



## A New species of bumble bee scarab beetles, *Amphicoma* Latreille 1807 (Coleoptera: Glaphyridae) from Kurdistan region-Iraq

Nabeel A. Mawlood\*, Hazim S. Ahmed and Nawzad B. Kadir

College of Agriculture, Salahaddin University-Erbil

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#### \*Corresponding Author:

Nabeel A. Mawlood

nabeel\_akm57@yahoo.com

### ABSTRACT

A New species of the family Glaphyridae, *Amphicoma hirani* sp. nov. is described and illustrated from Kurdistan region-Iraq and compared with its closely-related species. The species is characterized by strong mandibles, Protibiae tridentated and the Parameres small triangular shaped. The important taxonomic parts have been drawn. Localities, plant hosts and date of the collection have been mentioned.

### INTRODUCTION

Glaphyridae MacLeay, 1819 is a relatively small family of Scarabaeoidea comprising about 200 species and subspecies in six genera (Nikolajev et al., 2011). Adults are strong, diurnal fliers. They are often found hovering near flowers or foliage. Most species are found in sand areas. Larvae are free-living in sandy areas, where they feed decaying leaf litter and detritus that is layered in the sand, (Carlson, 2002). Most extant Glaphyridae genera are restricted to the Palaearctic (Medvedev, 1960). The genus *Amphicoma* Latreille, 1807 is mainly distributed in east and southeastern Asia with a disjunct distribution of six species and subspecies from southern Europe. The authorship and concept of the genera *Anthypna* Eschscholtz, 1818 and *Amphicoma* were

erroneous until Bezděk *et al.* (2005) correctly verified and inverted the usage of the two genera, thus transferring 17 species from the former genus to the latter. Asian *Amphicoma* species described by numerous European coleopterists, mainly (Fairmaire, 1886; Endrodi, 1952; Petrovitz, 1965). More recently Nikodým (2005) and Keith (2008) published a series of papers describing 17 new species from China and southeastern Asia (and one new species from Greece). Currently, there are 48 valid names within *Amphicoma*. The Iraqi Glaphyridae fauna has been poorly studied so far with four species from genus *Ampicoma* Latreille, have been recorded by different authors (Derwesh, 1965; Abdul-Rassoul, 1976; Al-Ali, 1977). The purpose of this paper is to describe the new species of *Amphicoma*.

**Type Material:** (♂) (Holotype) Iraq - Kurdistan region – Erbil (Hiran), 330 km N Baghdad, 25. April. 2014 from Haory cress, *Lepidium draba*; leg Nabeel A. Mawlood; Paratype (5 ♂♂ 6 ♀♀): from same locality; The Holotype is kept in the Insect Museum of Directorate General of Agricultural Research - Ministry of Agriculture - Erbil, Kurdistan region – Iraq.

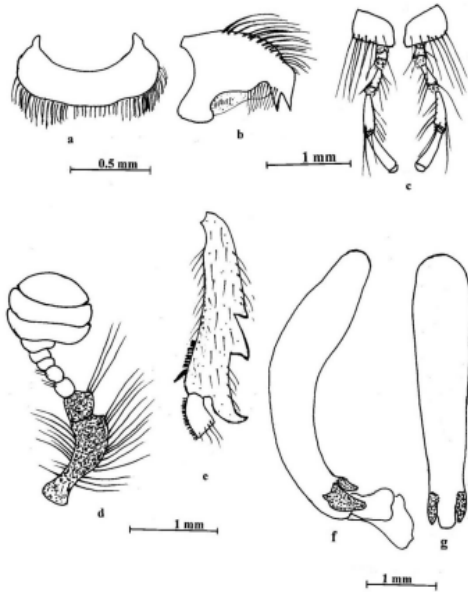


Figure (1): *Amphicomma hirani* sp. nov.

a. Labrum b. Mandible c. Labial palp d. Antenna e. Protibiae  
f. Male genitalia (Lateral view) g. Male genitalia (Dorsal view)

### *Amphicomma hirani* sp. nov.

**Body:** Length 10.3-12.5 mm, width 4.4-5.6 mm. elongate oval, shining, ground color greenish gold with lightly copper reflections.

