PEPPERMINT IPM: CULMINATION OF A FOUR YEAR PROGRAM

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The termination of the 1981 growing season marks the end of a four year peppermint pest management program offered by the O.S.U. Extension Service. The program was initiated in Central Oregon and the Willamette Valley, which jointly produce 88% of Oregon's peppermint oil. The 3 year Central Oregon program was taken over by private industry. The 4 year Willamette Valley program which was concluded this last fall is currently being offered by private consultants and a fertilizer distributor.

At the end of the 1981 peppermint season a telephone survey of firms offering IPM services and retail firms marketing pesticides under non-IPM program was made to determine the percentage of acres treated under each program. Results summarized below:

Pest	Pesticide	Per Acre Control Cost	% Acres Treated IPM Monitored	% Acres Treated non-IPM Monitored	Total Expenditures, Pest Control- IPM Monitored 1/	Total Expenditures, Pest Control- non-IPM Monitored 1/	Magnitude of Difference for Acreage Treated: IPM vs non-IPM 2/
cutworms and loopers	Orthene	$11.00	31.0	37.8	$4,433	$5,405.40	18
mint flea beetle	Methomyl	$15.00	1.3	1.8	$254	$351	28
garden symphylan	Dyfonate	$15.00	30.6	32.6	$5,986.50	$6,357	6
strawberry root weevil	Furadan	$23.00	11.0	20.0	$3,289	$5,980	55
mint root borer	Furadan	$23.00	37.7	23.8	$11,272.30	$7,116.20	37
two-spotted spider mite	Comite	$13.00	14.7	3.3	$2,484.30	$557.70	77

1/ per 1300 acres

2/ expressed as a percentage

Participants of the IPM program spent approximately 7% more on chemicals than "non-IPM" growers in 1981. The increase was due to predictive sampling and the correlation of pest density to established economic thresholds. Several of the fields in the IPM program were spot-treated from which growers realized both short-term and long-term benefits. The benefits include reduced pesticide expenditures, conservation of natural enemies, a decreased rate of resistance development by pests, and a reduction of the pesticide load in the environment.