## WEED CONTROL IN TOBACCO

*Mike Marshall, Extension Weed Specialist*

### Preplant Incorporated Herbicides for Weed Management in Tobacco

<table>
<thead>
<tr>
<th>Herbicide</th>
<th>Rate/Acre Broadcast</th>
<th>Active Ingredient</th>
<th>Mode of Action</th>
<th>Preharvest Interval</th>
<th>Restricted Entry Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Command 3ME</td>
<td>2.0-2.67 pt</td>
<td>0.75-1.0 lb</td>
<td>13</td>
<td>65 days</td>
<td>12 hours</td>
</tr>
<tr>
<td>(clomazone)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments:** Apply COMMAND to the soil surface as a broadcast spray and incorporate using shallow tillage (less than 2 inches). Excellent control of prickly sida and annual grasses. Good control of ragweed. See label for other restrictions and drift control measures. COMMAND may persist and cause injury to small grain cover crops, see label for details. COMMAND may be applied up to 7 days after transplanting.

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Devrinol 2EC</td>
<td>2.0-4.0 qt</td>
<td>1.0-2.0 lb</td>
<td>15</td>
<td>70 days</td>
<td>24 hours</td>
</tr>
<tr>
<td>(napropamide)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments:** Apply DEVRINOL preplant incorporated by shallow disking. Controls pigweed, ragweed and other broadleaf weeds. Use the higher rate for fields with a history of heavy weed infestations. Will not control morningglories. Do not exceed 2.0 lb ai/A DEVRINOL per cropping season. Do not apply DEVRINOL more than once per cropping season.

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Prowl H2O 3.8EC</td>
<td>2.0 pt</td>
<td>0.95 lb</td>
<td>3</td>
<td>---</td>
<td>24 hours</td>
</tr>
<tr>
<td>(pendimethalin)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Comments:** Apply PROWL broadcast on the soil surface and incorporate up to 60 days before transplanting. Increase rate where weed pressure is heavy. Controls small seeded annual grasses and broadleaf weeds.

<table>
<thead>
<tr>
<th>Herbicide</th>
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<th>Restricted Entry Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>TILLAM 6E</td>
<td>2.67 qt</td>
<td>6.0 lb</td>
<td>8</td>
<td>---</td>
<td>12 hours</td>
</tr>
<tr>
<td>(pebulate)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments:** Apply TILLAM and incorporate immediately to prevent evaporation of TILLAM with a tandem disk set to cut 6" deep. For best results, run the tandem disk in two different directions (cross disk). Drag with a spike tooth harrow or cultipacker to help seal TILLAM in soil. Provides good control of most grasses and nutsedge. TILLAM is not persistent in the soil and weeds germinating late in the season will not be controlled.

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<td>12 hours</td>
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<tr>
<td>(pebulate)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Devrinol 2EC</td>
<td>2.0-4.0 qt</td>
<td>1.0-2.0 lb</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(napropamide)</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Devrinol 50DF/DF-XT</td>
<td>2.0-4.0 lb</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments:** Apply DEVRINOL + TILLAM preplant incorporated by shallow disking. This combination will provide control of nutsedge and annual grasses and broadleaves. Apply up to 3 weeks before transplanting. Do not apply more than 1 gallon/A of DEVRINOL 2EC per season. Do not make more than 1 application of DEVRINOL per season. Use lower rate on coarse-textured soils.
**Pretransplant (Surface Applied) Herbicides for Weed Management in Tobacco**

