

***Rhaebus ammoni* n. sp. – The first representative  
of the Central-Asian Genus *Rhaebus* in Israel**  
(Coleoptera: Bruchidae)

Igor LOPATIN & Vladimir CHIKATUNOV

Abstract: *Rhaebus ammoni* n. sp. from Israel is described. This is the first record of the genus *Rhaebus* from the Middle East.

Key Words: Coleoptera, Bruchidae, *Rhaebus ammoni*, new species, taxonomy, zoogeography, *Nitraria*, Israel.

### Introduction

The genus *Rhaebus* Fischer, 1824 belongs to the family Bruchidae, which is considered newly by some authors as a subfamily of the Chrysomelidae. According to the new data (REID 1995), the genus is considered to be close to the subfamily Sagrinae and is included in the family Chrysomelidae sensu lato. Therefore, the genus *Rhaebus* must be separated into a special tribe Rhaebini.

The genus included up till now 4 species, distributed from the South-east of European part of Russia (Volgograd and Orenburg districts), through Kazakhstan, lowlands of Kyrgyzstan, southern Siberia to Mongolia and western and Central China. Some representatives of the genus were found recently in northern parts of Iran and Turkey, which considered to be south-western part of its areal. Therefore, the discovering of the new species in Israel was rather unexpected.

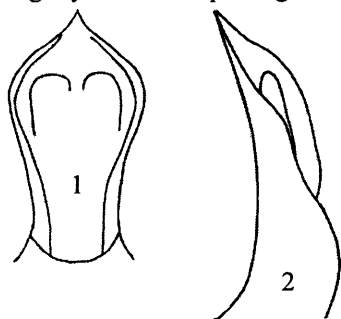
The host-plant of *Rhaebus* species, both in imago and in immature stages, is *Nitraria* (Fam. Nitrariaceae). Their biology was studied by TER-MINASSIAN in western Kazakhstan (TER-MINASSIAN 1957). Adult beetles are active from the period of bud-formation till the period of fruiting of

*Nitraria*. They predate on buds, flowers and ovaries, causing death of ovaries. Eggs are laid on the inner surface of buds, flowers and fruits. Larvae develop in fruits and hibernate in fallen fruits. Before pupation they make a hole in the fruit integument. Pupation takes place in spring. Duration of pupae stage is 15-20 days.

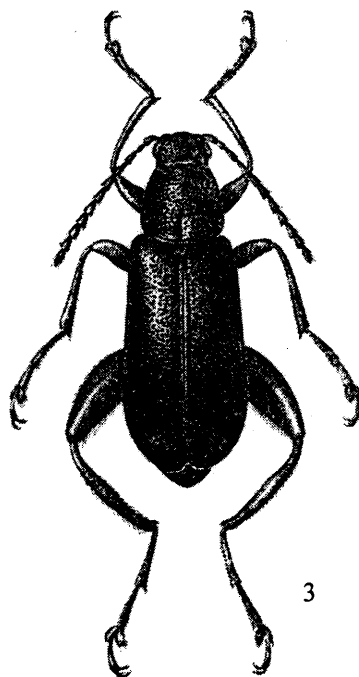
Aggregations of *Rhaebus* occur in many parts of their areal, females are prevalent everywhere. The phenology of the new species not studied in Israel. All specimens were collected from the beginning of June until the middle of July.

***Rhaebus ammoni* Lopatin & Chikatunov n. sp.**

Description: ♂. Length 4 mm. Integument golden-green, shiny, 8<sup>th</sup>-11<sup>th</sup> antennal segments black, with greenish metallic hue. Frons covered with deep punctures, more concentrated on its basal part, especially near eyes and on vertex. Smooth, slightly convex strip along the frons.



Figs 1 - 3: *Rhaebus ammoni* n. sp., 1) aedeagus, dorsal view, 2) aedeagus, lateral view, 3) habitus.



Antenna long, its distal segment overpasses the humeral callus of the elitron.

