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SOME BIOLOGICAL STUDIES ON *Parmacella ibera* Eichw.

IN IRAN¹

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SUMMARY

Damage of mollusks as agricultural pests is very common among some species of Limacidae family.

The present paper deals with the most common and most important slugs in Iran from the farmers' point of view.

Characteristics:

The whole body length 100 - 110mm. It is variable in colour, depending on the genetical variation and different altitudes.

In southern shore of Caspian Sea in the northern part of Iran, colour is usually mottled dark grey or mottled light grayish brown with black streaks. Keel is well - defined along the back.

Biological features :

In the Mazandaran province mating occurs in the spring. It may take several hours and each partner fertilizes the other. The white spherical eggs are laid in batches of 33. 7 in average in May under the fallen, decaying leaves of

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trees, in crevices in the soil or under any sort of suitable protection. Duration of eggs hatching is 28. 3 days, on the average under the laboratory conditions (see the Table in Farsi text).

However, in the natural condition, the eggs hatch sometime before July as no eggs were found anywhere afterwards. The newly hatched larvae have their shells exposed, but later as they grow up, the mantle covers the shell and the shells disappear.

During the summer the larvae tend to aestivate when they do not feed and their activities cease. As soon as the temperature falls in the late summer the larvae become active and start to feed on the leaves of different cultivated plants and are able to withstand the moderate winter of the Province. The life cycle takes 12 - 13 months.

The amount of damage depends on the density of the population. Many plants of the families Legumionaceae, Solanaceae, Cruciferae, Alliaceae and also citrus and ornamental plants are injured by the attacks of these slugs.

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