NEW RECORD OF SPECIES *STEPHANITIS HOBERLANDTI* HOBERLANDT 2000 IN BAGHDAD PROVINCE

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Abstract

A new record of lace bug species *Stephanitis hoberlandti* (family : Tingidae) belongs to (order: Hemiptera and sub order Heteroptera) has been collected two hundred insects (200) adult (males and females) and one hundred and twenty (120) nymph have been collected from leaves of fruit tree (*Malus domestica* and *Pyrus communis*) from different location in Baghdad province on 10/5/2017, 10/9/2017, 15/ 2/ 2017 (Abu-Gharib, Al-Mahmodia and Al-Yosifia). Insects were indentified by using taxonomic keys and morphological characters. Used camera (Lucida) has been used to draw bodies' parts and used camera to pictured.

**Key word**: Lace bug, Hump, Paranota, Carinae.

Introduction

The family included about 2351 species belong to 300 genus (Froeschner, 1996; Laporte, 1833). The first who called lace bug for the family because seems the sculptor like net on wings.

The insect under the study belongs to family Tingidae, sub order Heteroptera, order: Hemiptera (Rosetta, 2013; Drake & Ruhoff, 1965), insects are small in size, body is oval in shape sometimes broad and depressed at surface and ventral, the hood (Hump) extended at base of head from mesonutum, mouth partsare piercing-sucking, wings membranous with sculptor as net (Hesselin, 2011; Pericart. 1979; Satti, 2003).

Female can lay hundreds of eggs in her life time (Hill, 1983). The nymph is small in size, oval in shape, dark color and carrying spins on body. Nymph has five instars. The insect hibernates as an egg. Both adults and nymphs feed on leaves at upper and lower side (Ghosh, 2008) and responsible for causing damage (Gentry, 1965). Nymphs of lace bugs are also reported to produce honeydew, which covers the leaves and becomes blackened by the development of sooty mold fungi (Gouveia & Ohlendorf, 2002). The metamorphosis is Paurametabola (egg-nymph-adult) and the species of this family is phytophagous (Alford, 2016).

**Material and Methods**

Samples were collected from fruit tree (*Malus domestica* and *Pyrus communis*) from Baghdad province on 10/ 9/ 2017, 15/ 2/ 2017 from different location in Baghdad (Al-Gadriya, Al-Mahmodia and Al-yousfiya). Samples were transferred to lab by plastic case by used smooth brush. The hosts name and date of collection were recorded.
photosynthesis and transpiration (Klingeman et al., 2000). The symptoms appear on upper surface of leaves as yellowish and black spots on lower surfaces (Buntin et al., 1996). (Fig. B, C & D)

**Species Stephanitis hoberlandti Hoberlandt 2000**

**Synonyms**: *Stephanitis oschanini* (Golub, 2002)

This species is very resemble with the species *Stephanitis pyri*, but with some differences in some characters.

**Adult**: 2.14- 2.25 mm in length brown- yellowish in color. (Fig. E)

**Head**: 0.20- 0.25 mm in length. Dark brown carried 5 seta, 2 of them are in front one in the middle and 2 in the back.

**Antenna**: 1.40- 1.43 mm in length, the first is longer than the second, the third is longest the first about five times, and six times longer than the second the four segment is longer than the first and second segment and shorter than third segment.

**Thorax**: 0.54- 0.57 mm In length.

The paranota extend on each side of the pronotum; it is large and reach to base of head, and appears as cassia papers (Fig. F) and forms from 18- 19 large cell.

**Wings**: 1.92- 2.14 mm in length, the scale long with cut tip. Radius vein weak but medium vein reach to the middle of the wing. The coloration is un irregular and concentric in the middle near the inner margin. (Fig. H)

The tip an areola arranged in circular with contractionat middle inner margin. There is case on the medium vein.

**Abdomen**: is 1.8- 1.11 mm in length, pale brown in color the ovipositor carried seta on the lateral valve in female.

**Distribution**: Found in Palearctic region (Poland, Hungarian, Italia, Jordan, North of Iraq/Erbil and shaqlawa) (Lis, 2002).

Fig. G: the legs: 1- coxa, 2- trochanter, 3- femur, 4- tibia, 5- the seta on the tibia, 6- wrist. 7- the wrist contents two tarsi. Fig. H. the wings: 1-scale 2- the medium vein, 3- the sculptor like net on the wing, 4- areolae.

Conclusion and recommendation

The species under the study was collected from different plants which is cause damage and may be execute to death plants by suck the sap and excrete the honey dew that was caused a second infested. So we advise to doing more study as monitoring or observation the insects and control it.

Reference