Pronotum square-shaped, its anterior angles slightly and posterior angles strongly rounded. Pronotal disk covered with punctures of the same size as on frons. Punctures more dense than on frons, but sparse along the middle of the disk. Narrow, short longitudinal sulcus along the posterior 1/4 of pronotal disk. Scutellum very small, densely punctured.

Elytra 2.7x as long as pronotum, and in 1.9x as long as wide (at humeri), essentially extended backwards, widest after its middle. Puncturation dense and deep, similar to pronotal, but arranged in close drawn stria, interstria shallowly punctured. Elytral pubescens dense, short and appressed.

Metafemur thickened, but not semi-spherical, its outer edge convex, and inner edge almost strait. Pro- and mesofemur similarly shaped. Metatibia bent proximally, densely punctured and shortly pubescent, its inner edge straight. Abdominal sternites very shiny, densely covered with small punctures. Aedeagus (fig. 1, 2) widened and rounded distally, apex sharpened.

Diagnosis: *Rh. ammoni* is close to *Rh. mannerheimi* Motschulsky from which it is well distinguished by the non-semi-spherical form of metafemur and its metallic (not black) coloration. It differs from *Rh. solskyi* Kraatz by the lack of denticles on the inner edge of metafemur and shape of aedeagus.

Type material: Holotype, ♂: Israel: Yudean desert, Qalya, 7.VI.1996, A. FREIDBERG. Paratypes: the same collection data as holotype (2 ♂♂, 3 ♀♀); Israel: Yotvata, 13.VII.1995, A. FREIDBERG (1 ♂, 1 ♀). Type specimen is deposited at the entomological collection, Zoological Museum, Tel-Aviv University (TAU). Few specimens are deposited in the private collection of the first author.

Distribution: Israel: Dead Sea area and Arava Valley.

Etymology: The new species is named after the well-known Israeli entomologist, Dr. Amnon FREIDBERG, who was the first to collect it in Israel.

**Acknowledgments**

We thank Dr. V. KRAVCHENKO, Dr. O. MANNHEIM and Mr. A. L. L. FRIEDMAN for the translation and the correction of the text.

## Literature

- FISCHER DE WALDHEIM, G. (1824): *Entomographia Imperii Rossici*. II. - Mosquae pp. 1-264.
- REID, C. A. M. (1995): A cladistic analysis of subfamilial relationships in the Chrysomelidae sensu lato (Chrysomeloidea). - In: J. PAKALUK & S. A. ŚLIPIŃSKI (eds.): *Biology, phylogeny and classification of Coleoptera*. - Papers Celebrating the 80th Birthday of Roy A. CROWSON. - Warszawa Vol. 2:559-631.
- TER-MINASSIAN, M. E. (1957): Bruchidae. - *Fauna of USSR* 24(1):53-60.

### Authors:

Prof. Igor K. LOPATIN, Department of Zoology, Belorussian St. University, Minsk, Belarus'.

E-mail: lopatin@biobel.bas-net.by or zoo@bdpu.lingvo.minsk.by

Prof. Vladimir I. CHIKATUNOV, Department of Zoology, G. S. Wise Faculty of Life Sciences, Tel-Aviv University, Tel Aviv, Israel.

E-mail: laibale@post.tau.ac.il

---

## Kollegenkontakte

---

### Aufruf zur Mitarbeit

Im Rahmen der Erarbeitung eines aktuellen Verbreitungsbildes der Meloidae in der BRD und den angrenzenden Ländern, bitte ich alle Kollegen und Kolleginnen mir ihre älteren und neueren Funde zu melden oder ggf. Material vorübergehend zur Bearbeitung zur Verfügung zu stellen.

Da Nachweise der verschiedenen Imagines oft zufällig sind, eignen sich hierzu auch die Primärlarven der Meloiden, die sog. Triungulinen, die im Frühling auf Blüten oder phoretisch auf verschiedenen Hymenoptera-Gruppen angetroffen werden können. Sowohl für die Übersendung von Imagines als auch von Primärlarven wäre ich dankbar.

Kontaktadresse:

Johannes LÜCKMANN, Wietsche 7, D-42799 Leichlingen.

Tel.: 02175/88 05 29; E-Mail: jlueckmann@t-online.de