

Designations of neotypes in the genus *Anthrenus* Geoffroy, 1762 for three species described from Iraq (Coleoptera: Dermestidae: Megatominae: Anthrenini)

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Abstract. Neotypes are designated for the following three species described from Iraq: *Anthrenus aradensis* Mawlood & Abdul Rassoul, 2003, *Anthrenus fabrici* Mawlood & Abdul Rassoul, 2003 and *Anthrenus unicolor* Mawlood & Abdul Rassoul, 2003. The following synonymies are proposed: *Anthrenus (Anthrenus) simonis* Reitter, 1881 (= *Anthrenus fabrici* Mawlood & Abdul Rassoul, 2003 syn. nov.); *Anthrenus (Nathrenus) molitor* Aubé, 1850 (= *Anthrenus unicolor* Mawlood & Abdul Rassoul, 2003 syn. nov.).

INTRODUCTION

Mawlood & Abdul Rassoul (2003) described three new species from Iraq belonging to the genus *Anthrenus* Geoffroy, 1762. According to the original article the type material is deposited in Iraq Natural History Museum, Baghdad. According to personal communication with Dr. Razzaq Shalan Augul from Iraq Natural History Research Centre and Museum of Baghdad University all the type material was destroyed during the Iraq war in 2003. In the present article three neotypes are thus designated for the taxa described by Mawlood & Abdul Rassoul (2003).

MATERIAL AND METHODS

In the present article the author used original images by Mawlood & Abdul Rassoul (2003).

The neotypes were designated in accordance with Articles 75.3 and 75.4 of the ICZN 1999.

The following abbreviation refers to the collection where the material examined is deposited:

JHAC Jiří Háva, Private Entomological Laboratory & Collection, Únětice u Prahy, Prague-west, Czech Republic.

The neotype specimens are provided with label: "NEOTYPE *species name* Mawlood & Abdul Rassoul, 2003, Jiří Háva design. 2014".

TAXONOMY

Anthrenus (Anthrenops) aradensis Mawlood & Abdul Rassoul, 2003

Anthrenus aradensis Mawlood & Abdul Rassoul, 2003: 25.

Type material. Neotype (♂): „Iraq, Diyala, nr. Bawa Nur, 10.vi.1980“, (JHAC).

Original description. *Anthrenus aradensis* sp. nov.

Type material destroyed: 1 ♂ (holotype), 1 ♀ (allotype), 10 ♂, 4 ♀ (paratypes), Dohok, Iraq. Coll, 4.7.1983 (Leg. N. A. Mawlood).

„Adult: Length 1.6-2.4 mm; Breadth 0.9-1.5 mm; Head with milky scales, compound eyes with inner margin not emarginated (fig. 1a). Antenna with nine segments, antennal club consists of three segments, second club segment in both male and female (fig. 1b,e) distinctly longer than the first one. Labrum (fig. 1d) with straightened posterior margin. Pronotum with oval whitish subtriangular and oval scales (fig. 1e), antennal cavity (fig. 1f) oval shaped, elytra narrow with milky scales, fore tibia (fig. 1g) with 12-13 spines. Abdominal sternites without femoral lines (fig. 1h), parameres longer than aedeagus, aedeagal apodemes short and not extending out of the phallobase, phallobase subtriangular shaped, bridge joining parameres strongly incurved (fig. 1i).

Anthrenus aradensis sp. nov. is closely related to *A. flavipes* Lecont but differs from it by the following characters: compound eyes with inner margin straight (not emarginated); parameres distinctly longer than the aedeagus.

Host: From the flowers of *Euphorbia* sp. (Euphorbiae).“

Remarks. The species belongs to the subgenus *Anthrenops* according to antennae composed with 9 antennomeres is very similar to *A. (Anthrenops) nahiricus* Zhantiev, 1976 (Armenia, Caucasus) and *A. (A.) eichleri* Kadej & Háva, 2006 (Turkey, Israel), but differs from them by the structure of antennae, male genitalia and number of (12-13) spines on fore tibiae.

Distribution. A species known from Iraq (Háva 2007).

