

A NEW SPECIES OF THE GENUS *POLLENIA* ROB.-DESVOIDY, 1830  
(DIPTERA : CALLIPHORIDAE) FROM IRAQ\*

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ABSTRACT

This research includes a detailed morphological description of the *Pollenia mesopotamica* sp. nov. in Iraq.

Locality, host plant and data of collection were given.

INTRODUCTION

*Pollenia* Rob.-Desvoidy is one of the important genera of family Calliphoridae which as conceived at present has more than 100 members variously distributed in Nearctic, Palaearctic, Oriental and Australian (Dear, 1986; Rognes, 1987). Some species are parasites or Predatores in larval stages on earthworms specially *Allolobophora Chiorotica* (Savigny) and *Lumbricus terrestris* L. Seguy (1941) Keyed and illustrated various features of this species.

Taxonomic revision of this genus has been carried out by (Rohdendorf, 1935; Seguy, 1941; Schumann, 1986 and Rognes, 1987, 1992, 1998).

***Pollenia mesopotamica* sp. nov.**

**Body:** Obovate, non bright black, length 80-70mm, width 3.2-2.8mm.

**Male:** Head (fig.1a) circular, vertex narrow, black, with a pair of inner vertical bristles, moderately strong and slightly curved, postvertical bristles weak and similar in length to inner ones; compound eyes oval, dark brown length 2.1-1.9mm, width 1.3-1.1mm and occupy nearly 3/4 of anterior region of the head with densely silvery pollen, and a row of postocular bristles; ocular triangular prominences, black with a pair of ocular bristles equal to length of inner vertical bristles and with a few number of short setae; ocelli dark brown; Frontal stripe black with eight bristles; parafrontal black with densely silvery pollen and numerous of setae; face reddish with yellow pollen and numerous black and yellow setae; parafacial brown-black with silvery pollen with a few of yellow setae; facial groove concave with prominent carina; facial ridge with seven bristles; epistoma; reddish; vibrissae well developed; gena reddish, with yellow setae; Antenna (fig.1b) with three segments, first segment deeply brown with 6-5 setae second segment reddish with 14-12 setae, and long bristles, third segment reddish, all segments with silvery pollen; Maxillary palp reddish, clavate shaped, its apical half with different length of moderate densely bristles; Mentum (fig.1c) dark brown, oval shaped with different length of setae and two long bristles; Labrum-epipharynx cone shaped, its apodeme rod, strongly sclerotized, 0.59-0.52mm length; Oral lobes dark brown, its surface with different length of densely of yellow bristles and setae; Prestomal teeth yellow and very short Head in female similar to that of the male except outer vertical bristles well developed, frons wide with 2 proclinate and 1 reclinate Fronto-Orbital bristles.

**Thorax:** Scutum black, with fine silvery pollen and short moderately length of black setae

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and very fine long yellow crinkly setae chaetotaxy as follows acrostichal bristles 2+3; dorsocentral bristles 2+3; notopleural bristles 2; humeral bristles 2; posthumeral bristle 1; intra-alar bristles 1+2 post-alar bristles 2; supra-alar bristles 3; scutellum bristles 4+1 stigmal bristle 1; propleural bristle 1; stemopleural bristles 1:1 presuture bristle 1; ventral surface of thorax black, with fine silvery pollen; prostemum and propleuron without setae; mesothoracic spiracles redish, oval shaped, mesopleuron with long, dense, and yellow crinkly setae; anal ridge of mesopleuron with 7-6 bristles; subanal knob black, kidney shaped, with fine silvery pollen; pteropleuron vestiture with long, dense, crinkly and yellow setae; metathoracic spiracles redish, circular shaped.

**Wings:** Hyaline, veins dark brown, basicosta dark yellow, its upper surface without setae; subcostal sclerite with setae, dorsal and ventral surface of node with 10-9 dark yellow, fine and short setae apical cell is wide open, 0.17-0.12mm;

Thoracic squama square shaped, with yellow pollen and without setae; lower squama similar to the thoracic squama but smaller in size.

