NEW RECORD OF SPECIES URENTIUS EUONYMUS 1909 (HEMIPTERA: HETEROPTERA: TINGIDAE) IN BAGHDAD

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ABSTRACT

A new record of lace bug species *Urentius euonymus* (family :Tingidae) belongs to (order: Hemiptera and sub order Heteroptera) at first time in Iraq which is collected three hundred five (350) insects (males and females) from leaves of weed *Chrozophora tinctoria* (family: Euphorbiaceae) from college of Agriculture Abu- Gharib at 20 / 7 /2017 ,and Al- jaderia at 11/9/2017, insects Indented by used a taxonomic keys, morphological characters was described. Used camera Lucida to draw bodies' part and picture by digital camera.

Key word: Lace bug. Hump. Paranota. Carinae.
***Part of M. Sc. Thesis of the 1st authour.**

تسجيل جديد للنوع *Urentius euonymus* (Hemiptera: Heteroptera: Tingidae) في بغداد

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المستخلص:

تسجيل جديد للنوع *Urentius euonymus* يعود الى عائلة البق الشبكي ورتبة متباينة الأجنحة ورتيبة البق الحقيقي في بغداد. إذ جمعت 350 حشرة (ذكور وإناث) من أوراق نبات دغل (الزريج) من كلية علوم الهندسة الزراعية أبو غريب بتاريخ 20/ 7/2017 *Chrozophora tinctoria* (family: Euphorbiaceae) ومن الجادرية بتاريخ 11/ 9/ 2017. شخصت الحشرة باستعمال المفاتيح التصنيفية. درست الصفات المظهرية للحشرات. رسمت إجزاء جسم الحشرات بواسطة كاميرا لوسد وصورت بواسطة كاميرا رقمية.

الكلمات المفتاحية: البق الشبكي. الحدبة. الامتداد على جانبي ظهر الصدر الأمامي. الخط على ظهر الدرع.
***جزء من رسالة الماجستير للباحث الأول.**

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INTRODUCTION

This family included about 2351 species belonged to 300 genus (5).The first who called lace bug for the family (14). The genus *Urentius* was recorded in Kirkuk/ Iraq on plant *Helianthemum lippii* (15). In kingdom Saudi Arabian recorded the species (17), and in Turkey (11). In Africa record the genus *Urentius* and the species *euonymus* (2). The insect species belongs to family Tingidae and to the sub order Heteroptera and order Hemiptera(4;19), called Lace bug because seems the sculptor like net on wings. All the insects are small in size, body oval in shape some time brood or cylinder and depressed at surface and ventral, the hood (Hump) extended at base of Head from mesonutum, mouth part as piercing-sucking, wings membranous with sculptor as net (10; 17; 20& 21). Female can lay hundreds of eggs in her life time as in Alabama (10). The nymph is small in size, oval in shape, dark color and carrying spins on body. It has five instars to be an adult. The insect hibernates as an egg. Both adults and nymphs feed on leaves at upper and under side (7; 9).The damage caused by adults and nymphs (6), The metamorphosis is Pauraметabola (egg-nymph-adult) and the species of this family was phytophagous (1).

MATERIALS AND METHODS

The insect samples were collected from *Chrozophora tinctoria* grown in a filed located at college of Agriculture Abu_ Gharib at 20/7/2017 ,and Al_ Gaderia at 11/9/2017, Baghdad University. Samples were transferred to lab by plastic case used by smooth brush. The host was name and date of collection were recorded.

RESULTS AND DISCUSSION

Taxonomic state :

Order **:** Hemiptera
Suborder : Heteroptera- True Bugs
Superfamily :Tingoidea
Family : Tingidae - Lace Bugs
Subfamily :Tinginae
Tribe :Tingini
Genus: *Urentius*
Species: *euonymus*

Genus: ***Urentius* Distant 1909**

The whole body is covered with spines, male brown –reddish in color female white-yellowish in color. The Head depressed on lateral, hump extent at based on head. the pronotum with 3 rows called carina the middle longer than other in side of it .the spines different between species but all it carried 3 spines on front the middle was split , the outer margin of wing carried 1-2 series of spins . The spines of lateral left Paranota has one split spine near the top (Fig 1). Tarsi was two segments. (13).

***Urentius euonymus* Distant 1909**

Synonyms:

Prionostirina nana Schumacher 1913;
Urentius abutilinus priesner and Alfieri 1953;
Urentius haggari Bergevtn 1928;
Urentius maculatus Drake 1933.

