TRIALS ON THE NEW RICE HERBICIDES

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Summary

Several herbicides were tested to determine the effectiveness of them for weeds in rice paddies, both before and after transplantation of rice plant and also in direct-sowing. 7 and 10 L/Ha of Bentiocarb 50% EC both in pre and post transplanting and 50 Kg/Ha of Oxadiazone (Ron-star) 2 days before transplanting showed good herbicidal activities. In some case Oxadizone had slight phytotoxicity on rice plant but soon disappeared and caused no significant reduction in yeild. 60 Kg/Ha of MO–9g was not as effective as two above mentioned herbicides.

40 Kg/Ha of (M0+2.4.D.) specially in case of two applications caused severe phytotoxicity on rice plant and also reduction in yeild. M0–9g in rate of 35 and 50 Kg/Ha and Benthiocarb in rate of 7 and 10 L/Ha were tested in direct sowed rice fields with 2 rice varieties. Both caused severe damage to germinated rice seeds and did not show good herbicidal activities. Between varieties, Champa was more resistant than variety Dom-zard.

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WATER-MELON WEEVIL (1)
ACYTOPEUS CURVIROSTRIS PERSICUS THOMBSON

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Life history

This insect has three generations in a year and pass the winter in the adult stage in dried fruits remained in the fields.

It originally attacks *Citrullus colocynthus* but along with the extension of cultivated cucurbits it has spread its field of activity and now is known as one of the most important pests of melon, water-melon, cucumber and other cucurbits in the region of Esfahan, Ahvaz, Kerman and Shiraz.

The adults deposit eggs in two ways; in one way the eggs are laid in groups of up to 38 on a single fruit. In this case the fruit will be destroyed totally by the larvae feeding inside the fruit. In the other way the eggs are laid sparsely on the fruit up to 8 eggs, in this case the fruit will support the attack.

Control measures

1 – It has been frequently remarked that in case of dense plantation while the bushes are very near to one another, the infestation is high. It is proposed to plant cucurbits sufficiently spaced and on rows.

2 – The dried remaining fruits on the field should be collected and destroyed after harvest.

3 – The bushes of *Citrullus colocynthus* grown around the fields and forming the permanent shelters for this insect should be destroyed.

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