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Discerption and Recording Species *Orosius albicinctus* Distant, 1918 from Al- Eadim Area in Diyala Province

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***Abstract*:** *The present study including descripted species Orosius albicinctus Distant, 1918 by includes external morphological characters and the spotting patterns and photos of vertex, face, pronotum, mesonotum, shape of male abdominal basal, male genitalia including; aedeagus, connective, genital style and genital plate and in addition venation systems on fore and hind wings.*

The species under study regarded as a new record to Iraqi fauna of Cicadellidae. The specimens were collected from Diyala province in 2014

Keywords: *Orosius albicinctus, Cicadellidae, Hemiptera*

1. Introduction

THE Cicadellidae family is one of the most important and largest families to be traced back to the sub order Auchenorohynch, as members of this family are diverse in their size, colours and exterior appearance usually range between 2-23 mm and the most prominent qualities of a row or two and may reach four rows of longitudinal spines on the tibia of hind leg [1].

The Orosius genus also have their own cylindrical bodies and the general color cream white with brown spots as well as simple eyes very close to the anterior margin of the vortex. As well as sometimes noticing the united of two anal veins 1A, 2A in the area of the clavater in the fore wing [2], so can members of this genus and especially the species Orosius albicinctus transfer of many viruses among plants including chickpeas, peppers, potatoes and sesame. This has been observed in several countries, including Iran, where it has caused the stunting of plants [3]. Therefore, this species is of economic importance and has been observed in Asia, Africa and the Middle East, as well as in Australia [4, 5].

2. Materials and Methods

The samples were collected by using sweeping net and light trap, and the sampling was obtained from the Iraqi Natural History Museum, as paste the sampling on the white paper 1 × 1 cm, then save inside the insect box, and record the information about the sampling in terms of location and date collection. Then recorded the characteristic of the sampling and the body parts was separated [6] and photographed each of vertex, face, pronotum, and fore wing by Digital camera and with different zoom powers for the microscope. Both the mesonotum and hind wing were painted by the anatomy microscope, and the male genitalia was separated and placed in a test tube containing 10% KOH for the ease of separating its parts, after that put the genitalia in alcohol 70% and then in the glycerine, and examine in compound microscope powers [7].

3. Results

This species Orosius Albicinctus distant, 1918 is a new and first-time registration in Iraq.

Body: Fusiform, general color yellow with several brown spots scattered on the body surface male length 3.5 mm (pic. 1).

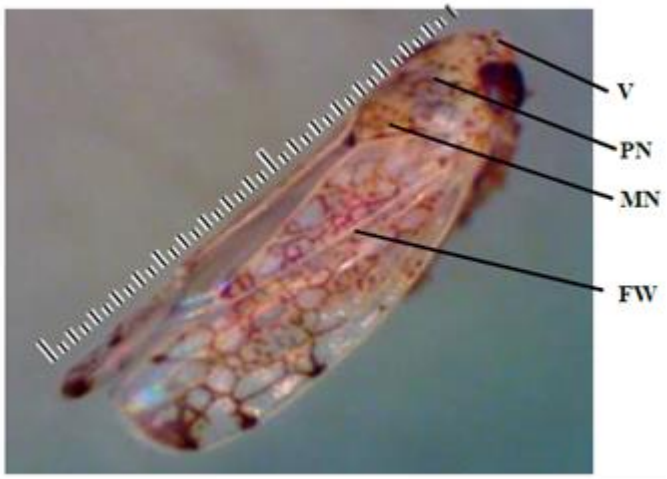

Fig. 1 Adult Insect ♂ (4x)

Vertex: Yellow, the anterior- margin AM round and prominent with a couple adjacent to the circular spots one is dark brown and the other is orange with a pair of dark opaque spots it's like glasses, the posterior lateral angle PLA is oblique. The compound eyes CE is a kidney dark red with a pair of simple eyes near the anterior margin of the compound eyes and it is a white surrounded by a red circular aura, the posterior margin PM is a little convex and there is a pair of small, slightly prolonged brown spots nearby (pic. 2).

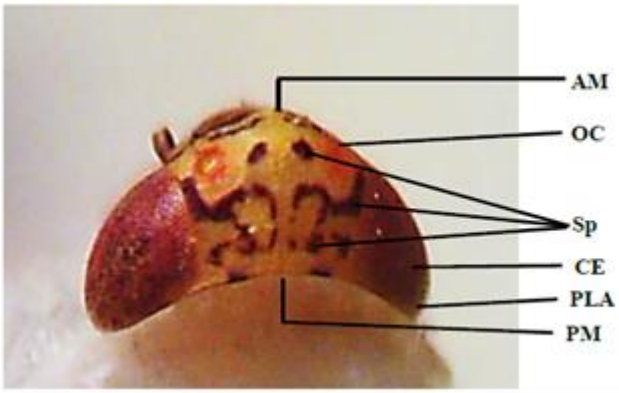

Fig. 2 Vertex (10x)

Face: A little dark yellow at the front and the clypeus, the fronto-clypeal FC is a little round with numerous brown winding spots as a parallel structure of two rows, the epistomal suture Epssu a little convex and a thick ribbon with a brownish cross. The gena G is a yellow prolong contain irregular brown spots. The lorum LO is almost oval with a brown spot and prolong irregular margin. Anterior clypeus AC wideness with a posterior sharp margin and a prolonged brown spot (pic. 3).