**Legs:** dark brown, with silvery pollen, fore tibia with a row of bristles on anterodorsal surface and 1 bristle on posteroventral surface; mid tibia (fig.2a,b) with 4-3 bristles on each posterodorsal and anteroventral surface; hind tibia with 2 bristles on each anterodorsal and anteroventral surface.

**Abdomen:** black, with silvery pollen, hind margin of tergites with 5-3 bristles; ventral surface of abdomen in male (fig.2c) black, with silvery pollen; first sternite small, nearly cup shaped, second sternite larger, nearly oval shaped, the third and fourth sternites oval shaped, the sternites 2-4 are with moderate density of long setae and with 12-8 bristles. Fifth sternites are deeply clefted posteriorly and forming to elongated ovaly lammella which is covered with dense, short moderately length of setae and 6-5 long bristles.

**Male terminalia:** Tergite 6 (fig.2c) black, with 4-3 bristles, sternite 6 (fig.2d) globular shaped, its left arm long and connected firmly to fifth sternite, right arm short and failing to reach to same sternites syntergosternite 7+8 (fig.2e) black, dome shaped with moderate density bristles, its posterior margin emarginated; hypandrium (sternite 9) reddish, its posterior arms slightly bend, and middle surface with chitinous arch; epandrium (tergite 9) nearly square shaped, its apical half with moderate density long setae, and its basal half with lowest density setae; paralobes (fig.3a) nearly cylindrical shaped, with density, short bristles; anal cerci (fig.3b) with broad base, united together basally forming V-shape and separated near the one third of apical part, its basal surface with density and long bristles so that reduced gradually toward its apical part phallopodeme (fig.3c) oval shaped, 0.66-0.59 mm length, broad from the apical and gradually tapering toward the base, its apical surface with two broad chitinous band; pregonite (fig.3d) hook-like with 7-6 bristles; postgonite (fig.3e) cylindrical shaped, its ventral surface with 7-6 bristles and one bristle on its inner margin; phallus (fig.3f) 0.98-0.87 length, basiphallus rectangle shaped, 0.17-0.12 length, epiphallus slightly bend, 0.25-0.21 mm length, paraphallus sword shaped, its apical triangle shaped and its outer margin near the apical without teeth, paraphallus process sword shaped, the distance between the basiphallus and paraphallus process is narrow 0.11-0.09mm, hypophallus oval shaped, its outer margin of basal half with very fine tooth. Ejaculatory sclerite (fig.3g) nearly cup shaped, 0.30-0.26mm in length.

*Pollenia mesopotamica* sp.nov. is closely related to

*P. dasypoda* Protschinsky but differs from it by the following:

Characters: the dorsal surface of thorax with three humeral bristles and posthumeral bristles; basicosta black; node with 5-4 setae; apical half of epandrium surface with two chitinous arch; one fourth of apical part of paraphallus strongly bended, paraphallus

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process cylindrical of paraphallus strongly bended, paraphallus process cylindrical shaped, its length is shorter than the phallus.

**Host plant:** Peach, *Prunus persica*.

**Material examined:** Kirbla.

> (Holotype), 1+ (Paratype).

