

The Population of *Aphis Gossypii* Glove on the Black Grape by the Method of Direct Account

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Abstract

A field study was conducted in Yathrib province Salahuddin government to study determination of population of *Aphis gossypii* on black grapes by using the method of direct account for upper, medium and lower parts of the plant were chosen (40 plants) at randomize from one of the fields, counting had done for one plant only. Results of the study showed that the highest population density was in May (22.8) adult / tree insect, and lowest population was in June (9.7) adult / tree insect, statistical analysis showed significantly differences, while the results showed that the upper layer from plant was more effective of infection by (23.7) adult for upper layer, (17.4) adult in medium layer and (12.5) adult in lower layer plant, the statistical analysis showed significant differences between the three layers of the plant.

Keywords: adult insect, *Aphis gossypii*, population, black grapes

INTRODUCTION

Aphis gossypii glove formed a group of small insects, with soft body which presence widely with great numbers absorbed plant juice, these groups of aphid consists of different individual in different stages of growth, whereas distinguished by a pair of tubal additive at the ventral term and long antennae and two ventral addition in aphid, consists of two tubal structure worked as two tubes for wax *Aphis* discrete honey material from vent, consisting primarily from plant juice absorbed from the insect forming best food for more insect (Talhok, Abdel Moneim Salim, 1984, p 121)

Grapes trees were fruit trees internationally presence which contain fruits with good value of food every one being, included most essential feeding parts ate fresh or contain in some food industry (Dujaili, Abbas Mohammed Jabbar, 1989 p 57).

The ants (Guldemond, Thagges, wT1235_1240) grape trees have infected by agriculture diseases like aphid which said that it is essential diseases present where as there is grape tree, feed larva and adult insects by absorbing plant juice from upper and lower surface of leaves caused yellow spots become sliver color at result chlorophyll discount and then drought of leaves and dropped (Dujaili, and Alaa Abbas Jabbar, Abdul Razzaq, 1989 p 520).

Aphids infect number of plant families it any multi-families has several generations in the reaches to more than (50) generation in the year because very short. (Abu Bakr, Sadiq Aladdin Noor Aladdin 2000). One of agricultural great in gsource is chemical controlling use, however some negatives resulting from the use (Adil, Khalid Mohammed 2001, p 42)

1- Materials and Methods

A field study was conducted Yathrib / Salahuddin province / at the year 2013, which chosen Khazraj agricultural region known as grapes agriculture (40) plant were chosen at randomly from the field for the counting population for aphid insect, one of randomly plants was chosen for studying, plant was divided to three layers upper, middle and lower then leaves were counted from one plant, then counted in every layer of plant layer, offer gaining of insect in every layer on number of plants (40) to get results, which multiplied in number of leaves for every layer to get final total for every insect in the layer.

2-Statistical analysis:

Data were analyzed statistically using Duncan test multiple-range method (Duncuns Multiple Range) level of probability ($p < 0.05$) (Alrawi Khalaf Allah, 1980)

3- Results and Discussion:

Table shows (1) that the population density of aphid with the ranges and position of insect ranges duration of 4/6 to 6/6/2013 on black grapes variety, as a position of insect in the upper part of the plant reached the highest value in number (30) adult in May, while reached highest value (20.7) adult in middle part of the plant in April, where as reached to (17) adult for lower layer of the plant in April. The statistical analysis showed significant differences between different plant parts during the study. As a time the results showed that May month was superiority over all other months reached (30) adult, while reached (27.7) adult in April, and least months was in June which reached to (13.3) adult, these results agree with (Al-azzawi 1991) that the aphid insect reached to highest value in May, and the reason of this population lowering with time may be as a state of continuous

highest in temperature with time that the aphid insect can reproduce in (4-28)°C temperature and more than these degree were caused death .These results also agreed with (Black man, 1984) that the aphid insect effected by continuous highest in temperature

Table (1) shows the population density of aphids on class black grapes

Position Time	Upper	Middle	Lower	Mean of Time
April 4/2013	27.7 ± 2.11 a	20.7 1.17 bc±	15.0 ± 1.78 de	21.1 1.69 A±
May 5/2013	30.0 1.92 a±	21.3 ± 2.15 b	17.0 ± 1.08 cd	22.8 ± 1.72 A
June 6/2013	13.3 2.88 ef±	10.3 ± 2.99 f	5.6 ± 1.84 g	9.7 ± 2.57 B
Mean of Position	23.7 ± 2.30 a	17.4 ± 2.10 b	12.5 ± 1.57 c	17.8 ±1.99 A

4- Reference

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