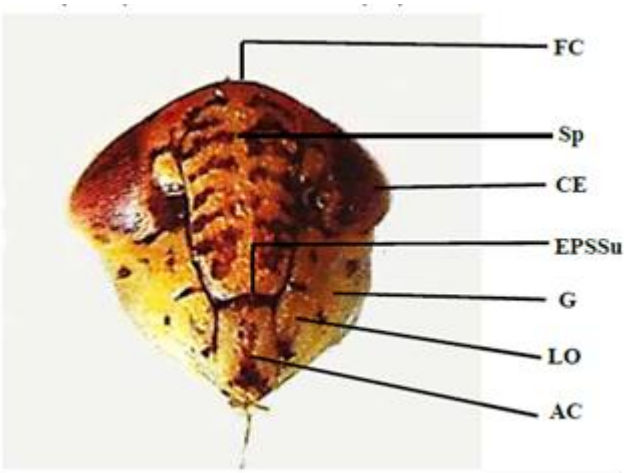

Fig. 3 Face (10x)

Pronotum: Pale yellow with a dark yellow ribbon stretching along the anterior margin AM a round with a couple of irregular brown spots as a number of brown spots are seen like with capillary blood vessels, the lateral angle LA oblique cut off the posterior margin PM almost flat (pic. 4).

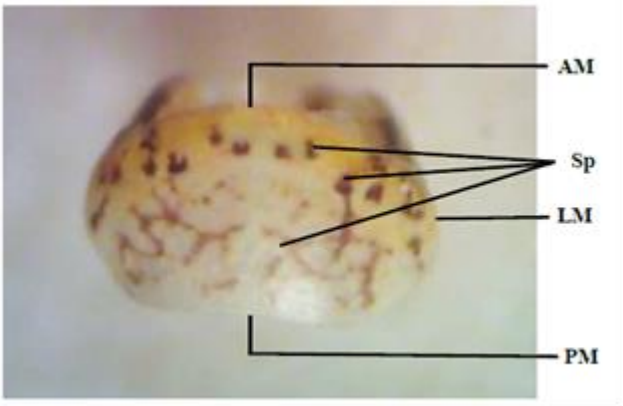

Fig. 4 Pronotum (10x)

Mesonotum: The prescutum PS is rounded and slightly forward-oriented, with a pair of dark spots, scutum ST with several pairs of spots, a pair of spots dark oblong and zigzag, the last of the dark spots and two dark circles, the lateral angle LA is almost non-prominent and round. It also notes the presence of circular spots like a dark mouth and nose. Scutellar suture SLSU is clear and the scutellum SL is oblong and tapered free-end (pic. 5).

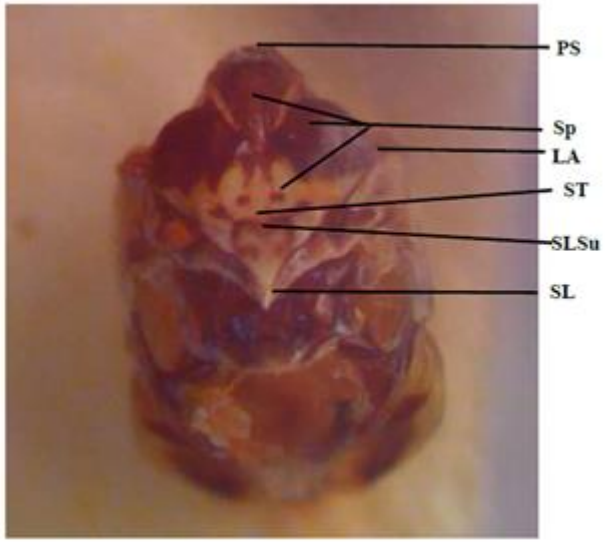

Fig. 5 Mesonotum (10x)

Front wing: pale yellow interspersed with white spots surrounded by the dark brown margin, its costal margin curved and the outer margin with the tears of its catheter. The apical margin is a round and oblique aligns it with a thick brown ribbon. There is a cross-vein in the clavate region CL, the anal vein curved inward. The inner apical cell AC is inverted hierarchical, the median apical cell MAC is the largest wide cells, and the external apical cell EAC and the costal apical cell ScAc are triangular, vein R up to the top of the wing (pic. 6).