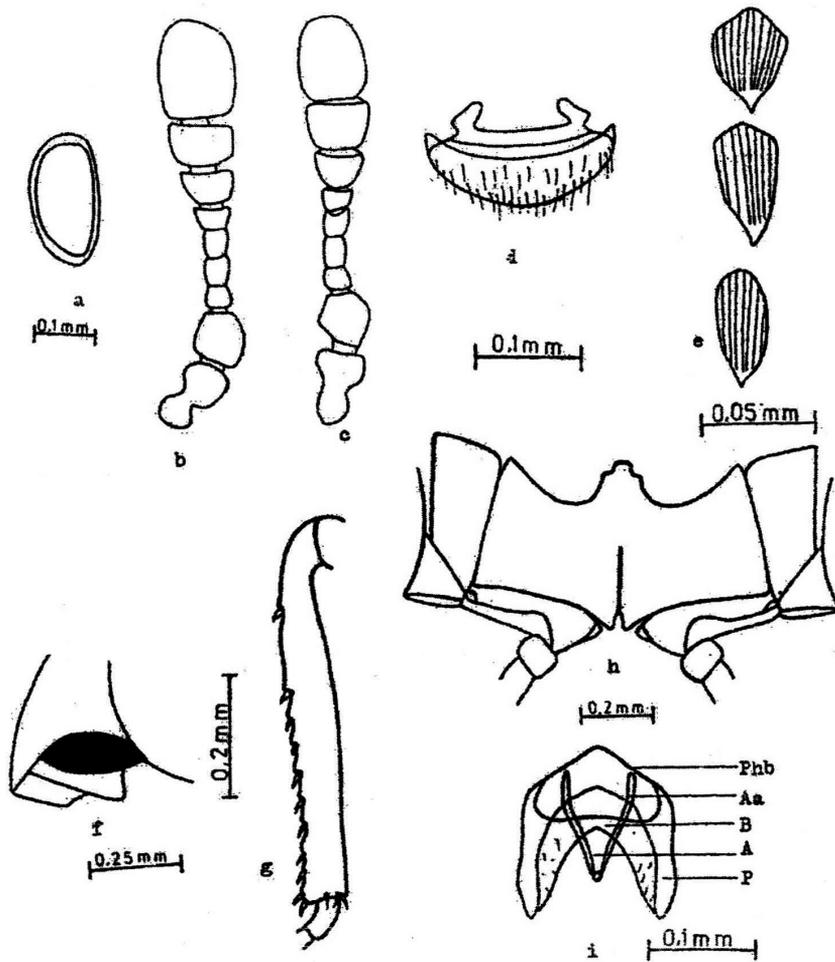


Fig. 1 *Anthrenus aradensis* sp. nov.

- a. Compound eye b. Male antenna c. Female antenna
d. Labrum e. Scales f. Antennal cavity g. Fore tibia
h. First abdominal sternite i. Male genitalia
A=Aedeagus , Aa=Aedeagal apodeme , B=Bridge , P=Paramer
Ph=Phallobase

Fig. 1. Original figures of *Anthrenus aradensis* Mawlood & Abdul Rassoul, 2003.

***Anthrenus (Anthrenus) simonis* Reitter, 1881
= *Anthrenus fabrici* Mawlood & Abdul Rassoul, 2003**

Anthrenus fabrici Mawlood & Abdul Rassoul, 2003: 25 **syn. nov.**

Type material. Neotype (♂): Iraq, Baghdad, v.1972, Al Zahri lgt., (JHAC).

Other material examined: Iraq, Baghdad, v.1972, Al Zahri lgt., 1 spec., (JHAC).

Original description. *Anthrenus fabrici* sp. nov.

Type material destroyed: 1 ♂ (holotype), 1 ♀ (allotype), 4 ♂ (paratypes), Baghdad, Iraq. Coll. 14.8.1984. (leg. N. M. Mawlood).

„Adult: Length 1.9-2.3 mm, breadth 1.4-1.7 mm, Head with whitish scales and with small spot of brown scales on its apical part, compound eyes with inner margin emarginated (fig. 2a), Antenna with 11 segments, antennal club consists of three segments, second club segment in both male and female slightly longer than first one (fig. 2b,c), Labrum (fig. 2d) with posterior margin slightly emarginated (fig. 2d). Pronotum with oval whitish scales and with both male and female slightly longer than first one (fig. 2b,c) Pronotum with oval whitish scales and with longitudinal spots of brown scales, (fig. 2e), antennal cavity circular shape (fig. 2f), fore tibia (fig. 2g) with 4-5 spines. Abdominal sternites with femoral lines (fig. 2h), parameres broad and slightly longer than aedeagus, aedeagal apodemes long and extending out of phallobase, phallobase circular shaped, bridge connecting parameres moderately incurved (fig. 2i).

Anthrenus fabrici sp. nov. is closely related to *A. flavipes* Lecont but differs from it by the following characters: Pronotum with whitish scales and with longitudinal spots of brown scales, parameres broad and slightly longer than aedeagus.

Host: *Ammi majus* L. (Umbelliferae).“

Remarks. The species belongs to the subgenus *Anthrenus* (s. str.), according to antennae composed with 11-antennomeres and emarginate eyes; all the morphological characters are identical with species *Anthrenus (Anthrenus) simonis* Reitter, 1881 and *A. fabrici* is thus a junior synonym of *A. simonis*.

