

Canopy - the adjuvant for grass herbicides that also suppresses Green Peach Aphid.

Canopy is both an effective herbicide adjuvant and insecticidal spray oil. It is the only product registered by the APVMA for Green Peach Aphid (GPA) suppression in canola and pulses and as an adjuvant for selective grass herbicides.

Early season agronomic management of canola often involves spraying to control grass weeds with a selective grass herbicide like Select Xtra. These herbicides require the inclusion of an oil based adjuvant in the tank mix to assist them to perform effectively.

In recent seasons GPA has also been a concern for canola growers in southern cropping regions. As a vector of Beet Western Yellows Virus (BWYV), control of GPA must now be given serious consideration.

So using Canopy as grass herbicide adjuvant will simultaneously suppress GPA present in the crop during grass weed spraying and may avoid the need for expensive aphicides during the season.

CANOPY

- Has an nC27paraffinic petroleum oil as active ingredient selected for its optimum paraffinic, carbon number and refinement properties.
- Has a long history of use as an insecticide and defoliation herbicide adjuvant in cotton.
- Is registered for green peach aphid suppression and control of diamond back moth (with Dipel) in canola
- Is registered as an adjuvant of selective grass herbicides such as Select Xtra, haloxyfop or quizalofop.
- Works through suffocation, ovipositional deterrence and direct eating toxicity to early life stages of pests.

- Can be used to protect synthetic chemicals from development of resistance due to its physical mode-of-action
- Is classed as “very soft” on the beneficial disruptive index (BDI), a guide to help the cotton industry preserve predator insects in their crops.

HOW TO USE CANOPY IN CANOLA

When checking the crop for grass weeds, keep an eye out for aphids to make a fully informed management decision. A green bridge provided by uncontrolled weeds between seasons or by a nearby tree-line may provide conditions favourable for aphid population development in-crop.

If grass weeds need spraying and aphids are present in low numbers then use a minimum spray volume of 80L/ha. Add the grass herbicide, mix and then add between 1 and 2L/ha Canopy. If there is moderate GPA pressure consider adding Trojan Insecticide at the rate of 20ml/ha.

If grass weeds need spraying and aphids are NOT present, then choose the spray volume based on the weed density and herbicide requirements. Add the grass herbicide, mix and then add between 0.5 and 1% by volume of Canopy, depending on the herbicide's adjuvant requirements.

Set the spray rig up to apply your selective grass herbicide according to its label directions:

- Ensure weeds are small, actively growing and not suffering from stress
- Aim for medium spray quality
- Apply in a minimum 50L/ha but consider using a higher spray volume for better aphid suppression. As high as 150L/ha is recommended if weeds are dense.

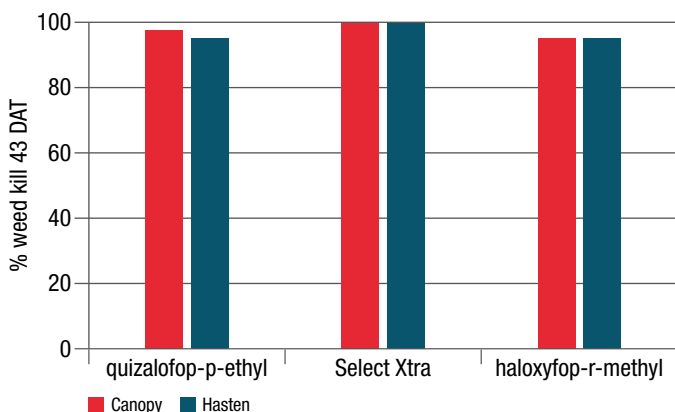


FIGURE 1 % ARG control in Faba beans, Ngapala SA when using both adjuvants at 1L/ha.

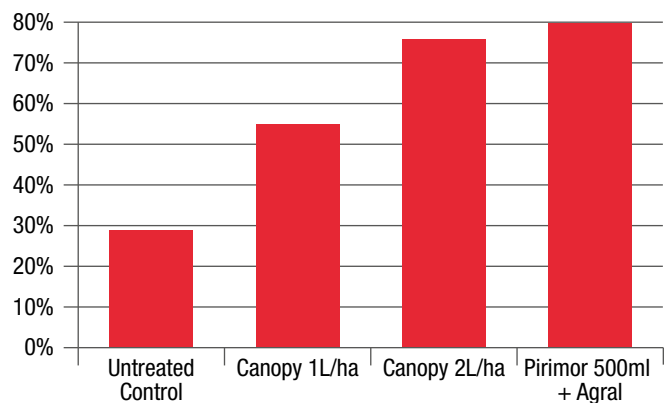


FIGURE 2 % Reduction in Green Peach Aphid numbers in Canola, 3 DAT, WA, 2007

TABLE 1. Registered directions for use of CANOPY as an insecticide in canola and pulses.

CROP	PEST	STATE	RATE	CRITICAL COMMENTS
Canola	Cabbage moth/ diamond back moth (<i>Plutella xylostella</i>)	All States	Apply at 1 – 2% or 1 – 2L/100L of water in combination with <i>Bacillus thuringiensis</i> (Dipel1 SC) at its label rate	Canopy will enhance the efficacy of Dipel1 SC. Target early instar stages of growth. Follow all the directions on the Dipel1 SC label. Use the higher rate for heavy pest pressure.
Pulse crops and oilseed crops including: Adzuki beans, canola Chickpeas, Faba beans, Field peas, lentils, Linola, Linseed, (con't) Lucerne, Lupins, Mungbeans, Navy beans, Pigeon Peas, Safflower, Soybeans, Sunflower, Vetch	Green Peach Aphid (<i>Myzus persicae</i>) (suppression only)		1 – 2L /ha	When aphids first appear in spring use low rate. Repeat application within 14 days. If commercial threshold is reached then apply high rate. A second application within 14 days may be required. For higher populations use low rate in mixture with alternative aphicide. Always apply in high volume (at least 80L/ha) of water. Canopy is best used as part of an IPM program in which beneficial insects contribute to control. Canopy will not disrupt natural enemies.
	<i>Helicoverpa</i> spp. (suppression only)		Apply at 2% or 2L/100L of water either alone twice 7 days apart or in combination with Nuclear Polyhedrosis Virus of <i>Helicoverpa</i> spp. at its label rate e.g. Gemstar or Vivus.	Canopy applied alone will suppress populations within the range 20-50% and is best used as part of an IPM program in which beneficial insects contribute to control. Target early instar stages and use high spray volume (at least 80L/ha) of water. Canopy will not disrupt natural enemies.

TABLE 2. Registered directions for use of CANOPY as a herbicide adjuvant in canola and pulses.

CROP	WEED	STATE	RATE PER 100L WATER	CRITICAL COMMENTS
Cotton, Cereals, Pulses and oilseeds	Refer to herbicide labels	All States	0.5L -1.0L/ha	Canopy® may be used wherever mineral or seed based oils are recommended unless omission of mineral oils is specifically recommended. Canopy® is compatible with a wide range of herbicides including: clethodim, haloxyfop P (methyl), quizalofop-p-ethyl, clodinafop-propargyl/cloquintocet-mexyl, .
Broadacre cropping including fallow			0.5L – 1.0L	Apply a minimum of 250ml Canopy® per ha.



**DON'T JUST GET
AN ADJUVANT.
GET AN ADVANTAGE.**