

# CANOLA INSECT CONTROL

David Buntin, Research/Extension Entomologist

PEST	INSECTICIDE	FORMULATION AMOUNT PER ACRE	LB. ACTIVE INGREDIENT PER ACRE	WHEN TO TREAT, REMARKS AND PRECAUTIONS
Aphids	<b>At-planting</b> Gaucho 600	10 to 20 fl. oz. / 100 lb. of seed	-	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 5aphids per leaf or 20% infested plants. Treat bud and early bloom stage if infestation exceeds 15% infested stalks (racemes). Late flower and pod stage do not treat. During bloom apply insecticides early in morning or late in the day to minimize spray effect on bees. Methyl parathion: follow label directions for application restrictions.
	<b>Foliar treatments</b> <u>bifenthrin</u> Brigade, Capture, Discipline, Fanfare, others (2EC)	2.1 - 2.6 fl. oz.	0.033 - 0.04	
	Methyl 4EC	1 pt	0.5	
	<u>lambda /gamma cyhalothrin</u> Karate Zeon (2.08) Warrior, Silencer, Lambda, others (1.0)	1.92 fl. oz. 3.84 fl. oz.	0.03 0.03	
	Proaxis 0.5	3.84 fl oz.	0.015	
Cabbage seedpod weevil	<u>bifenthrin</u> Brigade, Capture, Discipline, Fanfare, others (2EC)	2.1 - 2.6 fl. oz.	0.033 - 0.04	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. Do not apply Capture 2EC less than 14 days apart. During bloom apply insecticides early in morning or late in the day to minimize spray effect on bees.  Methyl parathion: follow label directions for application restrictions.
	<u>deltamethrin</u> Decis 1.5EC	0.8 fl. oz.	0.09	
	Methyl 4EC	1 pt	0.5	
	<u>lambda /gamma cyhalothrin</u> Karate Zeon (2.08) Warrior, Silencer, Lambda, others (1.0)	1.28 - 1.6 fl. oz. 2.56 - 3.84 fl oz.	0.02 - 0.03 0.02 - 0.03	
	Proaxis (0.5)	2.56 - 3.2 fl oz.	0.01 - 0.015	
Diamondback moth and other caterpillars	<u>bifenthrin</u> Brigade, Capture, Discipline, Fanfare, others (2EC)	2.1 - 2.6 fl. oz.	0.033 - 0.04	Apply when defoliation becomes severe and larvae are present. Diamondback moth larvae also may feed on blooms and pods. Diamondback moth may be difficult to treat; use highest rate.
	<u>lambda /gamma cyhalothrin</u> Karate Zeon (2.08) Warrior, Silencer, Lambda, others (1.0)	1.28 - 1.92 fl. oz. 2.56 - 3.84 fl oz.	0.02 - 0.03 0.02 - 0.03	
	Proaxis (0.5)	2.56 - 3.84 fl oz.	0.01 - 0.015	
	<u>zeta-cypermethrin</u> Mustang MAX, Respect (0.8EC)	4.0 fl oz.	0.025	
Lygus bugs	<u>bifenthrin</u> Brigade, Capture, Discipline, Fanfare, others (2EC)	2.1 - 2.6 fl. oz.	0.032 - 0.04	Treat during bloom if populations exceed 2 bugs per sweep.
	<u>deltamethrin</u> Decis 1.5EC	0.8 fl. oz.	0.09	
	<u>lambda /gamma cyhalothrin</u> Karate Zeon (2.08) Warrior, Silencer, Lambda, others (1.0)	1.28 - 1.92 fl. oz. 2.56 - 3.84 fl oz.	0.02 - 0.03 0.02 - 0.03	
	Proaxis (0.5)	2.56 - 3.84 fl oz.	0.01 - 0.015	
	<u>zeta-cypermethrin</u> Mustang MAX, Respect (0.8EC)	4.0 fl. oz.	0.025	

