

**ARDP ANNUAL MEETING REPORT, DECEMBER 1999**

**TITLE: Management of Obliquebanded Leafroller Damage and Insecticide Resistance With a Biorational Insecticide Program**

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During the spring of 1999 prior to bloom, OBLR were collected from 5 commercial orchards in which biorational insecticide programs were began to assess the baseline susceptibility of each population to the commonly used organophosphate insecticides, azinphosmethyl and chlorpyrifos. The susceptibility of populations in these orchards were compared to that of OBLR from a susceptible colony (Lyons Colony) in laboratory bioassays. The percentages of mortality of the F1 generation of larvae from each population in the laboratory bioassay are shown in the table presented below:

Population Source	Guthion 10 ppm	Lorsban 1 ppm
Orcharddale	10.8	3.3
Lynoaken Farms	20.4	6.5
Enders	17.4	21.6
Burnap	40.0	22.1
Furber	27.4	19.5
Trickler	82.2	47.4
Lyons	100.0	95.5

These results show that although there is some variability in response among the different sites, all populations are more resistant than the susceptible Lyons population. Subsequent bioassays will be conducted to determine if these levels of resistance change during the experiment in the next two-three seasons due to reduced selection pressure from non-use of organophosphate insecticides.

For a printed copy of the entire report, please contact the NYS IPM office at:

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