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A New species of the bee, *Anthophora* Latreille, 1803(Hymenoptera: Apidae) from Kurdistan region-Iraq

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Abstract: ***A New species of the family Apidae, Anthophora sulaimanensis sp. nov. Is described; main parts illustrated and got comparisons with its nearly-related species from Iraq-Kurdistan region. The species is characterized by Mandibles black, bi dentate; Labrum black with two brown sculptures on lateral basal sides; Clypeus without sculpture; Marginal cell of the fore wings broadly rounded apically, strongly bent away from wing margin. The important taxonomic parts have been drawn. Localities, plant visiting and collections date have been mentioned.***

Keywords: Hymenoptera, Apidae, New species, *Anthophora* Latreille, Kurdistan region-Iraq.

1. INTRODUCTION

The largest family of bees is Apidae, about 5.700 species described [2]. Larvae and adult of bees are plant eaters, use nectar for energy and pollen for protein [4]. Bees play a great role in pollination of natural flowering plants, and that is strange to whom not specialist. [8]. They benefit people by increasing food security, improving livelihoods, and by this role they play in conserving biological diversity in agricultural and natural ecosystems [6].

Anthophora Latreille,1803 is one of very important genus of the family. The bee genus *Anthophora* is one of the largest in the family Apidae, with over 450 species worldwide in 14 different subgenera. They are most abundant and diverse in the Holarctic and African biogeographic regions. They are solitary bees, however most of them make a nest in large aggregations. Nearly all species make nests in the soil, either in banks or in flat ground; the larvae develop in cells with waterproof linings and do not spin cocoons. *Anthophora* individuals can be distinguished from the very similar genus *Amegilla* by the possession of an arolium between the tarsal claws[7]. genus Anthophora Latreille,1803 revised for the first time in the West Indies Brooks(1999). In Iraq, Derwesh (1965) recorded 24 species of the family, included *Anthophora crinipes* Smith ,*Anthophora fulvitarsis* (Br.). Abdul-Rassoul (1976) mentioned four species, *Anthophora crinipes* Smith, *Anthophora fulvitarsis* Brulle, *Apis mellifera* L. and *Xylocopa fenestrate* Fabricius. Swailem et al.(1974) recorded five species, *Anthophora* sp., *Apis mellifera* L., *Xylocopa olivieri* Lep., *Xylocopa pubesceus*, *Xylocopa violacea* L. . Shali and Fat-hullalh (1986) recorded five species in Sulaimani governorate.

Type Material: (Holotype) (♀), Iraq-Kurdistan region-Sulaymanyah (Qandil), 350 km N Baghdad, 11. May. 2014 from Cape bugloss, *Anchusa strigosa*; leg Haval M. Amin; Paratype (1 ♂♂ 5 ♀♀): from same locality and dates; The Holotype is kept in the Insect Museum of College of plant Protection Department-Agriculture-Salahaddin-University-Erbil,Kurdistan region-Iraq.

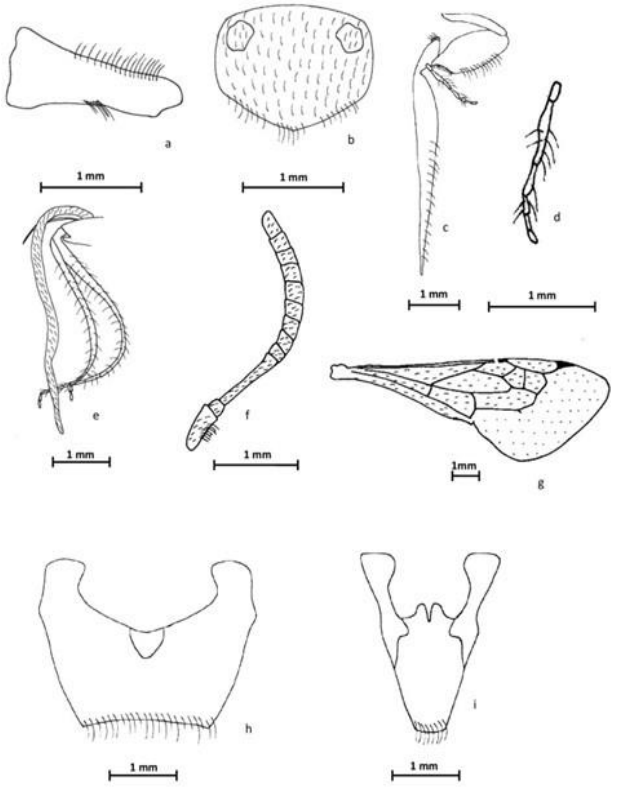

Figure 1 *Anthophora sulaimanensis* sp. nov a. Mandible b.Labrum c.Maxilla d.Maxillary palp e. Labium f. Antenna g. Forewing h.6th Abdominal sternite i.7th Abdominal sternite.

