

SOME MORPHOLOGICAL AND BIO-ECOLOGICAL STUDIES ON *Edwardsiana rosae* L. (1)

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SUMMARY

The rose leafhopper is a sucking insect of orchard trees and has a world-wide distribution. It is reported from Europe and exists in U.S.S.R., Sudan, western part of the United States and Iran.

E. rosae is a polyphagous insect and removes excessive amounts of sap and causes leaves to become covered with white or yellowish spots.

The amount of injury is dependent on the density of the population.

Apples, pearc, plums, quinces, vines, sour cherries, strawberries, fox-tails, roses, plane trees, elm trees and many other plants are recorded among the hosts of this leaf hopper.

There are two kinds of eggs which are diapausing and non-diapausing forms, and although both forms are similar in shape and colour, but they differ in size. Non-diapausing eggs are smaller and bear some dark spots.

The rose leafhopper has 5 nymphal instars which all look alike morphologically, but they are distinguishable by the size, location of the setae on the body, the length of the wing and the width of the head and thorax (See figure 2 and table 1 in Farsi text).

This species overwinters in the form of diapaused eggs under the bark of the host trees. The eggs hatch at the end of March. The nymphal stage is about 25 days and the overwintered generation lays the non-diapausing eggs in the apple leaf tissues.

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Under Karadj conditions (near Tehran), this species has 4 generations per year. The first 3 generations require 50-60 days each but the fourth generation which is the longest one takes six to seven months to accomplish (For further details refer to the figures and tables in Farsi text. They are represented in both Farsi and English languages).

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