**Coll.** 10 / 6 / 1970 (Leg. M.S. Abdul-Rassoul).

The types were preserved in Iraq Natural History Museum

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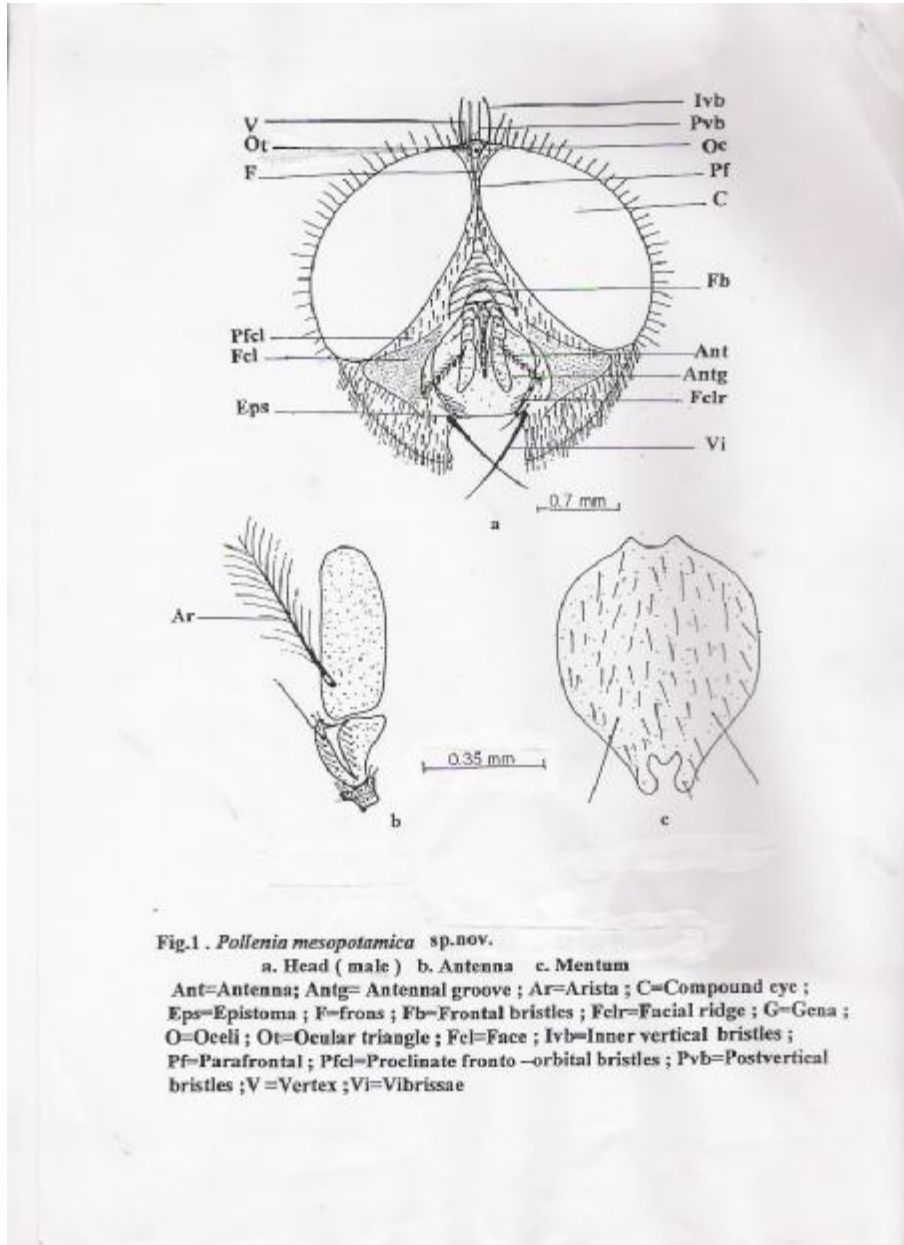
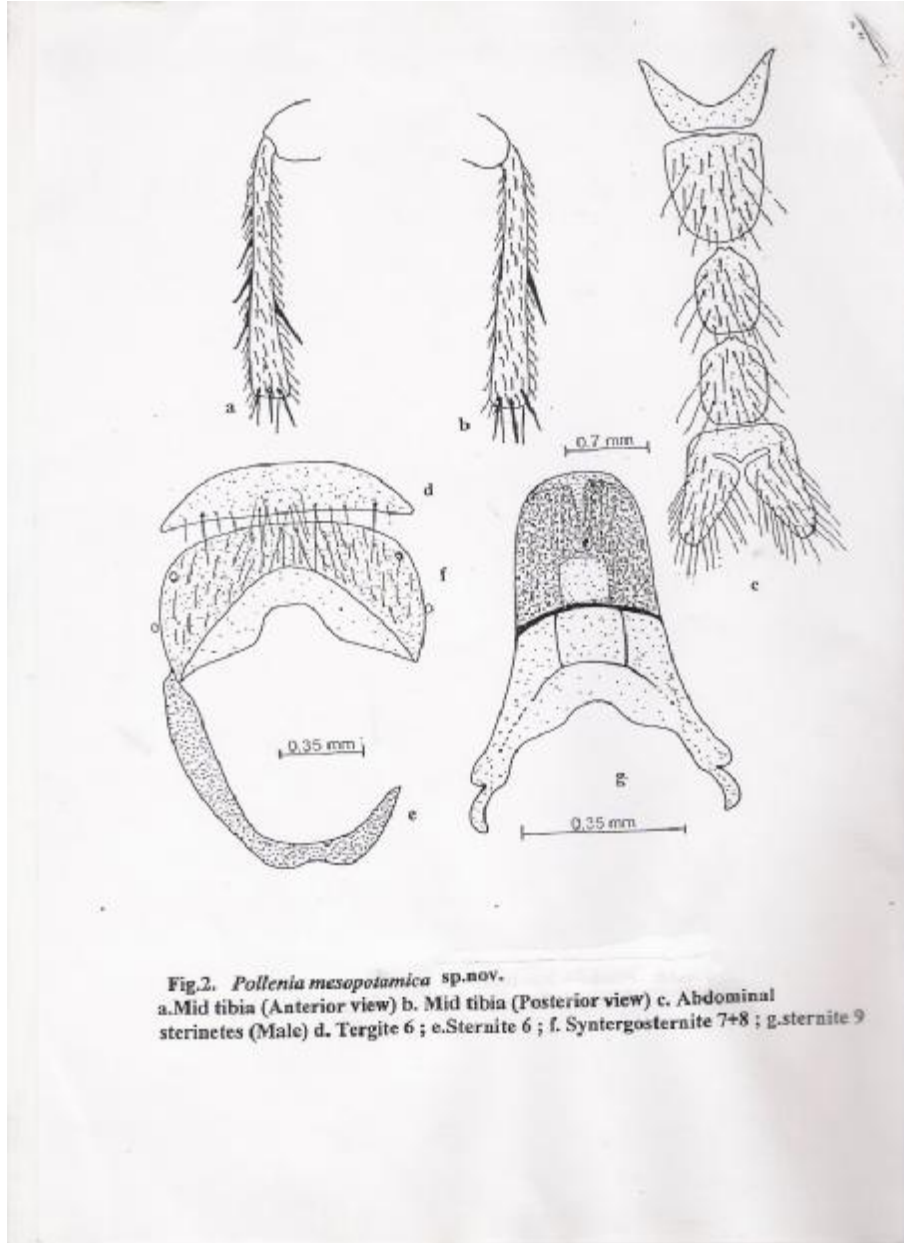