<table>
<thead>
<tr>
<th>Herbicide</th>
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<th>Mode of Action</th>
<th>Preharvest Interval</th>
<th>Restricted Entry Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spartan 4F (sulfentrazone)</td>
<td>6.0-8.0 fl oz</td>
<td></td>
<td></td>
<td>12 hours</td>
</tr>
<tr>
<td></td>
<td>0.19-0.25 lb</td>
<td>14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments:** Apply SPARTAN 4F to the soil surface following land preparation from 14 days up to 12 hours before transplanting. If beds are formed before transplanting, the top of the beds should be knocked down prior to application of SPARTAN. Sprayer calibration and good agitation are essential with application of SPARTAN. Avoid excessive overlap of spray swaths. Excellent control of morningglory, pigweed, lambsquarters and yellow nutsedge. Do not apply SPARTAN over the top of transplanted tobacco as crop injury may occur. Tank mix with COMMAND or PROWL for improved grass control. Do not apply more than 12 fl oz/A of SPARTAN per 12-month period. Do not apply SPARTAN to soils classified as sands with less than 1.0% organic matter. Do not use SPARTAN in tobacco seeding beds or greenhouses.

<table>
<thead>
<tr>
<th>Herbicide</th>
<th>Rate/Acre Broadcast</th>
<th>Mode of Action</th>
<th>Preharvest Interval</th>
<th>Restricted Entry Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spartan Charge 3.5F (carfentrazone + sulfentrazone)</td>
<td>5.7-10.2 fl oz</td>
<td>14</td>
<td></td>
<td>12 hours</td>
</tr>
<tr>
<td></td>
<td>0.016-0.028 lb + 0.16-0.25 lb</td>
<td>14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments:** Apply SPARTAN CHARGE to the soil surface following land preparation from 14 days up to 12 hours before transplanting. If beds are formed before transplanting, the top of the beds should be knocked down prior to application of SPARTAN CHARGE. SPARTAN CHARGE will provide postemergence activity on weeds (less than 3 inches in height) present at the time of application. Sprayer calibration and good agitation are essential with application of SPARTAN CHARGE. Avoid excessive overlap of spray swaths. Excellent control of morningglory, pigweeds, lambsquarters, and yellow/purple nutsedge. Do not apply SPARTAN CHARGE over the top of transplanted tobacco as crop injury may occur. Tank mix with COMMAND or PROWL for improved grass control. Do not apply more than 15.2 fl oz/A of SPARTAN CHARGE per 12-month period. Do not apply SPARTAN CHARGE to soils classified as sands with less than 1.0% organic matter.

**At-Transplant Postemergence Broadcast Herbicides for Weed Management in Tobacco**

<table>
<thead>
<tr>
<th>Herbicide</th>
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<th>Mode of Action</th>
<th>Preharvest Interval</th>
<th>Restricted Entry Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Command 3ME (clomazone)</td>
<td>2.0-2.67 pt</td>
<td></td>
<td>65 days</td>
<td>12 hours</td>
</tr>
<tr>
<td></td>
<td>6.0 lb</td>
<td>13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments:** Apply COMMAND over-the-top of transplants immediately after setting to provide soil residual control of small seeded annual grasses and broadleaves. Use the higher rate for fields with a history of weed problems. If possible, irrigate with a half inch of water if no rainfall occurs within 3 to 5 days.

<table>
<thead>
<tr>
<th>Herbicide</th>
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<th>Mode of Action</th>
<th>Preharvest Interval</th>
<th>Restricted Entry Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devrinol 50DF/DF-XT (napropamide)</td>
<td>2.0-4.0 lb</td>
<td>15</td>
<td>70 days</td>
<td>24 hours</td>
</tr>
<tr>
<td></td>
<td>1.0-2.0 lb</td>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Herbicide</th>
<th>Rate/Acre Broadcast</th>
<th>Mode of Action</th>
<th>Preharvest Interval</th>
<th>Restricted Entry Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devrinol 2EC</td>
<td>2.0-4.0 qt</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments:** Apply DEVRINOL over-the-top of transplants immediately after setting to provide soil residual control of small seeded annual grasses and broadleaves. Use the higher rate for fields with a history of weed problems. If rainfall does not occur within 5 days, shallowly incorporate or irrigate with sufficient water to wet soil to a depth of 2 to 4 inches. Do not apply more than 4 lb DEVRINOL per season.
**Post-Transplant Postemergence Directed Herbicides for Weed Management in Tobacco**

