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National Vegetable Industry Centre Newsletter

Lettuce aphid detected in Sydney

Dr Sandra McDougall
NSW DPI

Currant lettuce aphid (CLA), was found for the first time in NSW on hydroponic lettuce in the Camden district in early February, 2006 by NSW DPI staff as part of the state wide surveillance program. Since then it has been found in other parts of the Sydney basin. These inspections have been required to maintain the NSW state freedom from CLA for market access to other CLA-free states and to regulate entry of lettuce from Tasmania and Melbourne metro areas where CLA is now found.

Since the first positive detection a major effort was launched to survey as many lettuce crops as possible to see how widespread CLA is in the Sydney basin. Although many lettuce crops of untreated susceptible varieties were found to be free of CLA further detections of CLA have been made within the Sydney basin. Another positive detection of CLA has been made on the Central Coast at Mangrove Mountain. Surveys of lettuce in the Central West, Cooma and Hay have not detected CLA.

Growers in the Sydney basin who wish to ship lettuce to SA, WA or QLD will need to meet the market access requirements Victorian growers currently operate under. Contact your local NSW DPI office or Regulatory officer.

CLA Update, Victoria, February 06

Dr Paul Horne and Jessica Page
IPM Technologies Pty Ltd

Lettuce aphid has been present in Victoria for practically the entire season in Cranbourne and Werribee districts. Only a very small number of lettuce growers have decided to use IPM as the basis for lettuce aphid control and so have decided NOT to use Confidor® drenches. **Many more lettuce growers would use the IPM option in Victoria if interstate trade restrictions were lifted.**

A Field Day was held in Victoria on the property of Peter Schreurs and Sons (near Cranbourne) on February 6 this year. Industry representatives and Plant Health officials from every State in Australia were invited to see how IPM could be used instead of reliance on a single insecticide (Confidor®) to produce a good crop.

Attendees were invited to tear open lettuce and assess the level of lettuce aphid control. Those attending agreed that they could not find any lettuce aphids in the lettuce and so there was no problem with the pest.

Peter Schreurs and Sons plant 40,000 Cos lettuces per week. None of their plants have been treated with Confidor® and no insecticides at all were applied to the crop inspected on the field day. There have been no losses caused by lettuce aphid other than sales lost interstate because of restrictions on trade.

IPM Technologies Pty Ltd has monitored this farm for over 6 years, and an IPM approach has been used for this entire time. The IPM approach has not just been used on lettuce but on all lines grown on the farm (including leeks and womboks). The Schreurs family is **deeply unhappy** about attempts from interstate that are attempting to force them to abandon their highly effective and sustainable IPM strategy that is an industry example.

IPM Technologies Pty Ltd is also monitoring three other crops in Werribee South that have not used Confidor® drenches. Two of these have used Nasonovia susceptible varieties and one has used Nasonovia resistant varieties. There have been **no rejections** or complaints because of lettuce aphid from any of these crops. At this stage in the season, lettuce aphid has been controlled on these farms by an IPM approach relying upon predatory insects including brown lacewings and ladybird beetles.

All of the crops monitored in Werribee South are commercial crops, planting between 30,000 and 50,000 lettuces per week. They are not small plot trials on a research farm but are the main commercial crop grown by the farmers involved. There have been **no losses due to lettuce aphid** at any stage of the season on any of these IPM grown crops.

We repeat here some of the points made in the previous note: There is no doubt that the numbers of lettuce aphid in non-Confidor-drenched crops has been higher during the life of the crop and at times higher at harvest than in Confidor-drenched crops. However, the level of aphids has not been greater than the market demands, and there have been no complaints about aphids. There has been much more of a problem for many farmers (using Confidor® or not) with other insects such as Rutherglen bug.

We believe that an IPM approach is a viable alternative to Confidor® drenched seedlings for those growers wanting another option to control lettuce aphid and grow iceberg lettuce.