Distribution. A species known from Egypt, Iran, Israel, Jordania, Syria, Turkey (Háva 2007), new to Iraq.

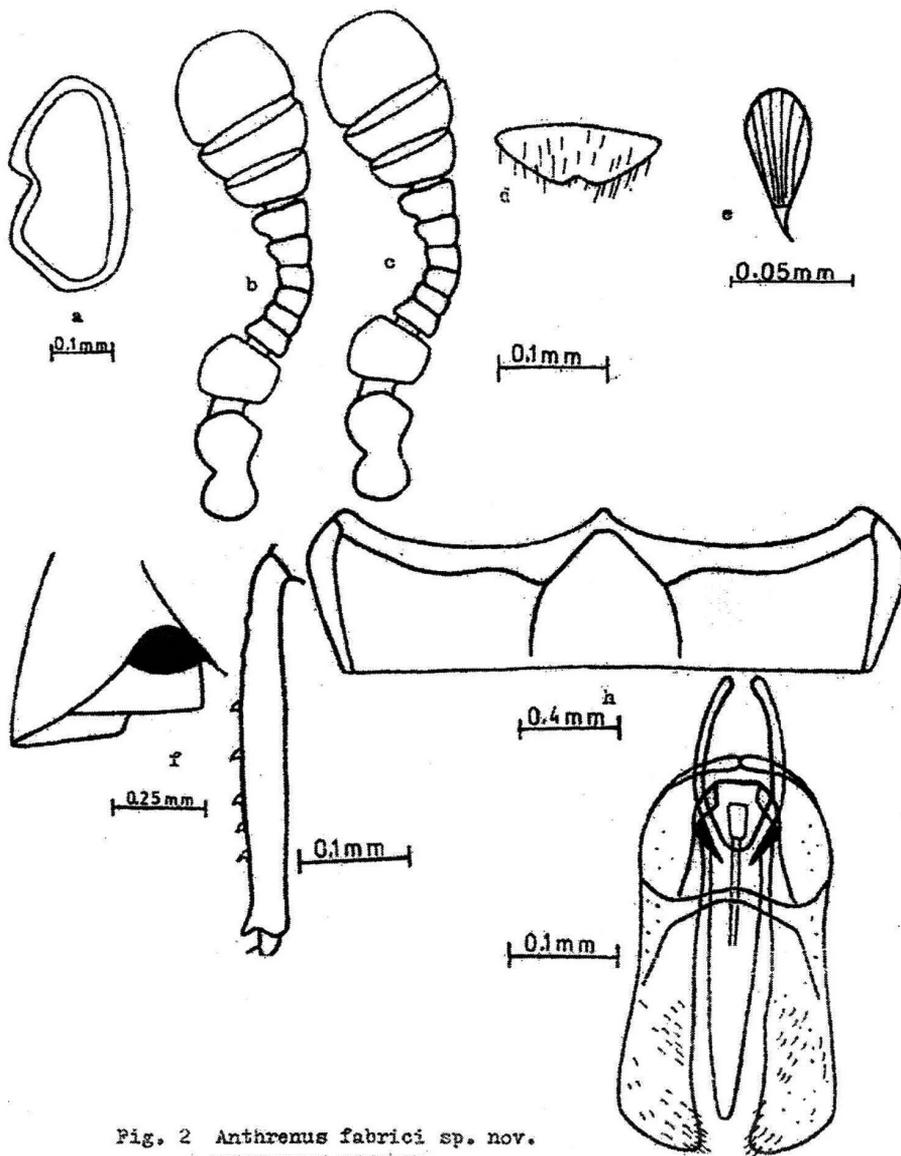


Fig. 2 *Anthrenus fabrici* sp. nov.

- a. Compound eye b. Male antenna c. Female antenna
- d. Labrum e. Scale f. Antennal cavity g. Pore tibia
- h. First abdominal sternite i. Male genitalia

Fig. 2. Original figures of *Anthrenus fabrici* Mawlood & Abdul Rassoul, 2003.

***Anthrenus (Nathrenus) molitor* Aubé, 1850**
= *Anthrenus unicolor* Mawlood & Abdul Rassoul, 2003

Anthrenus unicolor Mawlood & Abdul Rassoul, 2003: 26 **syn. nov.**

Type material. Neotype (♂): Iraq, Baghdad, v.1972, Al Zahri lgt., (JHAC).

Other material examined: Iraq, Baghdad, v.1972, Al Zahri lgt., 2 spec., (JHAC).

Original description. *Anthrenus unicolor* sp. nov.

Type destroyed material: 1 ♂ (holotype), 1 ♀ (allotype), 10 ♂ (paratypes), Dohok, Iraq. Coll, 4.7.1983 (Leg. N. A. Mawlood).

