FESCUE (RED): Festuca rubra L.
BLUEGRASS (KENTUCKY): Poa pratensis L.
STRAWBERRY (WILD): Fragaria sp.

Hairy chinch bug (HCB): Blissus leucopterus hirtus Montandon

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PREVENTIVE AND CURATIVE TESTS OF MERIT, TEMPO AND DURSBAN ON HAIRY
CHINCH BUG (TRIAL NO. 1), 1999: This test was conducted on an athletic field at Holderness School,
Holderness, NH. The grass was mowed at 3-inch ht. The preventive treatments were applied on 4 May to
adults; the curative treatments were applied on 22 Jun to 1st and 2nd instars. The plots were 49 ft², replicated
four times, in a RCB design. The liquid treatments were applied from a 7-ft boom, on a 2-wheel, bicycle-type
CO₂ sprayer. The boom was equipped with four 8005 fan-type nozzles, fitted with 50-mesh screens.
The volume of insecticide and water mix was 2 gal/1000 ft², delivered at 40 psi. The granular treatments
were applied using large salt shakers. Weather conditions on 4 May (preventive treatments) were as follows:
sky, moderated rain; wind, calm; air temp, 59°F; soil surface temp, 60.1°F; at 1-inch depth, 56.8°F. Weather
conditions on 22 Jun (curative treatments) were as follows: sky, clear; wind, calm; air temp, 64.6°F; soil
surface temp, 62.2°F; 1-inch, 64.4°F. Soil composition is as follows: texture, loam; sand, 47%; silt, 41%;
clay, 12%; organic matter, 6.2%; moisture, 15.4%; thatch, 0.25 inch; pH, 5.2. The preventive plots were
rated, using the floatation method, for live nymphs and adults 14, 27, 41, and 62 DAT; the curative plots
were rated 14 DAT.

Merit applied as a preventive measure provided good control, equivalent to Tempo and Dursban applied as
curative treatments. No phytotoxicity was observed.

<table>
<thead>
<tr>
<th>Treatment formulation</th>
<th>Rate lb (Al)/acre</th>
<th>18 May</th>
<th>1 Jun</th>
<th>15 Jun</th>
<th>6 Jul</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. HCB/0.69ft²</td>
<td>%</td>
<td>No. HCB/0.69ft²</td>
<td>%</td>
<td>No. HCB/0.69ft²</td>
</tr>
<tr>
<td>Merit 0.5G³</td>
<td>0.3</td>
<td>0.3a</td>
<td>91.4</td>
<td>0.0a</td>
<td>100</td>
</tr>
<tr>
<td>Merit 0.5G³</td>
<td>0.4</td>
<td>2.0a</td>
<td>42.9</td>
<td>0.3a</td>
<td>76.9</td>
</tr>
<tr>
<td>Tempo Ultra</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tempo WP³</td>
<td>0.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dursban Pro</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Untreated check</td>
<td>—</td>
<td>3.5a</td>
<td></td>
<td>1.3a</td>
<td></td>
</tr>
</tbody>
</table>

Means followed by the same letter in a column are not significantly different (P=0.05, DMRT). Square root transformations of [x + 1] used for analysis.
³Applied 4 May.
²Applied 22 Jun.