ABSTRACT

DETERMINATIONOF THE POPULATION CHANGES AND THE LEVEL OF DAMAGE OF *Sesamia nonagrioides* Lef., (Lep.: Noctuidae) AND *Ostrinia nubilalis* Hbn., (Lep.: Crambidae) BY USING PHEROMONE TRAPS IN THE FIRST AND SECOND CROP MAIZE IN AYDIN

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The study has been conducted to determine the population changes and the level of damage of *Sesamia nonagrioides* and *Ostrinia nubilalis* by using pheromone traps in the first and second crop maize during the 2010 growing season in Çine, Germencik, Koçarlı and Nazilli. The study showed that both insects gave 2-3 generations per season and observed in large amount in the second crop compared the first crop. The amount of *Sesamia nonagrioides* has higher than *Ostrinia nubilalis.* Infastation ratio, amount of larvae, number of gallery and lenght of *Sesamia nonagrioides* increased by the time of harvest. Larvae were mostly seen at the low parts of the stem. Both pest were found at the ears, however the damages by the two pests were not economicly important. A negative correlation was found between the larvae amounts and the plant length, height, weight, diameter, number of corncob, wet and dry corn yield of *Sesamia nonagrioides* and *Ostrina nubilalis.* A positive correlation was found between the diameter of stem and the length of ear, but it was not statistically significant. A negative correlation was found between the number of gallery and the length of total gallery of *Ostrinia nubilalis* and agronomic values, but it was not remarkable. On the other hand, the negative correlation was observed between the number of gallery and total gallery length of *Sesamia nonagrioides* and agronomic values, it was significantly important. As a result, it was revealed that *Sesamia nonagrioides* was a potential pest in the second crop and rather than the amount of larvae, the length of total gallery had important role in yield values. Thus, it is suggested that more studies on the tolerance should be adviced against the *S. nonagrioides.*

Key Words: *Sesamia nonagrioides*, *Ostrinia nubilalis*, Pheromone, Maize