„Adult: length 2.9-2.2 mm, breadth 1.6-2.0 mm, Head with milky scales, compound eyes with inner margin straight (not emarginated) (fig. 3a), antenna with 11 segments, antennal club consist of three segments, second antennal club in male about 1.5 times as long as first one (fig. 3b), second antennal club in female slightly longer than the first one (fig. 3c), labrum (fig. 3d) with straight posterior margin. Pronotum with subtriangular milky scales (fig. 3e), antennal cavity oval shaped (fig. 3f), elytra moderately wide covered with milky scales, fore tibia with 8-9 spines (fig. 3g), abdominal sternites with femoral lines, parameres very narrow, and slightly longer than aedeagus, aedeagal apodemes long and extending out of phallobase, phallobase nearly circular shaped, bridge connecting parameres feebly incurved (Fig. 3h).

Anthrenus unicolor sp. nov. is closely related to *A. flavipes* Lecont but differs from it by the following characters: Dorsal surface of body covered with milky subtriangular scales, compound eyes with inner margin straight (not emarginated), parameres very narrow, bridge connecting parameres feebly incurved.

Host: *Euphorbia* sp. (Euphorbiae).“

Remarks. According to antennae composed with 11 antennomeres and not emarginated eyes The species belongs to the subgenus *Nathrenus*, all morphological characters are identical with the species *Anthrenus (Nathrenus) molitor* Aubé, 1850 and *A. unicolor* is thus a junior synonym of *A. molitor*.

Distribution. Mediterranean species (Háva 2007), new to Iraq.

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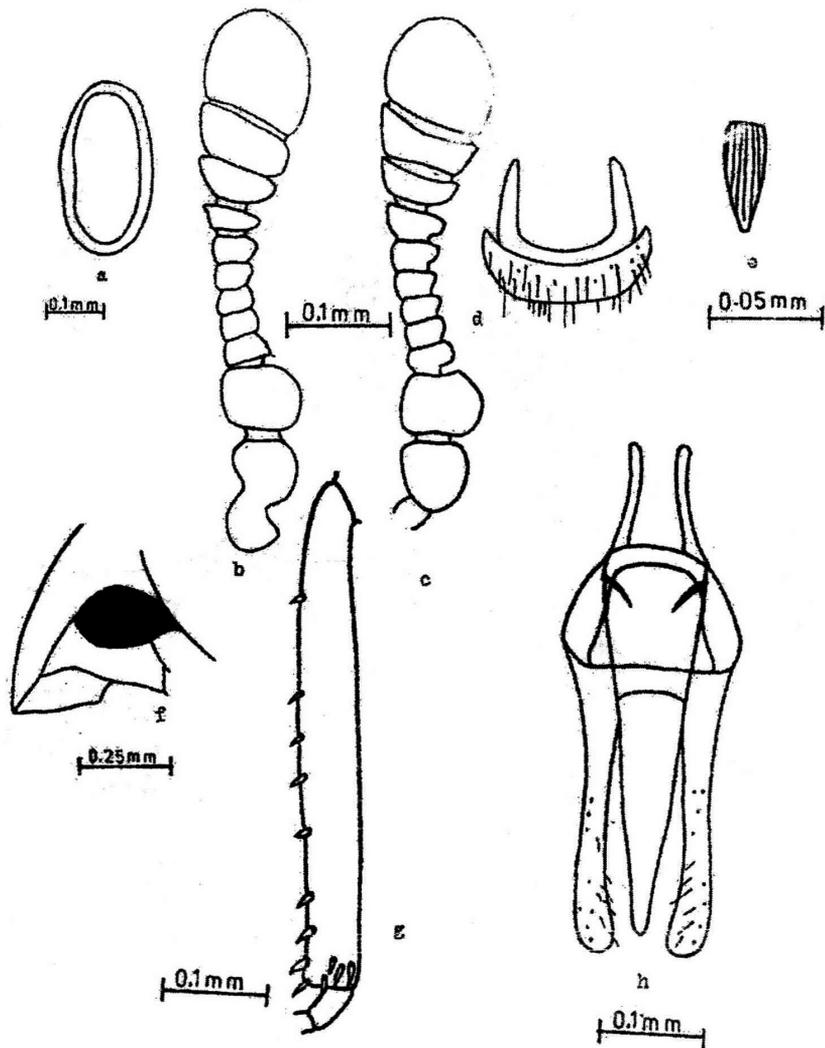


Fig. 3 *Anthrenus unicolor* sp. nov.

- a. Compound eye b. Male antenna c. Female antenna
d. Labrum e. Scale f. Antennal cavity g. Fore tibia
h. Male genitalia

Fig. 3. Original figures of *Anthrenus unicolor* Mawlood & Abdul Rassoul, 2003.

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