Host plant: *Chrozophora tinctoria*.

2.25-2.50 mm in length. Dark brown in color and pale in middle. Head 0.28_0.35 mm in length, 0.31 mm in width pale yellowish in color. Antenna clavate with four segments 0.51-0.57 mm in length, the first thinner than second segment, third segment longer than other with five spins on inner margin and have a small pilot on base of it, fourth segment smaller than third segment carried three seta (Fig. 2). Compound eye red in color, large and bulgy, ocelli was absent (Fig. 3). Mouth part modifies for piercing - sucking the rostrum for 5 segments (Fig. 4). Maxillary palp 3 segment (Fig. 5).

Thorax: 0.68-0.71 mm in length bearing 2 spines on each segment. There is a structure called hump (Hood) on it (Fig. 6). Scutellum extended to fifth abdominal segment. The Paranotal reflex on mesothorax carried spins on lateral side which used in taxonomic character.

Legs: 0.86-0.91 mm in length it's long and thin with different spins carried 3 middle spines and 3 on liner margin. Tibia with 5 spines on outer margin. Tarsi with 2 segments carried a pair of claws (Fig 7, 8), there is a pale ring called areola between thorax and abdomen.

Fore wing: 1.35-1.46 mm in length. Pale white in color and one series of spines on costal margin (19 spins), the sculptor case- like on medium vein (Fig 9).

Abdomen: 1.22-1.28 mm in length wider area on segments 4, 5 reddish - brown in color in male and pale yellow in female, carried 16 spines on the lateral.

Female genitalia: forming from eight and ninth abdominal segment, with 3 valves, the

first valve carried dented called egg channel. The second like solid groove used to choose placed for eggs (Fig 10).

Male genitalia: Male is different from female by length and genitalia. The paramers extended on lateral of adages yellow- brown in color. Forming from capsule adages and vesical with dentinal tip used in meeting (Fig 11).

Nymph: more brownish in color. Body carried 27 spines arrange as 5 on head 3 on (3 on frons, 2 on basal head) 16 on lateral abdomen, one on top 2 on each thorax segments. There are five nymphal instars .

DAMAGE

Both adults and nymphs sucks sap by piercing-sucking mouth parts as they feed from lower and upper surface then caused change leaves color to pale yellow to brown (8; 11& 14). The symptoms of infestation of this insect is a black spots of excrement on upper and lower surface of leaves, the eggs can be found under that excrement (Fig 12).

Material examine

About 350 adult ♂& ♀ and nymph were collected from college Agriculture / Abu- Gharib at 20 /7 /2017 and 50 insects at 11 /9/2017 from Al_Gaderia.

Distribution

This species recorded in prelatic region, north Africa, middle Asia, turkey, Syria, Palestine, Egypt, kingdom of Saudi Arabia ,Yemen , Ethiopia, Kenya, Mozambique, Namibia, Nigeria, signal, Sudan and oriental region [India and Serylanka]. This study is the first record of the species *Urentius euonymus* in Iraq.

Fig. 1

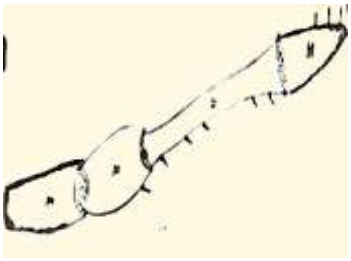

Fig. 2

Fig .3

Fig.4

Fig.5

Fig.6

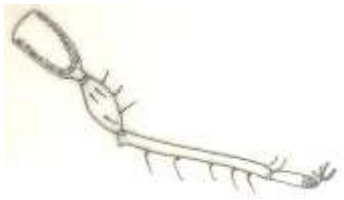

Fig.7

Fig.8

Fig.9

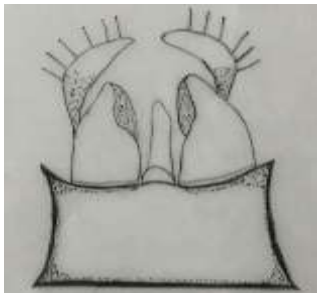

Fig.10

Fig.11

Fig.1

Fig.1. split spine near the top; 2. Antenna; 3. Compound eye; 4. Mouth parts; 5. Maxillary palp; 6. Thorax; 7&8. Legs; 9.Wings; 10. Female genitalia; 11. Male genitalia 12. Damage.

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