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RESEARCH ON THE BIOLOGY OF *Oulema melanopus* L. AND ITS CONTROL IN THE ESFAHAN PROVINCE OF IBAN[1]

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SUMMARY

Overwintering adults leave their hibernating sites and appear at the beginning of April. They attack the spring sown wheat at the mid of April . The eggs are laid after seven days, as singles or clusters of 2 - 5 eggs on the uppersides of the leaves, near the sheaths (Table 1). Each female lay 17 eggs in the laboratory (Table 2). At the temperature of about 22 degrees C. the neonate larvae appear seven days after the deposition of the eggs (Table 3.) There appear whitened strips on the leaves because of the larvae' s feeding (Flg. 1). The larvae are installed mostly on the flag leaves (Table 4). It takes 24 - 26 days for the larvae to accomplish their development. Pupation takes place in the soil (in Table 5 the pupation period is discussed). The beetles f ly to the gramineous plants alongside the irrigation ditches. We have found that 8 - 10 percent of these beetles copulate and females (with swollen abdomens) lay the eggs on these plents. The appearance of the larvae of the second generation coincides with the time when the irrigation is stopped and the host plants are grazed, and these are the main reasons of their inability to complete their development. The non - copulated beetles migrate to clover and lucern fields.

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In the autumn they fly to the fruit trees to hibernate under the barks of the trunks. The host plants of the beetles and the larvae are : barley, corn, spring sown wheat and weeds such as *Setaria* sp., *phalaris* sp., *Cynedon dactylon*, *Cyperus rotundus* and *Avena fatua*.

Fentron 50 EC 1. 25 L/ha, Fenitrothion 50 EC 1. 25L/ ha, Dizainon 60 EC 1L/ ha and Hostathion 40 EC 1. 5L/ha were applied against the larvae of the insect in the wheat fields. There was a siginficant reduction of the popu - lation compared with the untreated plots (Table 6).

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