## CANOLA: CANOLA INSECT CONTROL

David Buntin, Research/Extension Entomologist

### PEST INSECTICIDE FORMULATION AMOUNT PER ACRE LB ACTIVE INGREDIENT PER ACRE REI/PHI (Hours or Days) WHEN TO TREAT/ REMARKS AND PRECAUTIONS

#### Aphids

<table>
<thead>
<tr>
<th>Pest</th>
<th>Insecticide</th>
<th>MOA</th>
<th>Formulation Amount Per Acre</th>
<th>LB Active Ingredient Per Acre</th>
<th>REI/PHI Hours/ Days</th>
<th>Remarks and Precautions</th>
</tr>
</thead>
</table>
| Aphids | *imidacloprid*  
Gaucho 600, other brands | 4C | 10-20 fl oz  
100 lb of seed | – | 12 H/ 35 D | Combination of turnip aphid,  
cabbage aphid, and  
green peach aphid. Gaucho seed  
treatment may control aphids for 3-4  
weeks after planting. Treat  
seedling and rosette stage plants if  
populations exceed 5 aphids per leaf  
or 15% infested plants. Treat bud  
and early bloom stage if infestation  
exceeds 15% infested stalks (racemes).  
Do not treat late flower and pod  
stage. During bloom apply insecticides  
early in morning before sunrise or late in  
the day to minimize spray effect on bees.  
NOTE: Poncho 600 also is labeled as a  
seed treatment for flea beetle control on  
seedling plants. Gaucho 600 is a better  
choice for aphid control.  
NOTE: Apply Beleaf when aphids first  
appear and are increasing. It may take  
several days to see a reduction in  
aphid numbers.  
NOTE: DO NOT apply Transform until after  
petal fall and bloom is complete. |
| | **SEED TREATMENT** | | | | | |
| | bifenthrin  
Brigade, Capture, Discipline,  
Fanfare, other brands 2EC | 3A | 2.1-2.6 fl oz | 0.033-0.04 | 12 H/ 35 D | |
| | flonicamid  
Beleaf 0.5 | 9C | 2.8 fl oz | 0.089 | 12 H/ 35 D | |
| | gamma cyhalothrin  
Declare 1.25  
Proaxis 0.5 | 3A | 1.54 fl oz  
3.84 fl oz | 0.015  
0.015 | 24 H/ 7 D | |
| | lambda cyhalothrin  
Warrior II Zeon 2.08  
Silencer, Lambda, other brands | 3A | 1.92 fl oz  
3.84 fl oz | 0.03  
0.03 | 24 H/ 7 D | |
| | sulfoxaflor  
Transform WG | 4C | 0.5-0.75 fl oz | 0.016-0.023 | 14 H/ 14 D | |
| Cabbage seedpod weevil | bifenthrin  
Brigade, Capture, Discipline,  
Fanfare, other brands 2EC | 3A | 2.1-2.6 fl oz | 0.033-0.04 | 12 H/ 35 D | Apply when at 70% bloom (before full bloom)  
when 2 or more weevils per plant. Repeat  
application 7-10 days later if 1 or more weevils per plant are  
present.  
NOTE: Do not apply *bifenthrin* (2EC) less than 14 days apart  
NOTE: The products listed may be toxic to  
pollinating bees. When applying insecticides during  
flowering, apply very early in the day or late in the  
day when bees are less active. Notify beekeepers  
with hives near the field(s) to be treated. Review the  
product label for any additional pollinator protection  
precautions. |
| | deltamethrin  
Delta Gold 1.5EC | 3A | 0.8 fl oz | 0.09 | 12 H/ 7 D | |
| | gamma cyhalothrin  
Declare 1.25  
Proaxis 0.5 | 3A | 1.28-1.54 fl oz  
3.2-3.84 fl oz | 0.0125- 0.015  
0.0125- 0.015 | 24 H/ 7 D | |
| | lambda cyhalothrin  
Warrior II Zeon 2.08  
Silencer, Lambda, other brands | 3A | 1.6-1.92 fl oz  
3.2-3.84 fl oz | 0.025-0.03  
0.025-0.03 | 24 H/ 7 D | |
| | zeta-cypermethrin  
Mustang Maxx, Respect 0.8EC | 3A | 4 fl oz | 0.025 | 12 H/ 7 D | |
| Diamondback moth and other caterpillars | bifenthrin  
Brigade, Capture, Discipline,  
Fanfare, other brands 2EC | 3A | 2.1-2.6 fl oz | 0.033-0.04 | 12 H/ 35 D | Apply when defoliation becomes severe and larvae  
are present. Diamondback moth larvae are resistant  
to most classes of insecticides and may be difficult to  
control; use highest rate. |
| | chlorantraniliprole  
Coragen 1.67SC  
Prevathon 0.43 | 28 | 3.5-5 fl oz  
14-20 fl oz | 0.045-0.065  
0.047-0.067 | 4 H/ 21 D | |
| | cyantraniliprole  
Exirel 0.83 | 28 | 7-13.5 fl oz | 0.045-0.088 | 24 H/ 7 D | |
## CANOLA INSECT CONTROL

