# A NEW SPECIES OF *RHYNCOMYA* ROB.-DESVOIDY, 1830 (DIPTERA : CALLIPHORIDAE) FROM IRAQ \*

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#### **ABSTRACT**

This research includes a detaile description of new species *Rhyncomya irakensis* sp. nov. from Iraq.

Localities distribution, host plants and data of collection were recorded.

#### INTRODUCTION

*Rhyncomya* Rob.-Desvoidy is one of small genus from family Calliphoridae which contains 18 species (Peiris, 1951; Rognes, 1998).

Some species unknown bionomics, the other visted the flower (Kurahashi et al., 1997).

Taxonomic revision of the genus carried out by (Zumpt, 1956; Zumpt and Tasacas, 1976; Deeming, 1996; Fan, 1997).

Rhyncomya irakensis sp. nov.

Body: Gry yellowish, 7.4 - 6.0 mm length. 2.8 - 2.2 mm width.

Male: Head (fig. 1a) yellow; Inner vertical bristles slightly curved;

Postvertical bristles short and equal one-third of length of inner ones;

Compound eyes holoptic, dark brown, oval shaped, 2.0 - 1.8 mm length, 1.1 - 0.9 mm width, occupy about third-fourth of the anterior region of the head, narrow point is in quarte apical 0.06 - 0.03 mm; Frons Redish -Redish brown with pale yellow dust; Parafrontal narrow with pale yellow dust and 3 - 2 shorte setae, each sides with 8 - 7 of bristles; Frontal stripe wide from the basal, 0.26 - 0.21 mm length and gradually tappering forward the vertex, its narrow pointed is in qurter apical 0.03 - 0.01 mm; Face yellow with yellow dust and 3 - 2 setae; Parafacial yellow with yellow dust and 3 - 2 shorte setae, its upper surface with small, circular, and black spot without dust; Antenna (fig. 1b) yellow with yellow dust, 1st segment cup shaped with numerous of short setae, 2nd segment cup shaped longer twice and half time than 1st ones, its outer margin with a pair row of short setae and one long bristle, 3rd segment cylinderical shaped, 0.42 - 0.38 mm length; Arista pubescent very long 0.91 - 0.87 mm length; Vibrissae slightly curved and non-crossed; Epistoma yellow; Oral margin with a row of long bristles; Maxillary palp(fig. 1c) clup shaped, 0.91 - 0.84 mm length, outer margin of apical half with a row of bristles; Mentum (fig. 1d) dark brown, nearly triangle shaped, with moderate dense of bristles and brown setae.

<sup>\*</sup> Part of PH.D. Thesis

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Labrum-epipharynx (fig. 1e) cone shaped, with 10 - 9 bristles, its apodeme yellow, 1.1 - 1.0 mm length; Oral lobs small, oval shaped with different length of long, yellow setae; Prestomal teeth yellow.

Femal head similar to the male but outer vertical bristles is present; 1 pair of reclinate and 2 pairs of proclinate fronto-oribital bristle; Compound eyes cirular shaped, 1.7 - 1.6 mm length, 0.8 - 0.7 mm width; Frontal stripe wide.

Thorax: Scutum grey, scutellum yellow, each with slivery dust and moderate, dense, short and black setae; chaetotaxy:- acrostichal bristles. 2+3; dorsocentral bristles 2+3; notopleural bristles 2; humeral bristles 3; posthumeral bristles 2; intra-alar bristles 1+2; supra-alar bristles 2; presuture bristle 1; post-alar bristles 2; scutellum bristles 3+1; propleural bristle 1; stigmatal bristle 1; sternopleural bristles 1:1; pleuron grey with dark slivery dust; mesothracic spiracels oval shaped, yellow, 0.56 - 0.49 mm length; prosternum grey, with slivery dust and long, crinkley, pale white setae; mesopleuron grey, with dark slivery dust and without setae, its lower margin with 4 - 3 long bristles; hypopleuron with dark slivery dust, its lower margin with a row (7 - 6) long bristles, metathoracic spiracels yellow, circular shaped; sunbanal knob kidney shaped with dark slivery dust.

Wings: Hyaline, basicosta yellow; dorsal surface of stem vein with a row of short yellow setae; subcostal sclerite without setae; node without setae; apical cell very narrow 0.05 -0.03 mm length; thoracic squqma circular shaped with fine yellow pubescent; upper squama similar to the thoracic squama but smaller; tympanic membrane with comb of long pale yellow setae; halters yellow.

