

# PyBo Technical Report

<b>CROP</b>	Avocados
<b>PESTS</b>	Fruit Spotting Bug Grasshoppers

**DATE:** December 2001

**PRODUCER:** David Roby Alstonville NSW

**DISTRICT:** North Coast of NSW

**CROP STAGE:** Mature avocado trees were 4-5 metres high.

**PEST PROBLEM:** The treatment was for the purpose of demonstrating to a few growers the effectiveness of PyBo applied through a regular orchard blower to mature trees. There were only a few fruit spotting bugs, long horned grasshoppers and spiders.

**LIKELY HARVEST PROSPECTS:** The crop was not under major threat at the time.

**PILOT TEST:** Wed 5th December 2001 Temp 25C Light cloud.

**PEST NUMBERS** There were few insects, but we were doing it as a demonstration.

**EQUIPMENT:** Tractor mounted orchard blower. Because of a light breeze, David sealed up the top nozzle to reduce spray drift.

**DILUTION & APPLICATION RATE:** A 1 ml/litre solution was applied. Both sides of the leaves were wet due to the turbulence. A tarpaulin had been spread on the ground under one tree to see what fell.

**ASSESSMENT:** The effects were immediate; adult and nymphs of bugs were dead within a few minutes. Spiders began to drop down from high up the tree, suspended from their webs. About 25 minutes after spraying, large (100mm) grasshoppers dropped.

**THE DOLLARS:** About 600 litres of spray was the normal amount used to cover the 140 trees... approximately 4 litres per tree. Based on the 5 litre pack price, the PyBo solution worked out at 54.4 cents per tree.

**SUMMARY:** PyBo only kills the insects it hits. There is no residue. Spraying late in the afternoon will give the best results as the pyrethrum will be effective until sunlight destroys it next day. This means hiding insects have more chance to come in contact with it and be killed. Insect populations, (particularly *Monolepta* 'swarms') build up quickly and can reduce flowering, fruit setting, and mark fruit making it less attractive to buyers. The small cost and immediate results from PyBo makes it a financial proposition to use whenever insect populations begin to threaten the growers income. As David says, "Getting an extra \$20 and more from a tree for an outlay of around 50 cents seems like a good deal to me".

Any tropical fruit tree with insect pest problems can be treated in the same way. If you can hit the insect today, it dies today!