<table>
<thead>
<tr>
<th>PEST</th>
<th>INSECTICIDE</th>
<th>MOA</th>
<th>FORMULATION AMOUNT PER ACRE</th>
<th>LB ACTIVE INGREDIENT PER ACRE</th>
<th>REI/PHI (Hours or Days)</th>
<th>WHEN TO TREAT/REMARKS AND PRECAUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diamondback moth and other caterpillars (continued)</td>
<td>gamma cyhalothrin Declare 1.25 Proaxis 0.5</td>
<td>3A</td>
<td>1.54 fl oz 3.84 fl oz</td>
<td>0.015 0.015</td>
<td>24 H/7 D</td>
<td>Apply when defoliation becomes severe and larvae are present. Diamondback moth larvae are resistant to most classes of insecticides and may be difficult to control; use highest rate.</td>
</tr>
<tr>
<td></td>
<td>lambda cyhalothrin Warrior II Zeon 2.08 Silencer, Lambda, other brands</td>
<td>3A</td>
<td>1.92 fl oz 3.84 fl oz</td>
<td>0.03 0.03</td>
<td>24 H/7 D</td>
<td></td>
</tr>
<tr>
<td>Lygus bugs</td>
<td>bifenthrin Brigade, Capture, Discipline, Fanfare, other brands 2EC</td>
<td>3A</td>
<td>2.1-2.6 fl oz</td>
<td>0.032-0.04</td>
<td>12 H/35 D</td>
<td>Treat during bloom if populations exceed 2 bugs/sweep.</td>
</tr>
<tr>
<td></td>
<td>deltamethrin Delta Gold 1.5EC</td>
<td>3A</td>
<td>0.8 fl oz</td>
<td>0.09</td>
<td>12 H/7 D</td>
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<td>gamma cyhalothrin Declare 1.25 Proaxis 0.5</td>
<td>3A</td>
<td>0.77-1.54 fl oz 2.56-3.84 fl oz</td>
<td>0.0075-0.015 0.01-0.015</td>
<td>24 H/7 D</td>
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<td>lambda cyhalothrin Warrior II Zeon 2.08 Silencer, Lambda, other brands</td>
<td>3A</td>
<td>1.28-1.92 fl oz 2.56-3.84 fl oz</td>
<td>0.02-0.03 0.02-0.03</td>
<td>24 H/7 D</td>
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<tr>
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<td>zeta-cypermethrin Mustang Maxx, Respect 0.8EC</td>
<td>3A</td>
<td>4 fl oz</td>
<td>0.025</td>
<td>12 H/7 D</td>
<td></td>
</tr>
<tr>
<td>Flea beetles</td>
<td>bifenthrin Brigade, Capture, Discipline, Fanfare, other brands 2EC</td>
<td>3A</td>
<td>2.1-2.6 fl oz</td>
<td>0.033-0.04</td>
<td>12 H/35 D</td>
<td>Rarely a problem in winter canola in Georgia. Treat seedlings if beetles are present and damaging more than 15% of seedling plants. Treat during bloom-stage in spring if beetles are numerous and defoliation exceeds 10%.</td>
</tr>
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### Premixed or Co-Packed Insecticides

Products listed are available as premixes or co-packages of two insecticide active ingredients. User should check mixture labels for active ingredient, specific use rates, target pests, and precautions.

