

Section VII

Insecticide Residues, Regulations, Application and Related Problems

METHIOCARB RESIDUES IN GRAPES AND WINE

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The insecticide methiocarb (Mesurol, 3,5-dimethyl-4-(methylthio) phenyl methylcarbamate) has been found effective as a bird repellent on grapes in Oregon. Studies were undertaken to determine the residues of this compound in grapes and their fate during vinification using a gas chromatographic method. Total residues (methiocarb and its oxidative metabolites) in Pinot noir and White Riesling grapes treated 4 times at 4.5 kg/ha and harvested 1 day after last application ranged from 6.1 ppm to 58 ppm depending on the method of application. A substantial portion of the methiocarb residues was lost during the vinification process as shown in the following table:

| sample | Residue, ppm | |
|---------------|--------------|----------------|
| | Pinot noir | White Riesling |
| grapes | 22 | 38 |
| must or juice | 10 | 15 |
| pomace | 28 | 40 |
| wine | 7.4 | 4.8 |