Legs: Yellow, fore femure with a pair rows of long bristles on the posterodorsal surface, a row of long bristles on the posteroventral surface; fore tibia with a row of moderate dense bristles on anterodorsal surface, 1bristle on the anteroventral surface; mid femure with a row of bristles on the posteroventral surface; mid tibia (fig. 2a,b) with 3bristles on the anterodorsal surface, one bristle on each anteroventral and posteroventral surface; hind femure with a row of bristles on the anterodorsal surface, and non-complete row on anteroventral surface; hind tibia (fig. 2c,d) with arow of bristles on anterodorsal surface, tow bristles on posterodorsal surface.

Abdomen: Dark yellow witj grey dust; posterior margin of T1+2 without bristles; posrerior angle of each tergits with circular black spot; sternites in male (fig. 2e) dark yellow with grey dust, 1<sup>st</sup> nearly cup shaped without setae; st 2 nearly triangle shaped; st 4 - 3 oval shaped; st 4 - 2 with moderate dense of black setae and 5 - 4 of long bristles; st 5 with deep incision posteriory and formed bilobed sclerite with moderate dense, long, black bristles; Abdomen in female similar to those in male but differ by tergites without black spots, 5 st oval shaped.

Male terminalia: Tergite 6 (fig. 3a) yellow, its hind margin with 5 - 4 long bristles; sternite 6 (fig. 3b) nearly ring shaped, its left arm reach to the syntergosternite 7+8, right arm is short and failing to reach to the syntergosternite 7+8; syntergosternite 7+8 (fig. 3c) with lowestly dense of short bristles and four very long bristles; Tergite 9 (fig. 3d) short, its arms strongly curved, the distance among its apical 0.09 - 0.05 mm; Paralobs (fig. 3e) semiparrel, cyliderical shaped, its one-third basal with dark yellow of long bristles, and its one-third apical with 5 - 4 very short dark yellow bristles; Anal cerci (fig. 3f) with a broad basal which strongly tapper forword the apical, its one-third

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basal with dark yellow of long bristles; Phalloapodeme (fig. 3g) cylinderical shaped, with antero median flange, 0.35 - 0.31 mm length, Pregonite (fig. 3h) with a row of bristles on posterior margin and apex. Postgonite (fig. 3i) cylinderical shaped, with one long bristle near the apex; Phallus (fig. 3j) striaght, short, 0.09 - 0.05 mm length, basiphallus recatingle shaped, 0.17 - 0.12 mm length, epiphallus nearly hook shaped, equal to length of basiphallus, paraphallus 0.42 - 0.35 mm length, paraphallus process 1 -inversed shaped, 0.31 - 0.24 mm length, its apical pointed and curved, membrane distance among basiphallus and paraphallus process very short 0.05 - 0.03 mm, hypophallus oval shaped, its outer margin with minute teeth which directed to the upper, acrophallu very short, cylinderical shaped; Ejaculatory sclerite short 0.26 - 0.22 mm and moderately expanded.

Female terminalia: Segments short, teloscopic, Tergite 6 (fig. 4a) yellow, its posterior edge with a row of different length bristles, spiracles 6 and 7 located in this tergite; sternite 6 (fig. 4b) yellow nearly recatangular shaped, its posterior edge with a row of short bristles and with four long bristles on one-third apical; Tergite 7 (fig. 4c) is composed essentialy of two oval longitudinal plates, which may be widely separated, fused at their posterior medial ends, which provided with a row of short bristles; Sternite 7 (fig. 4d) with oval shaped basal, its surface with moderate dense of short bristles; Tergite 8 (fig 4 e) consist of two cup shaped plates which flanks the ovipositor, their surface without bristles; Sternite 8 (fig. 4f) triangle shaped, with numerous of short bristles; Epiproct (fig. 4 h) triangular shaped, with fine brown pubescent, its surface with 12-10 short bristles and four long bristles; Hypoproct (fig 4i) triangular shaped, with fine brown pubescent, its surface with 36-34 short bristles, Anal cerci (fig. 4j) oval shaped, its half apical with moderate dense of bristles; Spermatheca yellow, oval shaped, 0.26-0.21 mm length, without a nipple-like projection.

Rhyncomya irakensis sp. nov. closely realted to R. peusi Zumpt but differ from it by the following characters:-acrostichal bristles 2+3; dorsocetral bristles 2+3; intra-alar bristles 1+2, supra-alar bristles 2, scutellum bristles 3+1; fore tibia with 3 bristles on the anterodorsal surface, ibristle on each anteroventral and posteroventral surface; paralobs equal to length of anal cerci; epiphallus hook-like, membrane distance among basiphallus and paraphallus process narrow.

Host plant : Weeds
Material examination
1 ♂ (Holotype), 1 ♀ (Paratype)
Coll. 15 / 5 / 1999 (Leg. N. A. Mawlood)
The types were preserved in Iraq Natural History Museum.