**Brand name (active ingredients)** | **Range of formulation rates**
---|---
Besiege (*lambda cyhalothrin, chlorantraniliprole*) | 5-10 fl oz/A
Hero (*zeta-cypermethrin, bifenthrin*) | 2.6-5.5 fl oz/A
Steed (*zeta-cypermethrin, bifenthrin*) | 2.5-4.7 fl oz/A
## CANOLA (RAPESEED) WEED CONTROL

Eric P. Prostko, Extension Agronomist – Weed Science

<table>
<thead>
<tr>
<th>HERBICIDE</th>
<th>MOA</th>
<th>AMOUNT OF FORMULATION</th>
<th>POUNDS ACTIVE INGREDIENT</th>
<th>REI/PHI (Hours or Days)</th>
<th>REMARKS AND PRECAUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRE-PLANT INCORPORATED</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ethalfuralin Sonalan HFP 3EC</td>
<td>3</td>
<td>24-40 oz</td>
<td>0.56-0.94</td>
<td>24 H/ –</td>
<td>Apply and incorporate before planting 2-3” deep within 48 hours of application. Use 24 oz/A on coarse soils, 32 oz/A on medium soils, and 40 oz/A on fine soils. Will provide control of some winter annual grasses, henbit, and chickweed. Will not control wild radish/mustard.</td>
</tr>
<tr>
<td>trifluralin Trelan, others 4EC</td>
<td>3</td>
<td>16 oz</td>
<td>0.5</td>
<td>12 H/ –</td>
<td>Uniformly apply in the fall prior to planting. Incorporate to a depth of 2-3” within 24 hours of application. Provides control of some winter annual grasses, henbit, and common chickweed. Trifluralin will not control wild radish or wild mustard.</td>
</tr>
<tr>
<td><strong>AT PLANTING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>glyphosate (various trade names)</td>
<td>9</td>
<td>32-64 oz</td>
<td>0.75-1.50 lb ae</td>
<td>4 H/ –</td>
<td>For the control of emerged annual and perennial weeds. Apply before, during, or after planting, but prior to canola emergence. Not all formulations of glyphosate may be labeled for this use. Refer to specific product label.</td>
</tr>
<tr>
<td>clethodim Select, Arrow, others 2EC</td>
<td>1</td>
<td>4-6 oz</td>
<td>0.06-0.09</td>
<td>24 H/ 70 D</td>
<td>For the control of emerged annual and perennial grasses. Apply with a crop oil concentrate at 1% v/v (Select/Arrow). A NIS (0.25% v/v) should be used with Select Max. Do not apply after the crop has begun to bolt. Crop injury may occur when applied during the bloom period. Do not exceed 16 oz/A/season of Select/Arrow or 12 oz/A of Select Max/Tapout. Rain-free period is 1 hour.</td>
</tr>
<tr>
<td>sethoxydim Poast 1.5EC</td>
<td>1</td>
<td>16 oz</td>
<td>0.19</td>
<td>12 H/ 60 D</td>
<td>Apply for the control of Italian (annual) ryegrass up to 8” tall. Apply Poast with a crop oil concentrate at 1% v/v. Sequential applications, spaced 14 days apart may also be used. DO NOT apply more than a total of 5 pts Poast/A in 1 season. In 2010, a population of Poast-resistant ryegrass was confirmed in a canola field in Franklin County. Poast Plus is not registered for use in canola. Rain-free period is 1 hour.</td>
</tr>
<tr>
<td>quizalofop Assure II, Targa 0.88EC</td>
<td>1</td>
<td>10 oz</td>
<td>0.07</td>
<td>12 H/ 60 D</td>
<td>Apply for the control of Italian ryegrass. Add either nonionic surfactant at 0.25% v/v or crop oil concentrate at 1% v/v. DO NOT apply more than 18 fl oz Assure II/Targa per season. DO NOT apply after canola flowers. Rain-free period is 1 hour.</td>
</tr>
</tbody>
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# CANOLA (RAPESEED) WEED CONTROL