Fig.1. *Pollenia mesopotamica* sp.nov.

a. Head ( male ) b. Antenna c. Mentum

Ant=Antenna; Antg= Antennal groove ; Ar=Arista ; C=Compound eye ;  
Eps=Epistoma ; F=frons ; Fb=Frontal bristles ; Fclr=Facial ridge ; G=Gena ;  
O=Ocelli ; Ot=Ocular triangle ; Fcl=Face ; Ivb=Inner vertical bristles ;  
Pf=Parafrontal ; Pfcf=Proclinate fronto -orbital bristles ; Pvb=Postvertical  
bristles ; V =Vertex ; Vi=Vibrissae



**Fig.2. *Pollenia mesopotamica* sp.nov.**  
a.Mid tibia (Anterior view) b. Mid tibia (Posterior view) c. Abdominal sternites (Male) d. Tergite 6 ; e.Sternite 6 ; f. Syntergosternite 7+8 ; g.sternite 9

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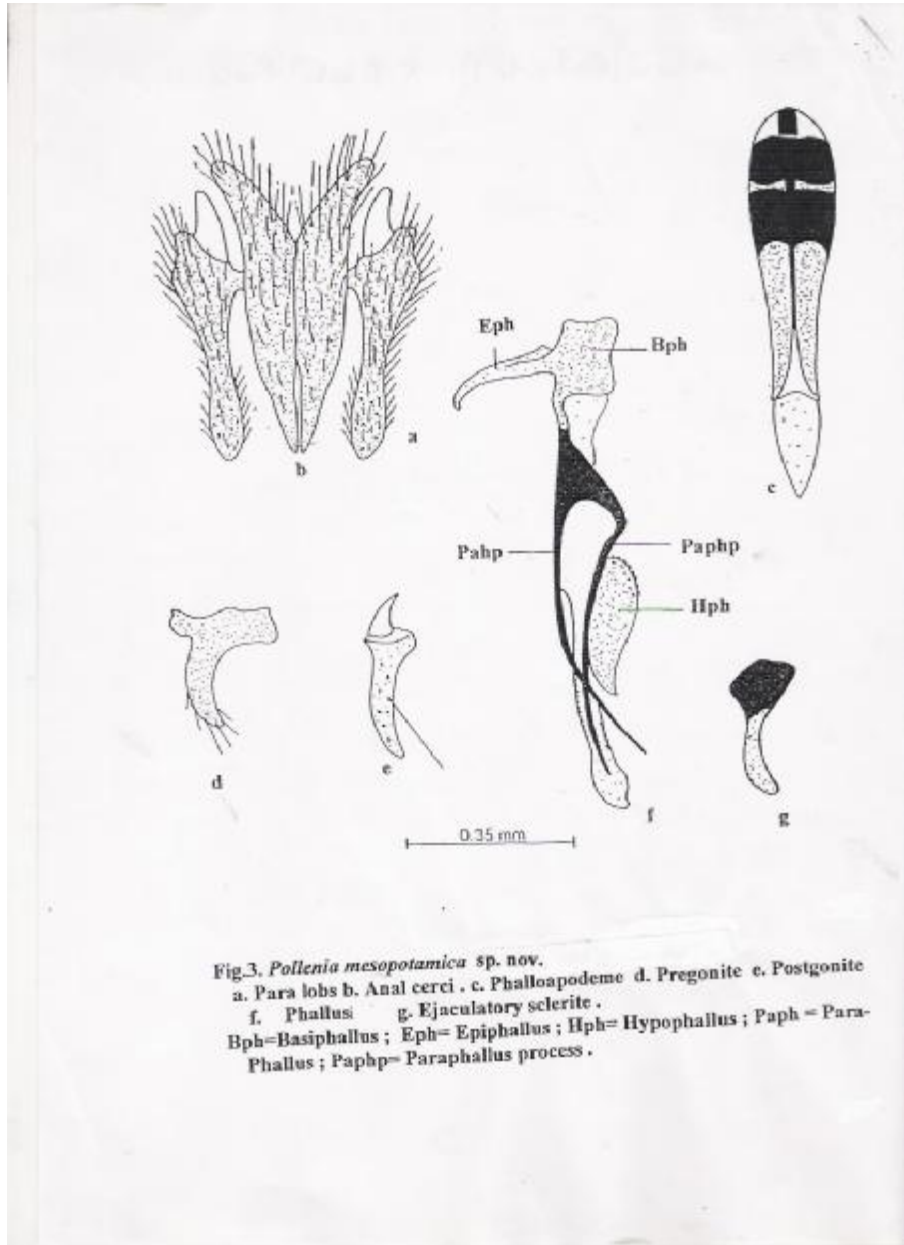


Fig.3. *Pollenia mesopotamica* sp. nov.  
 a. Para lobes b. Anal cerci . c. Phallopodeme d. Pregonite e. Postgonite  
 f. Phallus g. Ejaculatory sclerite .  
 Bph=Basiphallus ; Eph= Epiphallus ; Hph= Hypophallus ; Paph = Para-  
 Phallus ; Paphp= Paraphallus process .