**CANOLA INSECT CONTROL (continued)**

PEST	INSECTICIDE	AMOUNT PER ACRE		WHEN TO TREAT, REMARKS AND PRECAUTIONS
Flea beetles	<u>bifenthrin</u> Brigade, Capture, Discipline, Fanfare, others (2EC)	2.1 - 2.6 fl. oz.	0.033 - 0.04	Rarely a problem in winter canola in Georgia. Treat seedlings if beetle are present and damaging more the 15% of plants. Treat during bloom stage in spring if beetle are numerous and defoliation exceeds 10%.
	<u>deltamethrin</u> Decis 1.5EC	0.8 fl. oz.	0.09	
	<u>lambda /gamma cyhalothrin</u> Karate Zeon (2.08)	1.28 - 1.92 fl. oz.	0.02 - 0.03	
	Warrior, Silencer, Lambda, others (1.0)	2.56 - 3.84 fl oz.	0.02 - 0.03	
	Proaxis (0.5)	2.56 - 3.84 fl oz.	0.01 - 0.015	
	<u>zeta-cypermethrin</u> Mustang MAX, Respect (0.8EC)	4.0 fl. oz.	0.025	

**PESTICIDE USE PRECAUTIONS:**

**Brigade , Capture, Bifenthrin , Fanfare, others (2EC, bifenthrin):** Do not apply more than 5.12 fl. oz. per acre per season. Do not apply less than 14 days apart. Do not use within 35 days of harvest. REI = 12 hours.

**Decis 1.5EC (deltamethrin):** Do not apply within 7 days of harvest. Allow 7 days between applications. Do not apply more than 1.5 fl. oz./acre in one growing season. REI= 12 hours.

**Gaicho (imidacloprid):** Commercially applied seed treatment. Check label for crop plant-back restrictions. REI = 12 hours.

**Karate Zeon (2.08) (lambda cyhalothrin):** Do not apply more than 0.36 pt. (5.76 fl. oz.) per acre per season. Do not apply less than 5 days apart. Do not apply within 7 days of harvest. REI = 12 hours.

**Methyl parathion, Methyl 4EC (methyl parathion):** Do not apply more than 2 applications per season. Do not use within 28 days of harvest. Do not graze treated fields or feed treated forage or threshings to livestock. Apply in evening or early morning to protect pollinators. REI = 96 hours (4 days).

**Mustang MAX, Respect (0.8EC, zeta-cypermethrin):** Do not apply within 7 days of harvest. Do not apply less than 7 days apart. Do not apply more than 0.15 lb a.i. per acre per season. REI = 12 hours.

**Proaxis 1.25 (gamma-cyhalothrin):** Do not apply more than 0.72 pt. (11.5 fl. oz) per acre per season. Do not apply less than 5 days apart. Do not use within 7 days of harvest. REI = 24 hours.

**Warrior Silencer, Lambda, other brands (1.0) (lambda cyhalothrin):** Do not apply more than 0.72 pt. (11.5 fl oz) per acre per season. Do not apply less than 5 days apart. Do not use within 7 days of harvest. REI = 24 hours.

