

# Vegetable ~~Matters-of~~ Facts

Based on research funded by the vegetable growers levy,  
Horticulture Australia and the Department of Primary Industries-Victoria

Number 39  
September  
2006



# Lettuce

## Managing currant lettuce aphid (CLA) in baby leaf crops

- Baby leaf crops, which have multiple cuts, may require different management practices for lettuce aphid.
- This will be more critical for winter and spring crops when crops are going to be in the ground for much longer.
- Seedlings treated with imidacloprid will have protection for 8-10 weeks from treatment.
- For plants that are likely to be in the ground for periods longer than 10 weeks resistant cultivars should be used or after 10 weeks applications of an alternative aphicide should be used.
- Loose leaf crops do not have a heart and alternative aphicides will provide control.

### Biology

Aphids are a highly successful group mainly because of their ability to reproduce at a high rate. This is due to;

- embryonic development without fertilisation by the male;
- ability to produce live young;
- presence of different forms enabling division of labour. Some forms concentrate on reproduction with other (winged forms) specialising in dispersal.



Lettuce aphid (*Nasonovia ribis-nigri*)



Lettuce aphid (wingless)



A range of susceptible salad mix crops



Crops may be cut more than once (cut lettuce are in foreground)

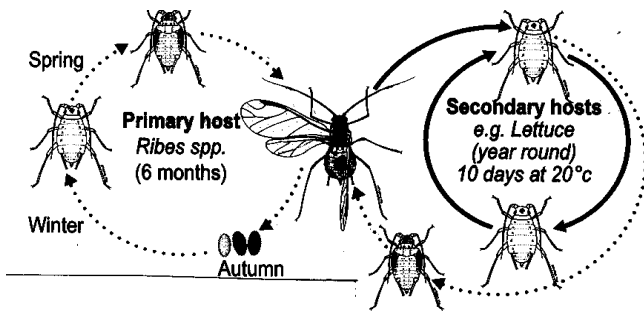
## The Issue with Baby Leaf Crops

Baby leaf crops may be harvested more than once (some crops up to 5 times). If multiple harvests do occur the crop will potentially be in the ground for a long period. This will especially be the case for crops planted in winter and early spring.

The use of imidacloprid as a seedling drench will only provide a limited period of protection for the crop (10 weeks). After that period it is essential to monitor crops closely for CLA and apply alternative aphicides. These will provide control of CLA since baby leaf crops do not heart but good spray coverage is essential. Selective aphicides will also help foster the presence of beneficials, in comparison to broad spectrum insecticides. Nasonovia resistant varieties will provide protection for the whole production period and should be used where possible.

Aphids will continue to breed and be present throughout winter but numbers will be lower and they will be more easily controlled.

Note: If you notice any control failures when using imidacloprid contact Bayer.



## Lettuce Aphid Lifecycle

**Autumn** – Sexual females & males are produced

**Winter** – Fertilised eggs overwinters.

**Spring**- Fundatrix (first generation female) hatches from eggs

**Spring-Summer**- Production of parthenogenetic, females (may be winged or wingless). Winged forms disperse to other host plants

Winged forms develop in response to;

- increased body contact resulting from crowding, or,
- reduced plant quality

For up-to-date information on Interstate Restrictions and Certification Requirements for the Interstate Movement of Hosts of Lettuce Aphid please contact DPI Plant Standards Branch on 9210 9390

Hosts of Curreant Lettuce Aphid	
Crop	Weed
Currants (includes all types – <i>Ribes</i> spp)	Hawks beard
Gooseberry	Hawkweed
Endive	Nipplewort
Chicory	Tobacco
Globe artichoke	Petunia
Lettuce (includes all types) e.g, butterhead, oak, red/green coral, frisee etc	Figwort
	Spiny sowthistle
	Annual sowthistle

Note: that most types of lettuce or endive included in salad mixes will all be hosts of CLA

## Management Strategies for Baby Leaf Crops

- Monitor crops closely
- Use nasonovia resistant varieties
- Use seedling treatments with recommended pesticides at the highest recommended rate.
- Turn in crops immediately after harvest.

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## Where there are multiple harvests

- Apply alternative aphicides once the protection period has finished.
- Winter and spring plantings will be the main crops at risk.
- Ensure good spray coverage when using alternative aphicides.

If CLA is found in a crop once harvest has finished immediately apply an insecticide and disc the crop in.

For information on CLA and monitoring and identification see:

## Vegetable Matters of Fact #28 Lettuce Aphid Identification

## Scouting protocol for lettuce incorporating IPM Corn Earworm control in lettuce – January 2005

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On our easy to find website

<http://www.dpi.vic.gov.au/vegcheque>

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Vegetable Matters-of-Fact is published as part of DPI's VegCheque extension program.

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□ The State of Victoria, Department of Primary Industries, 2006.

ISSN: 1445-5676