

## New record of moth fly species; *Psychoda alternata* Say, 1824 (Diptera: Psychodidae: Psychodinae) from Iraq

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### ABSTRACT

*Psychoda alternata* Say, 1824 (Diptera : Psychodidae : Psychodinae) is newly recorded for fauna of Iraq . Shortly description and the important diagnostic characters are figured.

### Introduction:

The dipteran family Psychodidae or "moth-flies" is a large, worldwide group of small (1–5 mm) Diptera with approximately 2600 described species [3] and consists of five subfamilies (**Bruchomyiinae**, **Phlebotominae**, **Psychodinae**, **Sycoracinae** and **Trichomyiinae**) all of which are present in the Neotropics [4].

The adults are small insects with a maximal size of 5 mm. Body and wings are thickly covered with long flattened hairs of various colours. The pattern of this vestiture is characteristic of genera or even species groups. Many species have developed secondary sex organs, some of which produce pheromones in the males. This subfamily has been divided into three tribes: Pericomini, Telmatoscopini and Psychodini[5].

The genus *Psychoda* has Vertex shorter than width of eye bridge; palpal segment 2 subequal to 1; labellum flattened apically; antenna with 12–14 flagellomeres, antennal segments beyond 13 reduced and much smaller than preceding flagellar segments, Eyes with definite bridges, extensions 2 to 5 facets wide above antennae, Wing without hairs or scales on membrane [6,7,8], we can separate it from closely related genera by the flattened Labellum, with row of 4-5 terminal rods on each side;

### Materials and Methods

The moth fly adult were collected through 2010- 2011 in different regions of Baghdad and Diyala provinces. 150 specimen was collected by aspirator which is found in bathrooms and rodent holes ; captured specimens were preserved in 75% ethanol, and selected specimens were mounted on slides which are deposited in the Iraq Natural History Museum , the locality and date of collection were provided on the labels . The keys of [1] and [2] were used for taxonomic identification . The description adopted in this work was that proposed by[1]

### Redescription of *Psychoda alternata*

Vestiture white to pale yellow; wing vestiture very light brown, with indistinct white band at base and at middle. apices of longitudinal veins with brown spots ringed by white areas. (denuded specimens show only brown spots at apices of veins. (Fig.2a)) Head: eyes separated by distance equal to 1 to 3 facet diameters (Fig.1c); interocular suture usually absent; labrum longer than first palpal segment; labellum flattened, bearing 4 (sometimes 5) long and 1 short teeth and 3 spines; third palpal segment moderately expanded, larger in diameter than other segments, ratio of segments 9:10:9:13. (Fig.1d). Antenna with 15 segments (Fig.1e), 5/9 times length of wing; sensory filaments composed of 2 anterior and 1 posterior branches, branches short; tenninal two segments reduced in size, flagellar segments XI and XII fused together, XII smaller than XI; XIII free, very small (Fig.1f). Wing 2 1/2 times as long as wide; bifurcation

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R2+3 at middle of wing; bifurcation M1+2 mesad of R2+3 by distance equal to 2 to 3 times width of cell R3 at level of bifurcation; ratio of R2+3:R2:R3 =10:10:15.

