| Project Title | : | The Usage of Orgalloy Barrier Film to Reduce The Application |
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| | | Doses of Methyl Bromide in Soil Fumigation |

Start /End Date : 1999-2002

Supporting Body : GDAR

Leader : Bilge MISIRLIOĞLU

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Summary : This project was carried out with aim to determine the possibilities of using of Orgalloy barrier film in application of soil fumigant methyl bromide (MeBr) against root-knot nematodes (*Meloidogyne* spp.) in greenhouses, soil borne diseases in vegetable seedlings and weeds in tobacco nurseries in Aegean region.

As a result of the experiments against the nematodes in 1999-2001 years, it was found that the effect of chemical used in doses 30 and 40 g/m² applied with orgalloy barrier film was near the same with licensed dose $60g/m^2$ (average 95%) applied with normal polyethylene cover. As a result, it was concluded that 30 g/m² MeBr+Orgalloy barrier film is acceptable on the control of root-knot nematodes in greenhouses for growing of tomatoes and cucumber, in Aegean region conditions.

The results of experiments against soil borne diseases in vegetable seedlings showed the possibility of using of $30g /m^2$ dose of methyl bromide applied with Orgalloy barrier film.

The experiments against weeds were conducted in 1999-2000 years in tobacco seedlings in Manisa-Gülbahçe and Balıkesir-Sındırgı regions where have different ecological conditions. In 1999 year the results of experiment in Manisa-Gülbahçe were hopeful. But the experiment was conducted in Balıkesir-Sındırgı failed because of high phytotoxicity methyl bromide.

In 2000 the experiments were conducted again at the same places but unfavorable weather conditions were due to their failure. So there was no chance to give any recommendations about using of methyl bromide applied with Orgalloy barrier film in tobacco seedlings.