<table>
<thead>
<tr>
<th>Herbicide</th>
<th>Rate/Acre Broadcast</th>
<th>Mode of Action</th>
<th>Preharvest Interval</th>
<th>Restricted Entry Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aim 2EC/1.9EW (carfentrazone)</td>
<td>0.8-1.5 fl oz</td>
<td>14</td>
<td>6 days</td>
<td>12 hours</td>
</tr>
<tr>
<td>Devrinol 50DF (napropamide)</td>
<td>2.0 lb</td>
<td>15</td>
<td>70 days</td>
<td>12 hours</td>
</tr>
<tr>
<td>Devrinol DF-XT</td>
<td>4 qt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prowl H2O 3.8EC (pendimethalin)</td>
<td>1.5-2.0 pt</td>
<td></td>
<td>N/A</td>
<td>24 hours</td>
</tr>
<tr>
<td>Prowl 3.3 EC</td>
<td>1.8-2.4 pt</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments:** Apply Aim using a shielded or hooded sprayer to weeds that are emerged and actively growing before layby (less than 3 inches in height). Add crop oil concentrate (COC) at 1 gal per 100 gal of spray solution. Coverage is essential for maximum efficacy on target weeds. Do not apply Aim when conditions favor drift. Do not allow spray to contact tobacco foliage or green stem tissue as severe crop injury may occur. Do not apply more than 3.06 fl oz Aim per acre per season. **Rainfast interval = 6 hours.**

**Devrinol:** Apply following last cultivation. Direct spray into row middles using drop nozzles. Provides only residual control. No activity on emerged weeds. If rainfall does not occur within 5 days, shallowly incorporate or irrigate with sufficient water to wet soil to a depth of 2 to 4 inches. Do not apply more than 4 lb/A of Devrinol per season. **Rainfast interval = 1 hour.**

**Prowl:** Apply 4 to 6 weeks after transplanting in a 16 to 24-inch directed band between crop rows. Spray should not contact the tobacco leaves. Use the higher product rate where weed pressure is heavy. Controls most annual grasses and pigweeds. No activity on emerged weeds.
**Weed Response to Herbicides for Tobacco Weed Management**

<table>
<thead>
<tr>
<th>Weed Type</th>
<th>PRE-TRANSPLANT</th>
<th>POST-TRANSPLANT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Command</td>
<td>Devrinol</td>
<td>Prowl</td>
</tr>
<tr>
<td></td>
<td>PPI</td>
<td>PRE</td>
<td>AT-TP</td>
</tr>
<tr>
<td>cocklebur, common</td>
<td>F P P P P P FG FG F P P G P P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>crabgrass</td>
<td>E E E E E FG FG E E E P E E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>crowfootgrass</td>
<td>E E E E E F F G E E P E E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>goosegrass</td>
<td>G E G G G FG FG G E E P E E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jonhsongrass (seedling)</td>
<td>G F G G G F F F F E P F G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lambsquarters</td>
<td>G G G G G E E FG G P E E G G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>morningglory spp.</td>
<td>P P P P P E E P P P GE P P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nutseed, purple</td>
<td>P P P P P E E P P P P P P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nutseed, yellow</td>
<td>P P P P F F E E P P P P P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>panicum, fall</td>
<td>G G G G G FG FG G G P P G G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>panicum, Texas</td>
<td>G --- G P P F F G --- G P --- G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pigweeds</td>
<td>P G G G G E E P G P E G GE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pusley, Florida</td>
<td>F E G G E FG FG FG G P --- E E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ragweed, common</td>
<td>G F P P G P P F F P F F P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sandbur</td>
<td>F --- G G G PF PF F --- G P --- G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sicklepod</td>
<td>P P P P P P P P P P P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sida, prickly</td>
<td>E P P P F P P G P P P P P</td>
<td></td>
<td></td>
</tr>
<tr>
<td>smartweed</td>
<td>G P P P P E E G P P E P PF</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1*Key to Response Ratings:* E = excellent control, 90% or better; G = good control, 80 to 90%; F = fair control, 70 to 80%; P = poor control, less than 70%; --- = Insufficient Data.