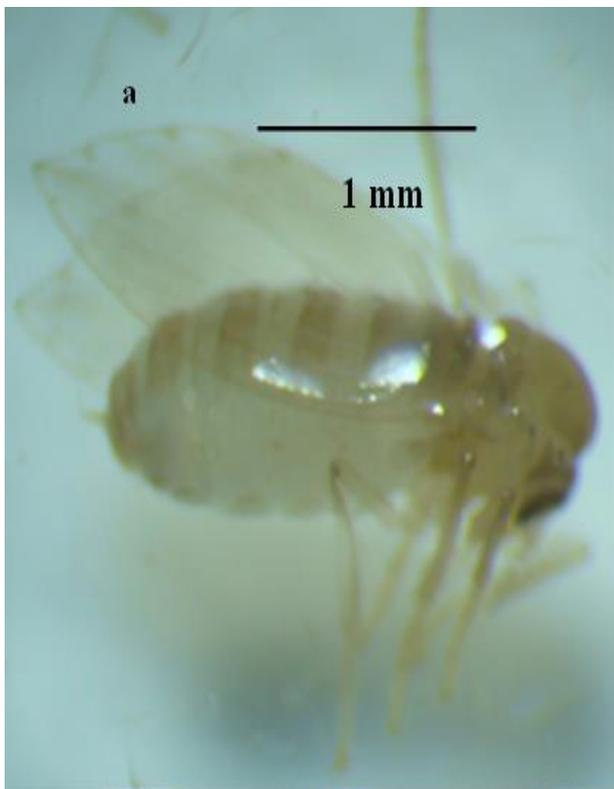
Male genitalia as figured 2b, surstyle long and slender, nearly twice as long as 9th tergite.

Female. Similar to male in size. Genitalia as figured, subgenital plate V-shaped (fig.2c).

We can separate this species from closely related species by 15 segments Antenna (Fig 1e) and presence of black hair spots at tips of veins (Fig 2a) .

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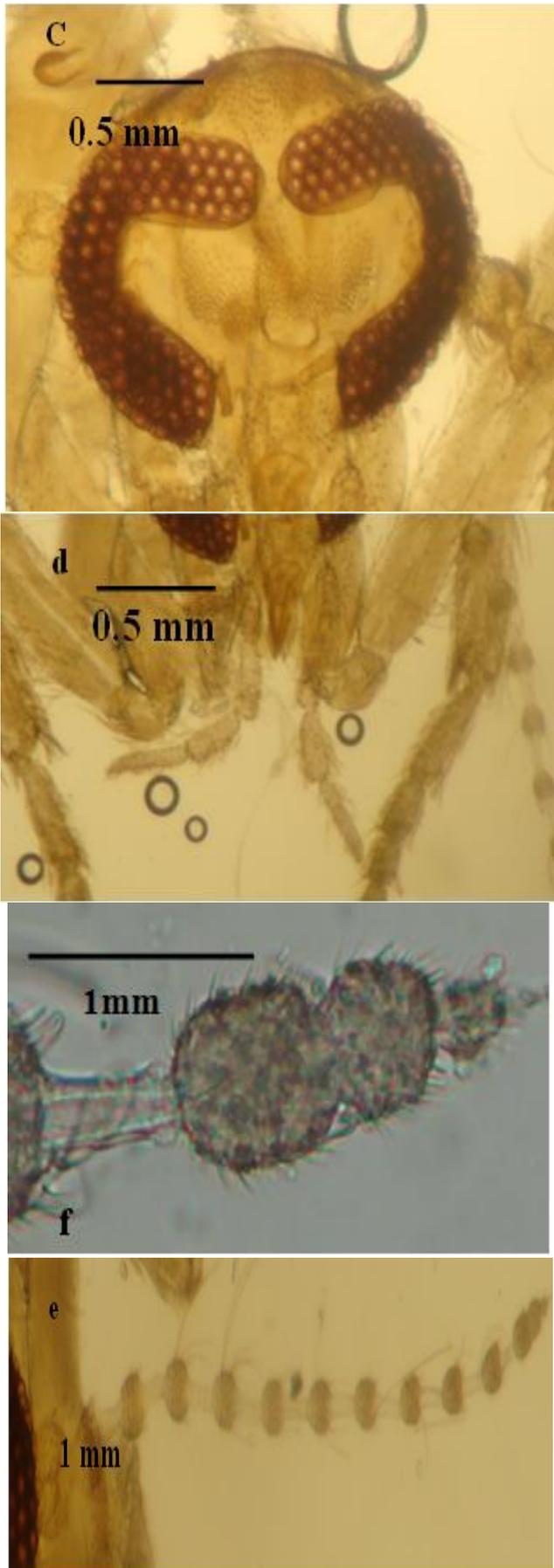


Figure 1, *Psychoda alternata* Say.. a, female; b, male; c, head; d, maxillary palpomeres; e, antenna ; f, antennal tip.