**Head:** Deflexed, metallic green nearly as wide as long, the widest part of head at its middle part, slightly narrower than pronotum, with faint golden shine. Vertex, frons and clypeus green, rugose covered with erected soft, light yellow hairs and dense of punctures. Clypeus nearly rectangular, sparsely setose, anterior margin straight. Eyes brown, kidney shaped, half divided by a canthus, length 2.4 – 2.7 mm. Canthus visible, densely long, yellow setose, length 0.9-1.0 mm. Labrum (Fig. 1a) prominent, nearly cup shaped, well sclerotized,

approximately six times as wide as long, surface sparsely puncted, lateral and anterior margins densely dark yellow setose. Mandibles (Fig. 1b) prominent, high sclerotized, apical part with two strong, acute teeth, molar area densely yellow setose, scrope densely yellow long setose. Maxilla dark brown, lacinia yellow, densely long yellow setose. 1<sup>st</sup> - 3<sup>rd</sup> segments of maxillary palps cup shaped sparsely brown setose, 2<sup>nd</sup> segment 1.2 times as long as the 3<sup>rd</sup>. 4<sup>th</sup> segment tubular shaped, bare, 2 times as long as 3<sup>rd</sup> segment. Labial palps (Fig. 1c) dark brown, 1<sup>st</sup> - 2<sup>nd</sup> segments nearly cup shaped, 2<sup>nd</sup> segment 1.2 times as long as 1<sup>st</sup> segment, inner margins of each densely long yellow setose, 3<sup>rd</sup> segment tubular shaped 1.3 times as long as 2<sup>nd</sup> segment. Paraglossa hook-like densely yellow setose. Antenna (Fig. 1d) 10 segmented, with 3-segmented, opposable club. length 2.0-2.4 mm, 1-3 segments dark brown, 4-10 orange, 1<sup>st</sup> segment 4 times as long as 2<sup>nd</sup> segment densely dark yellow long setose, 3-4 segments nearly same sized, antennal club subequal in length to segments 1-2, 8<sup>th</sup> and 9<sup>th</sup> segments cup shaped, equal in length, 10<sup>th</sup> segment nearly oval, 1.4 times as long as 10<sup>th</sup> segment.

**Thorax:** Pronotum convex, green, subquadrate, densely long, pale yellow setose; the widest part at its middle; anterior margin of pronotum slightly concave; with lateral margins slightly convex, posterior margin slightly protruding, Anterior angles of pronotum rounded, Posterior angles broadly rounded, broadest in the middle. Scutellum green, triangular, about 2.2 times wider than long. Elytra thin elongate, without striae, purple, apically oval, length 6.2- 7.8 mm, disc setigerous with long, robust setae along lateral margins and apical suture. Hind wing yellow, well-developed, veins dark yellow, upper margin with row of short black setae extend into the middle, r4 and r2 absent. Legs with metallic dark green shines, procoxae transverse about 4.5 times as long as width, Profemur

thick, slightly shorter than the procoxae. Meso- and metafemur slender. Protibiae (Fig. 1e) tridentated on outer margin, the median tooth close to the basal, apically with one short spur, inner margin with row of spines. meso- and metatibia generally simple, Mesotibia with two rows of spines, apically with two long spurs. Metatibia nearly similar to the mesotibia. Protarsal segment pectinate, shorter than the meso- and metacoxae tarsal. Protarsal claws shorter than the others, feebly curved.

**Abdomen:** With six visible, ground color segment with lightly greenish reflections, the first sternites not obscured by hind coxae, the tergites high densely dark golden stose. The sternites 1-5 transvers, 6<sup>th</sup> sternite oval shaped. Pygidium exposed beyond the apices of elytra, surface sparsely pale yellow setose.

**Male genitalia:** (Fig. 1f and 1g) Aedeagus brown- dark brown, well sclerotized, strongly curved, length 4.0-4.8 mm; basal piece oval. Large relative to parameres, parameres small, equal in length nearly triangular, apical part acute, internal sac membranous, irregular shaped.

**Diagnosis:** *Amphicoma hirani* sp. nov.: This species differs from closely related species *Amphicoma aurata* (Yawata) by the following characters: Antennal club shorter in length to segments 2-7. Anterior angles of pronotum rounded. Paramere small, straight, nearly triangular shaped. Body length 10.3-12.5 mm.

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