

Lettuce Aphid Trading Protocols

On February 28th the Australian Vegetable and Potato Growers Association (AUSVEG) convened a meeting of all state grower associations to agree on trading protocols should lettuce aphid arrive on the mainland.

It was agreed that:

- no interstate trade barriers be imposed on any of SA, VIC, NSW or QLD lettuce produce.
- protocols will apply to seedling nurseries and the interstate movement of transplants.
- if the pest first arrives in WA interstate trading protocols should apply.
- the existing arrangements should remain between Tasmania and the mainland.

This agreed national approach has been explained and formally put to government for consideration.

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3rd Australian Lettuce Industry Conference

To be held in Werribee,
Victoria 3rd - 5th May 2005.

This conference offers great
value for money.



All inclusive price of \$165

- Opportunities to discuss current industry issues with international and Australian lettuce industry leaders
- Choice in the conference program to suit your individual interests
- Entry to the National Vegetable Expo Werribee
 - Vegetable variety trials
 - Seeds, nurseries, chemical, fertilizer, machinery, irrigation and packaging exhibitor sites.

Please refer to the enclosed conference brochure for more information.

Tasmanian Lettuce Update

Tasmanian growers consider that there has been generally less aphid pressure in all crops this year. However the background lettuce aphid population has been strong enough to establish large aphid colonies in the Tasmanian DPIWE trials at Devonport.

There is mainland paranoia that the lettuce aphid will devastate the industry. Tasmanian growers have proved this is unwarranted. The lettuce aphid is manageable.



Lettuce aphid on lettuce

Most growers have their lettuce seedlings drenched with Confidor[®] prior to nursery dispatch. This enables them to grow lettuce with peace of mind that they are protected from lettuce aphid. There have been cases where Confidor[®] drenches have failed. These failures have been due to application methods and washing the chemical out whilst watering trays on farm.

Resistant varieties are the best option if they meet market requirements. In most trials the drenched standard varieties have performed better than the Nas resistant varieties. It has been clearly demonstrated that each grower needs to trial the Nas resistant varieties under their own growing conditions. Results have differed between growers.

Most growers have had an opportunity to see the successful Tasmanian DPIWE Integrated Pest Management (IPM) trials at Devonport. These trials have clearly demonstrated that beneficial insect control of lettuce aphid is comparable to Confidor[®].

Local growers feel that this season is a low pressure season for aphids in general and are uncertain how the beneficials will handle a high pressure year. It will take time for growers and consultants to develop confidence in their local pest / beneficial knowledge base required for a successful IPM system.

Hay soil drench trial

Insecticide soil drenches were evaluated at Hay last year in a winter sown lettuce crop. This trial included the best chemicals from previous trials at the Yanco Agricultural Institute.

Treatments were:

- 8g/100m of row Actara® (spray band)
- 8g/100m of row Actara® (granule band)
- 4g/100m of row Actara® (spray band)
- 25ml/100m of row Confidor® (spray band)
- 12ml/100m of row Confidor® (spray band)
- Control (no chemical)

The chemical treatments were applied 5cm deep behind a tyne. The chemicals are buried to prevent UV light breaking them down. The soil drenches were applied in one pass prior to sowing and watering of the lettuce crop.



Applying the treatments.

These trials significantly showed:

- Actara® and Confidor® equally controlled aphids.
- Aphids were controlled up to harvest.
- The chemicals also killed leaf hoppers and rutherghlen bugs.
- Granule chemical application worked as well as spray application.
- Thrips were not affected in this trial.

Wingless aphids appeared to recolonise the wrap leaves after thirteen weeks in the half rate plots.

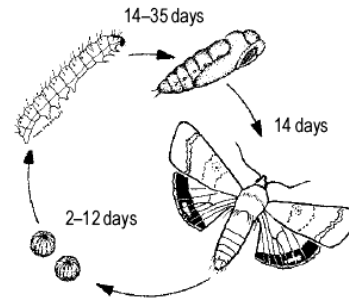
Data indicated that the chemicals indirectly killed brown lacewings and ladybird beetles. Their numbers were not great enough to prove any significance. Enclosed trials are needed to prove the effects of chemical drenches on beneficial insects.

For more information about the trial contact:

Andrew Creek
NSW DPI Tel: (02) 6951 2653

Managing heliothis

Heliothis is the main pest of lettuce and it is capable of destroying whole crops. *Helicoverpa armigera* is the most common species in autumn and has developed resistance to some insecticides.



Heliothis moths lay small white eggs on leaves. In Autumn these eggs can hatch within a week. The larvae chew leaves and burrow into the hearting lettuce.

Left: Heliothis lifecycle
Below: Heliothis larvae



Management

- Check crops regularly for eggs and small larvae.
- Sprays should target small larvae, before the grubs move into the lettuce heart.
- Plough crop residue after harvest, 'Pupae bust'.
- Eggs and larvae are parasitised and predated upon by many beneficial insects.
- Heliothis can be resistant to synthetic pyrethroid and carbamate insecticides. Rotate insecticides.
- Newer insecticides are available that may give better control. Many of the new insecticides are softer on beneficial insects.

Biological insecticides, eg. Dipel®, Gemstar® and Vivus®
- soft on all beneficial insects

Success®
- soft on ladybirds, lacewings and damsel bugs
- high impact on wasps

Proclaim®
- low impact on ladybirds, lacewings and wasps
- high impact predatory bugs

Avatar®
- low impact on lacewings and damsel bugs
(NB. once spray has dried)
- high impact on ladybird beetles

Are Rutherglens a pain in the neck?
meet the
ASSASSIN BUG



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