## Section VIII Mites & Sap-Sucking Pests

Leafhopper Virginia creeper *Erythroneura ziczac* Walsh, and the western grape leafhopper, *Erythroneura elegantula* Osborn Control in Wine Grapes var. 'Muscat Canelli'

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Insecticides were screened for their ability to control leafhopper nymphs in wine grapes. On August 19, 2004, field plots were established near Horsethief Point, Washington State, USA. Plots were 10 ft. wide and 40 ft. long and were replicated four times in a complete random block design. Insecticides were applied on August 19, 2004 using a hand gun on an ATV mounted sprayer. Ten leaves per plot were collected weekly and transported to the laboratory where leafhopper nymphs were counted under a stereoscope.

The first week after insecticide applications all compounds tested reduced leafhopper nymph abundance better than the untreated check, with the exception of the Applaud treatment of 0.525 lb. a.i./acre. The second week after insecticide application all compounds tested provided better leafhopper nymph control compared to the untreated check, with the exception of the Avaunt treatment of 0.11 lb. a.i./acre.

| Trade name      | Active Ingredient | Rate          | Mean nymphs per leaf | Mean nymphs per leaf | Mean nymphs per leaf |
|-----------------|-------------------|---------------|----------------------|----------------------|----------------------|
|                 |                   |               | 19 August            | 23 August            | 31 August            |
| Untreated check |                   |               | 3.950a               | 16.850a              | 18.600a              |
| Actara          | thiamethoxam      | 0.043 lb ai/A | 5.350a               | 0.900Ь               | 1.200ь               |
| Applaud 70 WP   | buprofezin        | 0.394 lb ai/A | 1.650a               | 1.850b               | 2.800b               |
| Applaud 70 WP   | buprofezin        | 0.525 lb ai/A | 2.000a               | 10.100a              | 2.525b               |
| Assail          | acetimiprid       | 0.02 lb ai/A  | 0.300a               | 0.733b               | 0.350b               |
| Avaunt          | indoxacarb        | 0.09 lb ai/A  | 2.900a               | 1.725b               | 1.788b               |
| Avaunt          | indoxacarb        | 0.11 lb ai/A  | 3.175a               | 5.475b               | 7.800a               |
| Danitol 2.4 EC  | fenpropathrin     | 0.4 lb ai/A   | 0.250a               | 4.300b               | 0.667b               |
| Fujimite 5%     | fenpyroximate     | 2 pt/A        | 1.600a               | 4.150b               | 2.367b               |
| NNI-750C        | buprofezin &      | 0.5 lb ai/A   | 1.333a               | 2.350b               | 5.950b               |
|                 | chlorpyrifos      |               |                      |                      |                      |
| Provado         | imidacloprid      | 0.033 lb ai/A | 1.400a               | 1.200b               | 1.067b               |

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