Diagnosis: *Anthophora sulaimanensis* sp.nov.: This species differs from closely related species *Anthophora agama* by the following characters: Clypeus without sculpture, mandibles bi dentate, outer denticle indistinct, body length is 12.1-12.3mm.

Anthophora sulaimanensis sp.nov.

Description: Female Body: Slender, black, slightly convex, body length 12.1-12.3 mm.

Head: Wider than long, black, without yellow sculpture, much broader than long, length 3.00-3.2 mm, width 4.4-4.7 mm. Eyes oval, brown, densely short setae, inner orbital margin strongly convex, upper inter orbital distance 2.7 mm, lower inter orbital distance 2.7 mm. Vertex slightly convex, densely black setae. Frons strongly convex, sparsely black setae. Facial fovea absent. Clypeus convex, black, without yellow sculpture, coarsely punctuate, sparsely short yellow setae, much broader than length, posterior margin strongly concave. Malar space narrow. Mandible (Figure1 a) black, bi dentate, 1.7-1.9 mm length, densely long yellow setae laterally, the base is slightly broader than an apex. Labrum (Fig.1 b) nearly circular, black, two brown sculptures on lateral basal sides, 1.2-1.3 mm length, impunctuate, surface densely short black setae, apical margin densely short yellow setae, posterior margin strongly convex at the middle, anterior margin slightly convex. Maxilla (Figure 1c) dark brown, stipes oval inner margin densely yellow setae, with comb in strong concavity of posterior stipital margin. Lacinia present, scale-like lobe with hairs near base of galea.Galea with postpalpal part greatly elongated, usually longer than stipes, sparsely yellow setae. Maxillary palp (Figure 1d) six segmented, 2nd segment 3.3 times as long as 1st segment, sparsely setae, 3rd segment 2 times as long as 4th segment, sparsely setae, 5th segment 1.2 times longer than 6th segment, without setae. Labium, yellow(Figure 1e), 1st and 2nd segments of labial palpi elongate and flattened , 3rd segment cup shaped, 4th segment tubular, 1st segment about 4.6 times as long as 2nd segment, densely yellow setae, 3rd and 4th segments short nearly equal in size, without setae. Glossa long, densely short yellow setae, pointed at apex. Paraglossa short membranous. Antenna (Figure 1f) black, consist 12 segments ,1st segment oval , 5 times as long as 2nd segment , 3rd segment tubular shaped 6.5 times as long as the 4th ,The segment 5-7 nearly square same length ,12th segment oval , 1.1 times as long as 11th segment.

Thorax: Pronotum darkbrown, densely yellow and black setae, posterior margin strongly concave, anterior margin slightly concave. Prosternum dark brown, impunctuate, densely yellow setae, posterior margin slightly convex, anterior margin strongly concave. Mesonotum round, black, finely punctuate, densely yellow setae, anterior and posterior margin strongly convex. Axillae round. Mesosternum, dark brown, finely punctuate, densely yellow setae. Metanotum dark brown, densely yellow setae. Propodeum nearly rectangular, dark brown-black, finely punctuate, densely yellow setae, anterior and posterior margin concave. Fore wing yellow (Figure 1g), length 10.3-10.5 mm, marginal cell with apex broadened, sharply bent away from wing margin. Basal vein straight 1.1 times as long as length of marginal cell, three submarginal cells, 2r-m strongly arched, 1st submarginal cell about 1.7 times longer than 2nd and 3rd submarginal cells separetly. Metatibia and metabasitarsus densely white and black setose, metatibia with apical margin without comb of setae (Rastellum), Hind tibial spurs present. Pretarsi with arolia. Abdomen: Nearly slender, dark brown-black, have six visible sternites, surface finely punctuate and densely setae, tergites with white and yellow hair bands apically, anterior margin of 6th sternite(Figure 1h) concave and anterior margin of 7th sternite(Figure 1 I)convex and invaginated at the middle.

Male: Unknown

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