that the name of the genus Heinrichia TERESHKIN, 1996 is preoccupied. Here the genus is given the new name Heinrichiella: Heinrichia TERESHKIN, 1996 = Heinrichiella nom. nov.

In 1996 the genus and species Clypeodromus thyridialis TERESHKIN were described. There are new data for the distribution of these taxa: Male, Russia, Altai, lake Telezkoje, Chulishman river, 6.8.89; male, Russia, Primorskij Kray, Ussurijsk 4 km NO, oak forest (Quercus mongolica in a upper layer and Lespedera bicolor in shrub formation), 13.8.92. Now the monotipical tribe Clypeodromini has a transpalearctic distribution: Byelorussia-South Ural-Altai-Far East.



Figs 1-3 Ulesta nigroscutella male: 1-2 head in frontal and dorsal view, 3 mandible.

Figs 4-5 Rhadinodonta flaviger male: 4 tyloides, 5 areola.

Figs 6-8 Ulesta perspicua male: 6-7 head in frontal and dorsal view, 8 mandible.

Figs 9-10 Rhadinodonta rufidens male: 9 tyloides, 10 areola.

#### Literature

- TERESHKIN, A. 1992. A new tribe, a new genus and a new species of the Ichneumoninae Stenopneusticae from Europe and Siberia (Hymenoptera, Ichneumonidae). Entomofauna 13,(10): 193-204.
- TERESHKIN, A. 1993. New and little known species of Ichneumoninae Stenopneusticae of the genera *Ulesta* CAMERON, 1903, *Notoplatylabus* HEINRICH, 1934, and *Neischnus* HEINRICH, 1952 (Hymenoptera, Ichneumonidae). Entomofauna 14 (29): 477-488.
- TERESHKIN, A. 1996. A new Ichneumoninae Stenopneusticae genus, *Heinrichia*, from the Far East (Hymenoptera, Ichneumonidae). Entomofauna. 17 (5): 89-94.
- TERESHKIN, A. 1996. Ichneumoninae Stenopneusticae of raised bog, with special reference to long term dynamics (Hymenoptera, Ichneumonidae). Linzer biol. Beitr. 28 (1): 367-385.

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