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Survey to the species of Family Sepsidae (Insecta: Diptera) in Iraq

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Abstract: ***The aim of this study is to survey species of Sepsidae family, The investigation showed three genera , date and locality of collecting specimens were recorded.***

Keywords: Acalybtarae, Black scavenger fly, Brachycera Diptera, Iraq, Sepsidae

1. Introduction

The black scavenger flies is common name known on family Sepsidae (Diptera: Acalbtrata) . The members of this family are worldwide distribution in all zoogeographical regions. The family is represented about 339 species belonging to 38 genera [1]

The sepsid flies are small –medium in size (2-12mm length). Most species are ant-like flies, with a narrow "waist[1] and morphologically and ecologically uniform family of the super family Sciomyzoidea [2],[3]

The adults and larvae abundance in several dung of horses ,cows and other animals , and they associated with animal vertebrates carrion and human , decaying vegetations and other organic matter. [4], [5],[6] .

Some spesid flies as pollinator of flowers [7], in India recorded four species of this family belonging to two genera as fallow: *Sepsis rufa* Macquart, *Sepsis nitens* Wiedemann, *Australosepsis frontalis* (Walker) and *Australosepsis niveipennis* (Becker) on *Cosmostigma racemosum* (Asclepiadaceae) [8].

This family is participate important role in forensic entomology, [9], [10],[11] ,[12].

The diagnostic characters of Sepsidae according to some authors such as [13], [14], [15], [16], [17], [18],[19], [20] as below :

Small flies in size , with slender body , ant –likes., shining black color sometimes shining dull black, brownish or yellowish. The head rounded or globular with larg compound eyes ; antennal aristate is bare . The thorax has silvery tomentum , on at least part of pleuro . Metathoracic spiracle with at least one or more fine long hairs on the lower margin . Legs are slender but in male fore femora and sometimes fore tibae have characteristic bristles, tuberculs or emarginations which using for crisping female base wing during matting . Sometimes the middle tarsus of males has enlarge or different color segment and hind tibia has a slit or elongated region . Wings are narrow and hyaline which usually have a black spot at the tip of radial vein (R2 +3); sometimes the basal of wings are blackish, and cotal vein without subcostal break. The abdomen elongate and sometime contrastst at the base then to be like ants .

2. Materials and Methods

The adult specimens were collected by sweeping net from several region of Iraq , Baghdad, Najaf , Basra from field near animal houses , and from carions of rabbit . After collecting flies they killed by freezing for several hours , then mounted with small label recorded the locality and date of collections and insect pins , they were keptq in insect box until diagnosis. For identification to genra and species using taxonomic keys such as [2], [10], [21], [22]. The plates were pictured by Dino Light microscope

3. Results and Discussion

Family SEPSIDAE Walker, 1883

Sepsidae Walker, 1833: 245. Type-genus: *Sepsis* Fallén, 1810,

In this study showed three genera :

1) Sepsis Fallen ,1810

- *Sepsis lateralis* (Wiedemann)

Material examined : 10 specemens were collected from Baghdad *by sweeping net at May 2016*

This species was recorded previously to Iraq as *Sepsis* sp. by[23] and *Sepsis lateralis* by[24] Which collected from Baghdad on December 1972.

- *Sepsis sp.*

Material examined : 4 males were collected from Nejaf Provence near caracase of dog at October 2016

- *Sepsis thoracica* (Robineau –Desvoidy)

This species was previously recorded to Iraq by [3]

Genus *Austraosepsis* Malloch, 1925
Australopsis niveipennis (Becker)
This species was previously recorded to Iraq by [3]

Dicranosepsis Duda,1926
Dicranosepsis sp.
As new record to Iraq

Material examined : 4 samples were collected from Basra on March 2016 by sweeping net near Rabbit dead at decaying

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stage , and 3 sample from black rat carcasse during decay stage on April, 2016.

Diagnistic characters

Small flies in size 2-8 mm. , shining black , the head globular in shaped with larg compound eyes ., the arista bear and long, orbital bristles lacking , (plate ,1)

Wing with darck costa but without black spot at tip of R4+5, legs are long and dark brown (plate 2)

Abdomen black and with fine hairs on the end.



Plate 1: head with Arisrta



Plate 2: Abdomen and wing

4. Conclusion

Because of surveying throughout some governorates of Iraq, in this survey I found the little species , and I shall made another survey to all regions of Iraq in Different Period . The poor checklist of this family for Iraq lead to find these species.

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