Tobacco Insecticide Update

Andy Bailey
Major Tobacco Insect Pests and IPM

• **Aphids:**
  – Colonies of 50 or more aphids per plant on at least 10% of plants through topping.

• **Fleabeetles:**
  – ≥ 3 fleabeetles/plant in first 2 weeks
  – ≥ 10 per plant at 2 to 4 weeks
  – ≥ 60 per plant after 4 weeks
Major Tobacco Insect Pests and IPM

• Budworms:
  – 5 or more budworms per 50 plants
  – 3 weeks through topping

• Hornworms:
  – 5 or more hornworms per 50 plants
  – 3 weeks through harvest
  – Do not count if white cocoons (parasites) present
Occasional Pests

• Stinkbugs:
  – Generally strike top of midrib on individual leaf and cause leaf to wilt, scald
  – No need to treat unless stinkbugs are found in the field
  – Acephate/Orthene, Warrior

• Grasshoppers:
  – ≥10 grasshopper per 50 plants
  – Acephate/Orthene, Warrior
  – Consider field border treatment
Residual Insecticides for Tobacco

- Tray Drench/Transplant Water products for aphid/flea beetle control: *neonicotinoids*
  - Admire Pro (imidicloprid)
    - 0.5-1.2 oz/1000 plants, tray drench or transplant water
    - Several generics (Alias, Widow, etc.)
    - ≥ 8 weeks aphid control
  - Platinum (thiamethoxam)
    - 0.5-1.3 oz/1000 plants, tray drench or transplant water
    - ≥ 8 weeks aphid control

- Transplant water application for residual worm (hornworm, budworm control):
  - Coragen (chlorantraniliprole) – 5 to 7 oz/A in TPW (150+ gal/A)
  - ≥ 7 weeks worm control
DuPont Insecticides

Group 28 Insecticides

• Coragen – Rynaxypyr, Chlorantraniliprole
  – Registered for tobacco since 2010
  – Use in transplant water and foliar for worm control
    • Hornworm and budworm

• Verimark – Cyazypyr, Cyantraniliprole
  – Should be registered for tobacco by mid-season 2015
  – Use as tray drench for aphid, fleabeetle and worm control
  – Data suggests more effective against aphids
Verimark

- 13.5 oz/A as a traydrench
  - 2-3 oz/1000 plants depending on plant population

- Data suggests that Verimark may not last as long for aphid control as imidicloprid (Admire Pro)
  - 6-7 weeks control for Verimark
  - 8 weeks control for Admire Pro

- May only be registered for tray drench applications
- Registration may come too late for any use in 2015
- May only be widely used for aphid control if neonicotinoid insecticides are eliminated.
## Insecticides for Foliar Use on Tobacco

<table>
<thead>
<tr>
<th>Insecticides</th>
<th>Insects Controlled</th>
<th>Harvest Interval (Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bt products (Dipel, Javelin, etc.)</td>
<td>Worms only</td>
<td>0</td>
</tr>
<tr>
<td><em>Sevin 80S</em></td>
<td>Broad Spectrum</td>
<td>0</td>
</tr>
<tr>
<td>Coragen</td>
<td>Worms Only</td>
<td>1</td>
</tr>
<tr>
<td>Tracer 4SC/Blackhawk</td>
<td>Worms Only</td>
<td>3</td>
</tr>
<tr>
<td><em>Acephate products (Orthene, etc.)</em></td>
<td>Broad Spectrum</td>
<td>3</td>
</tr>
<tr>
<td>Assail</td>
<td>Broad spectrum</td>
<td>7</td>
</tr>
<tr>
<td>Fulfill</td>
<td>Aphids only</td>
<td>14</td>
</tr>
<tr>
<td>Actara</td>
<td>Aphids</td>
<td>14</td>
</tr>
<tr>
<td>Provado</td>
<td>Aphids</td>
<td>14</td>
</tr>
<tr>
<td>Denim 0.16 EC</td>
<td>Worm Only</td>
<td>14</td>
</tr>
<tr>
<td>Belt</td>
<td>Worms Only</td>
<td>14</td>
</tr>
<tr>
<td>Belay</td>
<td>Broad spectrum</td>
<td>14</td>
</tr>
<tr>
<td>Voliam-Flexi, Endigo (<em>Warrior + Platinum</em>)</td>
<td>Broad spectrum</td>
<td>14</td>
</tr>
<tr>
<td><em>Lannate LV or SP</em></td>
<td>Broad Spectrum</td>
<td>14</td>
</tr>
<tr>
<td><em>Capture (Brigade, Brigadier)</em></td>
<td>Broad Spectrum</td>
<td>No later than Lay-by</td>
</tr>
<tr>
<td><em>Warrior 1 CS</em></td>
<td>Broad Spectrum</td>
<td>40</td>
</tr>
<tr>
<td><em>Voliam-Xpress, Besiege (Warrior + Coragen)</em></td>
<td>Broad Spectrum</td>
<td>40</td>
</tr>
</tbody>
</table>