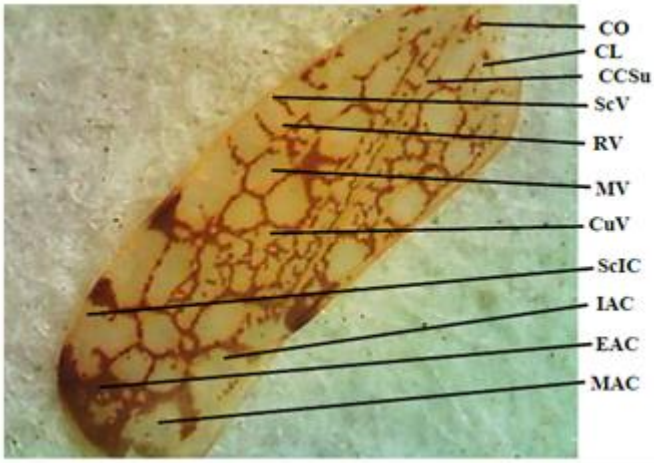

Fig. 6 Fore wing (10x)

Hind wing: translucent, glossy costal margin is convex near the base, concave in the middle of and curved at apical third, round peak, veins R, Sc is united with a cross- vein to connect to the peripheral vein PV with two points, vein A1 curved, vein 2A oblique inward slightly. There are two anal furrows AF1, AF2 represent the boundaries of wing folds, the jugum area is clear and do not have veins and its lower margin rounded and oblique. All longitudinal veins and their branches unite with the peripheral vein (fig. 1)

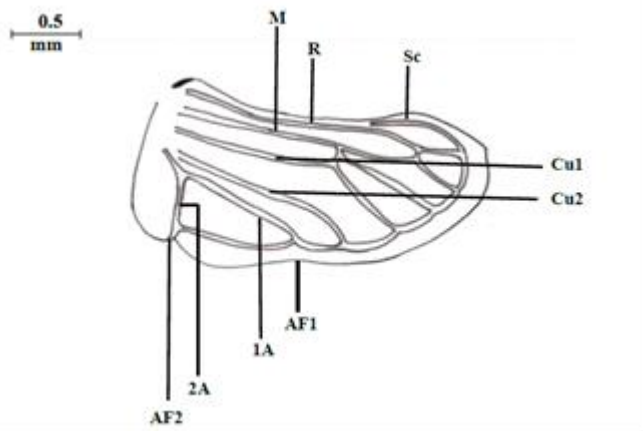

Fig. 1 Hind wing

Male Genitalia

Aedeagus: More like a bat when flying, its apex is oblongata and acute end, a base obligated and a pair of similar long prominence with cut and oblique ends (fig. 2A).

Connective: Oblong and concave apex at the midpoint with a pair of identical prominence as well as its base is bisferious into two identical halves (fig. 2B).

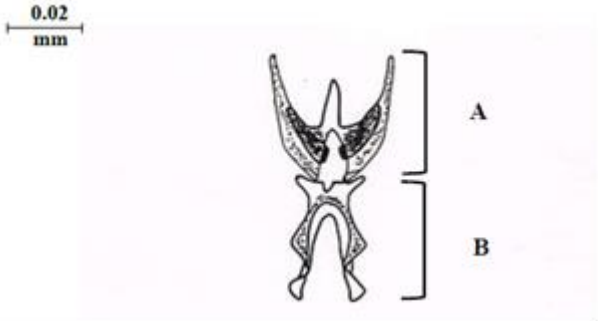

Fig. A2 Aedeagus

Fig. A2 Connective

Genital style: A prolong, flat apex, dark, scaly, and almost regular small tinkle on the outer margin, vaulted base, outer margin zigzag with an oblong prominence outward, inner margin winding and smooth (fig. 3).

Fig. 3 Genital style

Genital Plate: A prolong, round and zigzag base, with a prolonged, lobules base with flat end, the dorsal surface with large, irregular spine, inner edges zigzag and smooth (fig. 4).

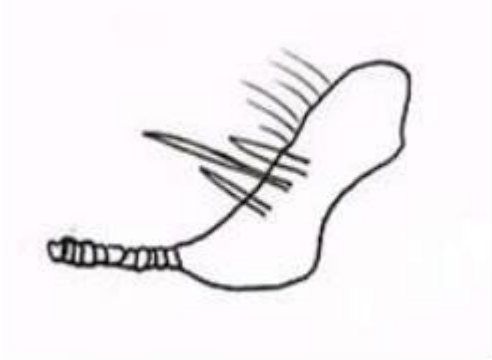

Fig. 4 Genital plate

Male basal abdominal as in fig. 5

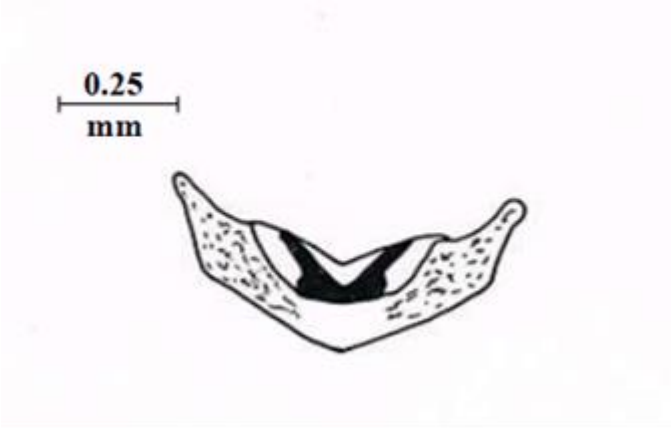

Fig. 5 Male Basal Abdominal Apodeme

Examined Samples: One male ♂ holotype
Collection places: Diyala province, April 2014.

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