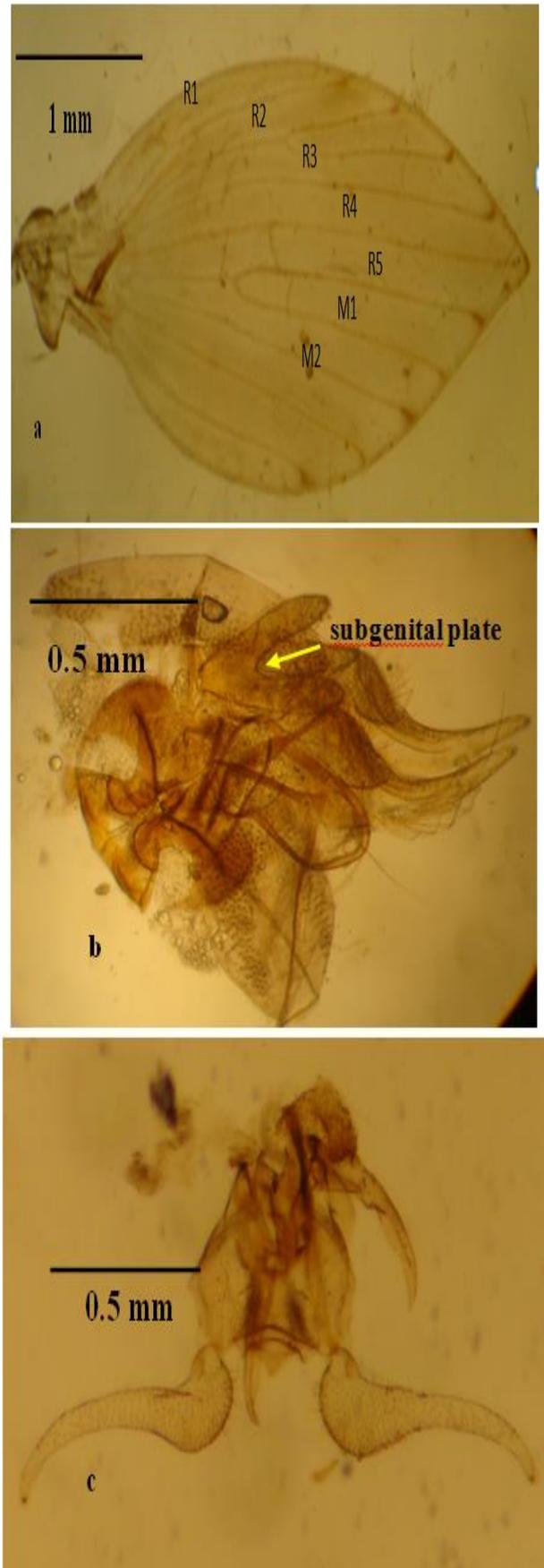


Figure 2, *P. alternata* , a, wing; b, female genitalia; lateral view; c, male genitalia dorsal view

## تسجيل جديد لذبابة العث النوع *Psychoda alternata* Say, 1824 (رتبة تنائية الاجنحة: عائلة ذباب العث: عويلة ذباب العث) من العراق.

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### الخلاصة

اضيفت ذبابة العث النوع *Psychoda alternata* Say, 1824 (رتبة تنائية الاجنحة: عائلة ذباب العث: عويلة ذباب العث) كتسجيل جديد للفونا الحشرية العراقية. حيث شملت هذه الدراسة على وصف مختصر لاهم الصفات التشخيصية لهذه الذبابة مصحوبة بالصور.