

# Py-Bo Technical Report

CROP	Linseed
PESTS	Helicoverpa spp (Heliothis)

**DATE:** October 2001

**ORGANIC PRODUCER:** Neil Sullivan "Lochabar"

**DISTRICT:** Millmerran, Darling Downs Qld

**CROP STAGE:** About 8 weeks from harvest, 600mm + high, heads well formed. The plants were drying off (needing rain).

**PEST PROBLEM:** The caterpillars were 15mm to 50mm and almost all were at the top of the plants feeding on the heads.

**LIKELY HARVEST PROSPECTS:** A typical plant had 78 heads, 42 of which were eaten right out or damaged. If treatment is successful a harvest of 250kg/ha is just possible. No treatment - no crop at all.

**PILOT TEST:** Tuesday 9th October 2001 Temp 25C Humidity 45% Light cloud.

**PEST NUMBERS** Three random 1 metre square plots showed 48, 55 and 66 insects each.

**EQUIPMENT:** 900 litre tank aboard a tractor with boom spray operated by PTO at 9mph

**DILUTION & APPLICATION RATE:** A test 50m run was done @ 1ml/L at 90L/ha. Insects were definitely effected and 1 hour later had stopped eating but were still alive. (Captured larvae were kept overnight and were dead next morning).

**ASSESSMENT:** Next morning the larvae numbers were down to 3-8/sqm, not eating and these died later anyway. (They can't be any deader than dead!).

**THE DOLLARS:** The linseed crop was treated at 1L of Py-Bo in 900L water with some Lux soap flakes as a wetter (but unnecessary). The 900 litre tankful cost \$109.50 and covered 10 ha or \$1204.50 for the 110ha crop. If graded and clean organic linseed at the farm gate is say, \$1400 per tonne, the treatment had to save around a tonne of linseed to break even. Neil did get a harvest of around 250 kg/ha whereas before it was doubtful he'd get anything at all. Hindsight is a wonderful thing. Spraying as soon as the heliothis became noticeable and before they had savaged 50% of the heads means he would have taken in a crop of 400+ kg/ha. As it was, the \$1200 spent, rescued around 27 tonne of linseed worth almost \$40,000 from the caterpillars. (It might have been twice that!).

**SUMMARY:** 5-6weeks earlier there were lots of ladybirds throughout the crop, but only 2 were seen on the day of the treatment. Gemstar was applied a week before, but although a few effected larvae were noted on the day, it was not going to stop the damage that was reducing the crop by maybe 5%-10% per day. The Py-Bo natural pyrethrum spray reduced the potential damage within an hour or so.

Py-Bo can be used on any broadacre crop to kill any caterpillar, bug, grasshopper, etc  
Phone Ion for details.  
1800 12345 7