وصف نوع جديد من الخنافس الزهرية لينة الأجنحة في العراق (Coleoptera: Malachiidae) Malachius Fabricius, 1775

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المملوكة

تم وصف نوع جديد من الخنافس الزهرية لينة الأجنحة في العراق Malachiusraniasia sp. nov. 

الصفات التشخيصية للنوع هي الأفوك العلويان ثنائي السن، المسام منشور في العقلة 11، أنهوبية 10 مرة بقدر طول العقلة العاشرة، الجزء الامامي للقصيب أنهوبية القاعدي. 

الكلمات المفتاحية: رتبة غمديه الأجنحة، عائلة Malachidae، نوع جديد، العراق
A new species of soft-winged flower beetles, *Malachius* Fabricius, 1775 (Coleoptera: Malachiidae) from Iraq

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**ABSTRACT**

A new species of soft-winged flower beetles, *Malachius raniansis* sp. nov. is described and illustrated from Iraq. Distinctive characteristics for this species are Mandibles bidental; Antenna serrate, 11th segment tubular shaped 1.2 times as long as 10th segment. Apical part of adeagus nearly tubular, basal cylindric-shaped.

Key words: Coleoptera, Malachiidae, New species; Malachius raniansis sp. nov., Iraq.

**1. INTRODUCTION**
Malachiidae are a large family in the superfamily Cleroidea. The family numbers over 1,400 species in the Palearctic region [1], they are commonly known as soft-wing flower beetles. The adults occur commonly on flowers and evidently feed on other insects as well as on pollen [2], [3] found insect fragments in the guts of adults belonging to several species. Larvae are usually predacious, but may also be scavengers [4]. [5] mentioned that the larvae are primarily predators, occurring in various habitats but most commonly in soil, leaf litter or under bark, some larvae feed on locust egg pods. The taxonomy of the family is in poor condition. There are no recent revisions or taxonomic treatments of the Nearctic and Palearctic species; therefore the list below reflects our best effort at achieving a list based on available literature. A key to the genera will be found in [6]. [7] gives a key to the species from the Pacific Northwest. Classification, distribution and economic important of malachiid beetles were treated by many investigators [8,9,10,11,12]. In Iraq there are not any taxonomic study of the family species except; [13] indicated 10 species in six genera and [14] recorded six species.

2. RESULTS

Description

_Malachius raniansis_ sp. nov.

Body: Cylindrical, dark reddish, length 6.1-8.0 mm, width 3.1-4.2 mm.

Head: Oval, with narrow black sutural edge. Eyes black, rounded. Vertex shine black weakly convex, densely black setose and fine punctate. Coronal suture present. Frons shiny black, slightly concave, densely black setose, fine punctate. Clypeus slightly concave, triangular laterally, sparsely black setose, fine punctate. Labrum (Fig.1a) nearly globular, pale yellow, sparsely pale yellow setose, anterior margin slightly concave. Mandible (Fig.1b) yellow - dark brown, high sclerotized, apical part bidemics, inner denticles slightly shorter than the outer, scrob sparsely setose, molar aria bare. Maxilla (Fig.1c) dark brown, cardo triangular, distal part of galea triangular, apical part membranes
densely yellow short setose, lacina membranes apical part densely short dark yellow setose, maxillary palp four segmented,

1-3segments of nearly cup shaped, 2\textsuperscript{nd} segment 1.3 times as long as 3\textsuperscript{rd} segment, 4\textsuperscript{th} segment elongated oval, 1.2 times as long as 3\textsuperscript{rd} segment. Antenna (Fig.1d) serrate, length 0.4-0.5 mm. dark brown except the basal part of 2\textsuperscript{nd} segment yellow, 1\textsuperscript{st} segment rectangular, 1.1 times as long as 2\textsuperscript{nd} segment, 2\textsuperscript{nd} segment semi-rounded, 3\textsuperscript{rd} - 10\textsuperscript{th} segments nearly cup shaped, 4\textsuperscript{th} segment 1.2 times as long as 3\textsuperscript{rd} segment, 11\textsuperscript{th} segment tubular 1.2 times as long as 10\textsuperscript{th} segment. Labium dark brown, 1\textsuperscript{st} - 2\textsuperscript{nd} segments of labial palp triangular, 2\textsuperscript{nd} segment 1.3 times as long as 1\textsuperscript{st} segment. 3\textsuperscript{rd} segment cylindrical as long as 2\textsuperscript{nd} segment.

