

2006/07 Canopy® summer crop/pulse/seed oil field trial update

Take Home Message

- Preliminary field trials in summer crops indicate that Canopy® has potential to contribute to IPM programs. A field trial program will be developed to further develop this area over the next few seasons.

Introduction

Canopy® is a true IPM product, providing pest control assistance for good beneficial populations without harming them.

The 2006/07 summer crop/pulse/seed oil field trial series for Canopy® saw it being tested for efficacy against *Helicoverpa* spp. in combination with Gemstar¹ on various other summer crops; for efficacy against pests of Adzuki beans; and for efficacy against aphids, *Helicoverpa* spp. and diamond-back moth on canola crops in southern states. Furthermore, research is being conducted into the use of Canopy® in IPM systems for various pulse crops.

Some results of field trials completed to date are presented in this report.

Summer crop trials.

Preliminary trials have been staged to explore the viability of using Canopy® as an IPM tool in various broadacre summer crops.

Green Mirids in Adzuki Beans

A replicated small plot trial of various treatments against green mirids in Adzuki beans grown at Wee Waa in early 2007 gave results consistent with results typical of cotton in that Canopy® mixed with Steward² appeared to improve efficacy over Steward alone, but this was not quite significant. Green mirid numbers declined in the untreated control probably due to a combination of rain (15 mm 3 DAT1 and 4 mm 4 DAT1) and growth stage (the crop was flowering at application 1 and subsequent pod fill may have made the crop less attractive to mirids). In addition, the population was initially mainly nymphs which progressed through their lifecycle through the trial without reinfestation occurring. Nevertheless, the indication from this exploratory trial was that there is potential for Canopy® to play a role in control of green mirids in



pulses and a trial program is planned to better elucidate spray timing, volume and application rate and frequency.

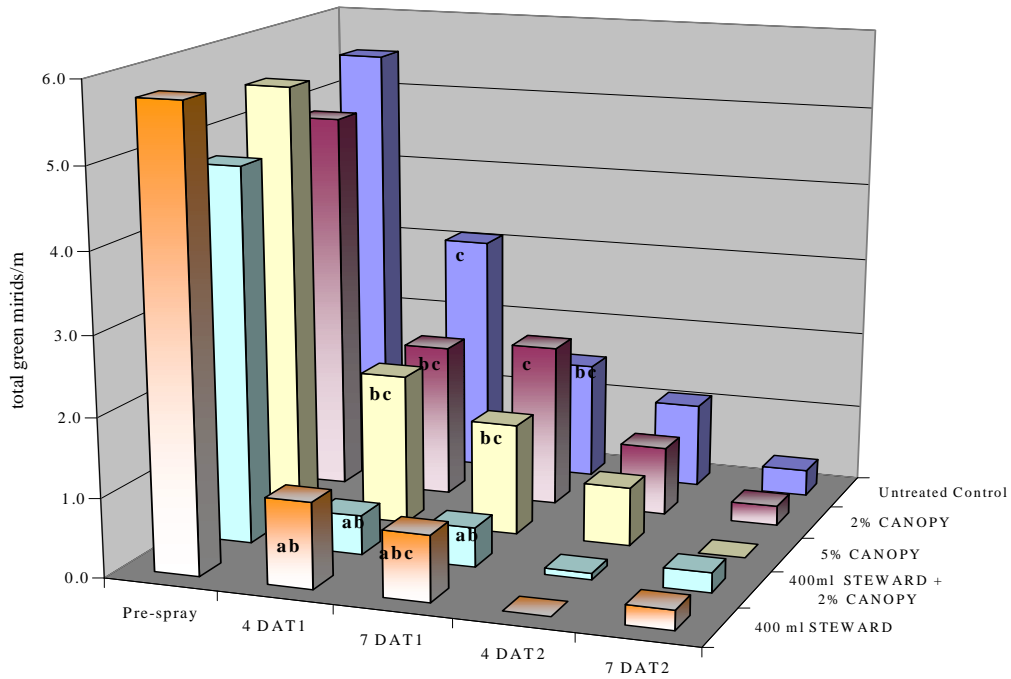


Figure 1. Performance of various treatments against green mirids in Adzuki beans. The addition of 2% Canopy® to Steward appeared to improve the efficacy of Steward but not quite significantly in this trial.



Helicoverpa spp. in Soybeans.

In another replicated field trial at Wee Waa, the effect of combining Canopy® with Gemstar against *Helicoverpa* spp. in soybeans was investigated (Figure 2).

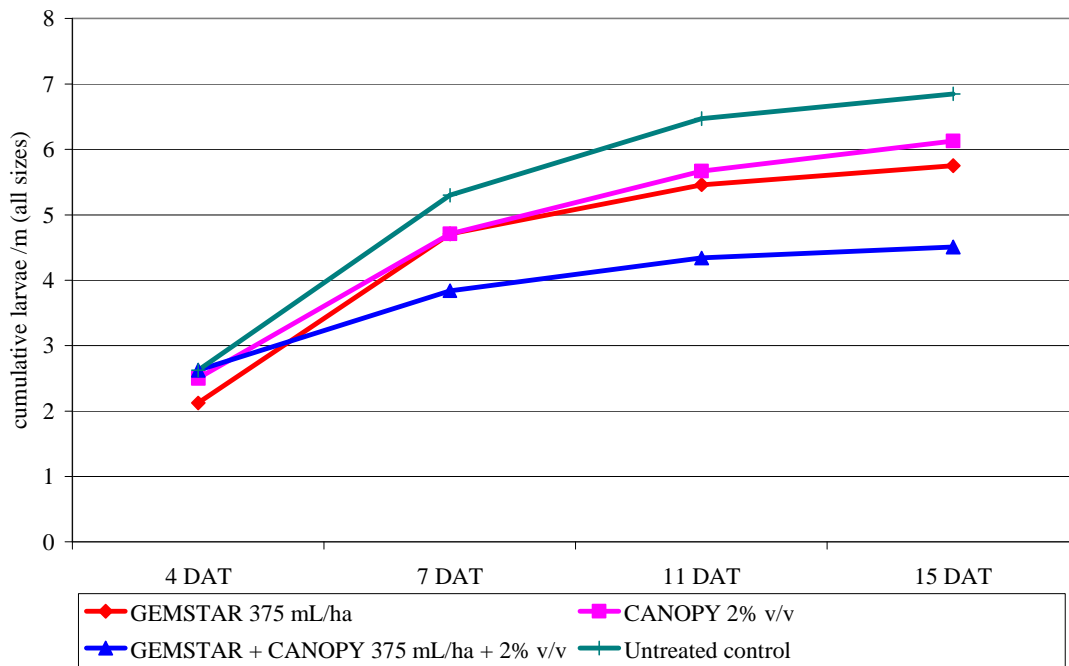


Figure 2. Cumulative *Helicoverpa*/m (all sizes) in a trial in soybeans, Wee Waa, 2004. The combination of Canopy® and Gemstar significantly reduced larvae compared to the control from 7DAT.

When applied in 77L/ha volume at the pod fill stage of growth, the Canopy®/Gemstar combination was able to achieve significant control of *Helicoverpa* spp. for over 15 days where the individually applied insecticides did not.

A field trial program will be developed to further develop this area over the next few seasons

¹ Gemstar is a registered trademark of Certis USA LLC.

² Steward is a registered trademark of Dupont.