# CANOLA (RAPESEED) WEED CONTROL

Eric P. Prostko, Extension Agronomist - Weed Science

USE STAGE AND HERBICIDE	BROADCAST RATE/ACRE		REMARKS AND PRECAUTIONS
	AMOUNT OF FORMULATION	POUNDS ACTIVE INGREDIENT	
<b>PREPLANT INCORPORATED</b>			
trifluralin (Treflan, Trilin) 4EC	1.0 pt	0.5	Uniformly apply in the fall prior to planting. Incorporate to a depth of 2-3 inches 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. MOA = 3
(Treflan) M.T.F.	1.0 pt		
(Treflan, Trilin) 5EC	0.8 pt		
<b>AT PLANTING</b>			
glyphosate (various trade names)		0.75 - 1.50 lbs ae	For the control of <b>emerged</b> annual and perennial weeds. Apply before, during, or after planting, <b>but prior to canola emergence</b> . Not all formulations of glyphosate may be labeled for this use. Refer to specific product label. MOA = 9.
3.00 lb ae/gal	32 - 64 ozs		
3.73 lb ae/gal	26 - 52 ozs		
4.00 lb ae/gal	24 - 48 ozs		
4.17 lb ae/gal	23 - 46 ozs		
4.50 lb ae/gal	21 - 42 ozs		
5.00 lb ae/gal	19 - 38 ozs		
<b>POSTEMERGENCE</b>			
clethodim (Select, Arrow, others) 2EC	4-6 ozs	0.06 - 0.09	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 within 70 days of harvest. Do not apply after the crop has begun to bolt. Crop injury may occur when applied during the bloom period. Do not exceed 16 ozs/A/season of Select/Arrow or 12 oz/A of Select Max. Rain-free period = 1 hour. MOA = 1.
(Select Max) 0.97EC	9-12 ozs		
sethoxydim (Poast) 1.5EC	1.0 pt	0.19	Apply for the control of Italian (annual) ryegrass up to 8 inches tall. Apply Poast with a crop oil concentrate at 2.0 pts/A. Sequential applications, spaced 14 days apart may also be utilized. DO NOT apply more than a total of 5.0 pints Poast per acre in one season. DO NOT apply if rainfall is expected within one hour. DO NOT apply within 60 days of canola harvest. Due to endangered species regulations, Poast is not labeled for use in canola in the following Georgia counties: Bartow, Gordon and Whitfield. Poast Plus is not registered for use in canola. MOA = 1.
quizalofop (Assure II, Targa) 0.88EC	10.0 fl. oz	0.07	Apply for the control of Italian ryegrass. Add either nonionic surfactant at 0.25% v/v or crop oil concentrate at 1.0% v/v. DO NOT apply if rainfall is expected within one hour. DO NOT apply within 60 days of seed harvest. DO NOT apply more than 18.0 fl. oz. Assure II/Targa per season. DO NOT apply after canola flowers. MOA = 1.
imazamox (Beyond) 1AS	4 oz	0.031	<b>ONLY FOR USE ON CLEARFIELD CANOLA VARIETIES!!!!!!</b> . Do not use on conventional varieties or severe crop injury will occur. Apply in combination with a NIS @ 0.25% v/v (1 qt/100 gals) and nitrogen fertilizer (2.5% v/v of 28% or 32% N; or 12-15 lbs/100 gals 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 and 37 days after canola planting. Crop rotations restrictions for Beyond are as follows: wheat = 3 months; barley, rye = 4 months; field corn = 8.5 months; cabbage, cantaloupe, carrot, cotton, cucumber, grain sorghum, oats, onion, peanut, pepper, tobacco, tomato, turnip, watermelon = 9 months. Rain-free period = 1 hour. MOA = 2.

**CANOLA (RAPESEED) WEED CONTROL (continued)**

USE STAGE AND HERBICIDE	BROADCAST RATE/ACRE		REMARKS AND PRECAUTIONS
	AMOUNT OF FORMULATION	POUNDS ACTIVE INGREDIENT	
<i>Liberty-Link and Roundup Ready Canola varieties are available. However, Liberty and glyphosate are <u>NOT</u> currently registered for use on these varieties in Georgia.</i>			
<u>NOTE:</u> 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.			
<u>NOTE:</u> 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		Prefix - 18 months	
Boundary - 12 months		Pursuit - 40 months	
Cadre - 40 months		Reflex - 18 months	
Callisto - 10 months		Scepter - 18 months	
Canopy - 18 months		Sencor - 12 months	
Classic - 18 months		Staple - 10 months*	
Diuron (Karmex, Others) - 2 years		Strongarm - 30 months*	
Fluometuron (Cotoran, Others) - 6 months		Squadron - 18 months	
Laudis - 10 months		Tri-Scept - 18 months	
Linuron (Lorox, others) - 4 months		Valor - 12 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.			