Thorax: Pronotum shiny black, with two reddish brown rectangular spots laterally, surface densely white setose, randomly irregular punctate, anterior margin of slightly concave, posterior margin rounded at the middle, anterior and posterior margins with row of pale white setae, anterior and posterior angle rounded, procoxal cavity open, prosternum black, rectangular, sparsely black setose, anterior margin of prosternum straight, prosternal process nearly globular. Scutellum shiny black, semi-rounded, surface sparsely fine punctate. Elytra (Fig.1e) reddish brown simple at the tip, ¼ of apical part black, surface densely black setose, fine punctate. Epiplural dark black, short black setose, fine punctate. Hind wing pale brown, veins brown – dark brown, redial cell oval, wedge cell oval elongated. Fore legs brown – dark brown, fore-femur cylindrical, tibia tubular, 1.2 times as long as the femur, black sparsely setose. 5\textsuperscript{th} segment of protarsal 1.5 times as long as 1\textsuperscript{st} segment. Middle legs brown, coxa oval, trochanter oval, 5\textsuperscript{th} segment of mesotarsal 1.4 times as long as the 1\textsuperscript{st} segment. Hind legs brown, coxa conical, trochanter oval, 5\textsuperscript{th} segment of metatarsal 2.2 times as long as the 4\textsuperscript{th} segment. Claws dark brown, shot slightly curved.

Abdomen: Shiny black, oval, six segmented, surface densely black setose, densely randomly irregular punctate. 1\textsuperscript{st} - 4\textsuperscript{th} abdominal sternite transverse same length, 5\textsuperscript{th} sternite cup shaped, 1.2 times as long as the 4\textsuperscript{th}. 6\textsuperscript{th} abdominal sternite brightly black, nearly cup shaped, anterior margin slightly concave, posterior
margin nearly straight, surface sparsely black setose. 6th tergites, dark brown, cup shaped, anterior edge straight, posterior slightly concave. Spiculumgaster absent.

Male genitalia: Aedeagus (Figs. 1g, h, i) pale brown, tubular, length 2.6-3.0 mm, apical part nearly tubular, basal hood pale brown, low sclerotized, nearly hook shaped. Tegmen (Fig. 1f) pale yellow, nearly quadrate shaped, anterior part slightly concave, posterior margin V-shaped at the middle, its arm nearly claveate, high sclerotized.

Type Material
Holotype (♂): Iraq - Kurdistan region; Erbil-Rania, 330 km N Baghdad, 4. April 2014 from whit top, Cardariadraba, H.Q. Hammamurad leg., Paratype (7 ♂♂, 6 ♀♀): from same locality and date, the holotype is kept in the Insect Museum of College of Agricultural-Erbil, Kurdistan region –Iraq.

Diagnosis: Malachius raniansis sp. nov. This species differs from closely related species Malachius mirandus (LeConte) by the following characters: body dark reddish, length 6.1-8.0 mm. Antenna serrate, dark brown except the basal part of 2nd segment yellow. Aedeagus pale brown, tubular, basal part nearly cylindrical shaped, length 2.6-3.0 mm.
Figure 1: *Malachiusraniansis* sp. nov.

a. Labrum   b. Mandible   c. Maxilla   d. Antenna   e. Elytra
f. Tegmen   g. Male genitalia (dorsal view)   h. i. Male genitalia (lateral view)

REFERENCES