# LITERATURE CITES

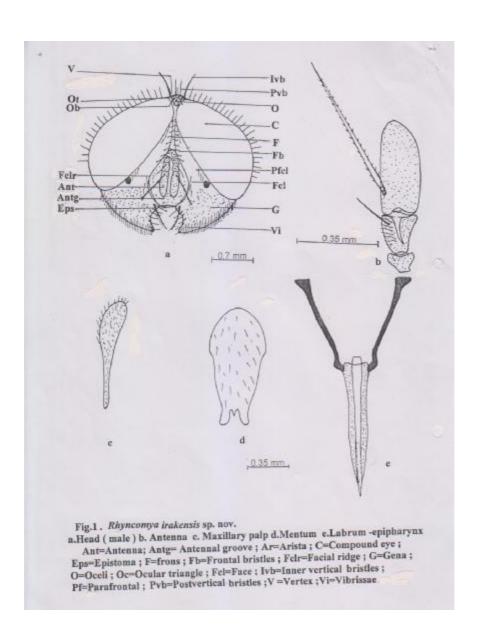
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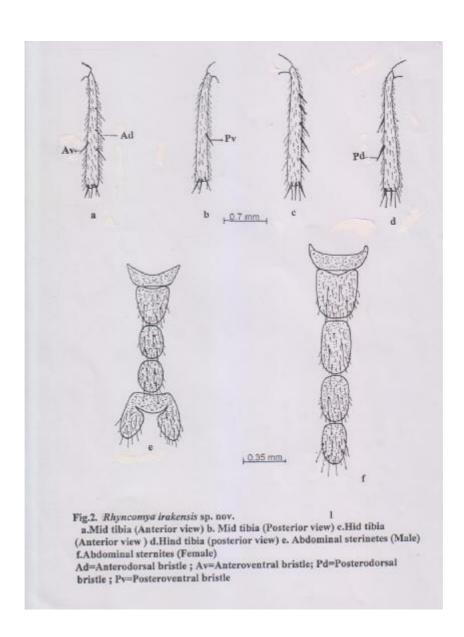
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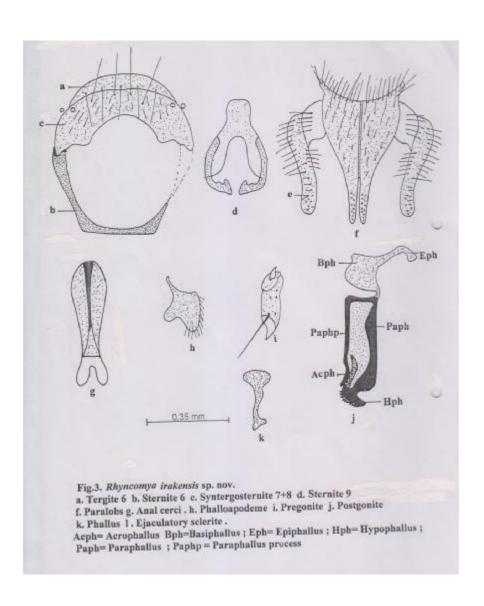
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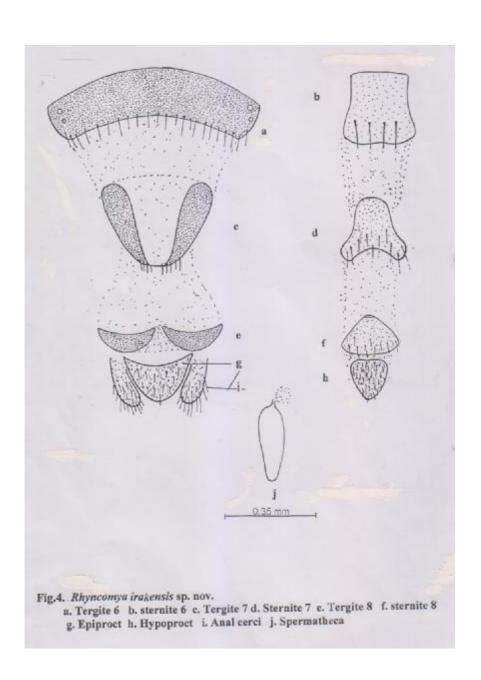
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# يوع جديد من BHYNCOMYA ROB.-DESVOIDY, 1830) في العراق (DIPTERA : CALLIPHORIDAE)

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# الخلاصة

يتضمن هذا البحث وصف تفصيلي لنوع جديد للعلم -. Rhyncomya irakensis Rob في العراق. سجلت مناطق توزيع الحشرة وعوائلها النباتية وتاريخ جمعها.