## HERBICIDE MOA

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<tr>
<th>HERBICIDE</th>
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<tr>
<td>imazamox Beyond 1AS</td>
<td>2</td>
<td>4 oz</td>
<td>0.031</td>
<td>4 H/ –</td>
<td>ONLY FOR USE ON CLEARFIELD CANOLA VARIETIES. Do not use on conventional varieties or severe crop injury will occur. Apply in combination with a NIS at 0.25% v/v (1 qt/100 gal) and nitrogen fertilizer (2.5% v/v of 28% or 32% N; or 12-15 lb/100 gal of AMS). Beyond is most effective when applied to weeds that are less than 3” tall. In UGA field trials, Beyond has provided good to excellent control of wild radish and shepherd’s-purse when applied between 24-37 days after canola planting. Crop rotations restrictions for Beyond are as follows: barley, cabbage, cantaloupe, carrot, cotton, cucumber, grain sorghum, oats, onion, peanut, pepper, tobacco, tomato, turnip, and watermelon – 9 months; field corn – 8.5 months; rye – 4 months; wheat – 3 months; soybeans – anytime. <strong>Rain-free period is 1 hour.</strong></td>
</tr>
<tr>
<td>diquat Reglone 2SL</td>
<td>22</td>
<td>24-32 oz</td>
<td>0.375-0.50</td>
<td>24 H/ 7 D</td>
<td>Can be applied by ground or air. A maximum of 1 application per season is allowed. Harvest no later than 10 days after application. Use a NIS at 0.25% v/v. Apply when crop is in the 60-75% seed turn (green to brown) stage. <strong>Rain-free period is 30 minutes.</strong></td>
</tr>
</tbody>
</table>

## HARVEST AID

**Liberty-Link and Roundup Ready Canola varieties are available. However, Liberty and glyphosate are NOT currently registered for use on these varieties in Georgia.**

**NOTE:** At this time there is not a herbicide that will control wild radish and wild mustard in conventional varieties. Avoid planting conventional varieties in fields with severe infestations of these weeds.

**NOTE:** Rotational restrictions must be followed to avoid herbicide residue carryover problems to canola from crops such as corn, cotton, peanuts, and soybeans. Rotational restrictions of several row crop herbicides that have the potential to injure canola are:

- Atrazine – 12 months
- Anthem – 18 months
- Boundary – 12 months
- Cadre – 40 months
- Callisto – 10 months
- Canopy – 18 months
- Capreno – 18 months
- Classic – 18 months
- Cobra – 1 month
- Diuron (Karmex, Others) – 2 years
- Envive – 18 months

- Fluometuron (Cotoran, Others) – 6 months
- Halex GT – 10 months
- Laudis – 10 months
- Leadoff – 10 months
- Linuron (Lorox, others) – 4 months
- Prefix – 18 months
- PowerFlex – 9 months
- Pursuit – 40 months
- Reflex – 18 months
- Scepter – 18 months
- Sencor – 12 months

- Staple – 10 months*
- Steadfast Q – 10-18 months
- Strongarm – 30 months*
- Squadron – 18 months
- Realm Q – 10-18 months
- Revulin Q – 10-18 months
- Tri-Scept – 18 months
- Ultra Blazer – 100 days
- Valor – 4 months (tillage), 8 months (no-tillage)
- Zidua – 18 months

For additional information on rotational restrictions for canola, refer to the specific herbicide label.
*A successful field bioassay must also be performed prior to planting.