Growers now have 3 options to control Lettuce Aphid: IPM, Resistant varieties (with or without IPM) and Confidor® drenches. This is more than is available for other pests and trade barriers should reflect this.

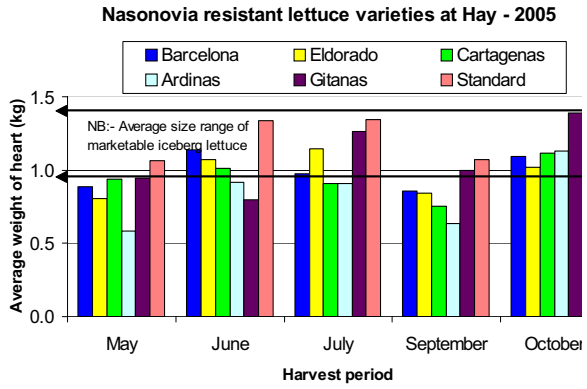
NSW DEPARTMENT OF PRIMARY INDUSTRIES · Department of Agriculture Government of Western Australia · Tasmania · Queensland Government Department of Primary Industries and Fisheries · HAL Know-how for Horticulture · Vegetable R&D · AUSVEG · SARDI South Australian Research and Development Institute

Observation trials at Hay

Tony Napier
NSW DPI

Five lettuce variety trials were established at Hay during the 2005 growing season. The primary objective of the trials was to give people an opportunity to see a selection of new nasonovia resistant varieties grown under local conditions. The trials also helped establish the most suitable time slot for each variety.

Observation plots with five of the nasonovia resistant lettuce varieties were established at different grower's properties. The trials were sown in the grower's commercial crop and were treated as part of that crop until harvest. The trial varieties were harvested within a few days of when the commercial crop was harvested. Yield measurements and subjective assessments were made at harvest. These were compared to the grower's standard variety used at that time.



Gitanis was the only trial variety recommended for a winter harvest while the others are recommended for a warmer time slot. A summary of the yield performance for each of the five lettuce varieties are shown in the above graph.

IPM Demonstrations in Tasmania

Lionel Hill
DPI, Water and Environment, Tasmania

DPIWE, Tasmania and IPM Technologies P/L are together working with two major Tasmanian lettuce growers to demonstrate IPM for lettuce pests in southern Tasmania. This follows a very successful demonstration of IPM in northern Tasmania last season.

Several plantings each of 3000 iceberg lettuce are being grown at fortnightly intervals from mid summer into autumn in the Coal River Valley. So far these plantings have not become infested with currant lettuce aphid despite the pest being present in high numbers at the site two years ago.


Ladybirds are useful predators on aphids

A few kilometres to the south there are numerous plantings, each of a few thousand open-hearted lettuce, being grown. These plantings are adjacent to each other with the sixth block due for harvest assessment in early March. These short-lived crops are proving to be a major test for IPM and the team hopes to use pirimicarb, plantings of rocket or oats and shorter time-gaps between plantings to slow aphid expansion and speed predator invasion. To date, the predators have exerted control of aphids but usually 1 to 2 weeks too late in these crops which can be cut at only 5 weeks after planting. In contrast to typical experience with IPM cropping, the first planting performed better than the next few before the predator/prey balance settles.

APVMA permits available for Insecticide and Fungicide use in Lettuce

Permit no	States	Target	Chemical	Trade name	Application	Expiry date
9184	NSW, QLD, NT & WA	Silverleaf white fly	Imidacloprid	Confidor®	Soil	30-Sept 08
8819	All states (except VIC)	Sclerotinia	Boscalid	Filan®	Foliar	31-Oct-07
8523	All states (except VIC)	Lettuce aphid	Pymetrozine	Chess®	Foliar	01-Aug-08
8207	All states (except VIC)	Sclerotinia	Tebuconazole	Folicur®	Foliar	24-Jan-07
8182	All states (except VIC)	Sclerotinia	Azoxystrobin	Amistar®	Foliar	31-Jan-07
7836	All states (except VIC)	WFT	Methomyl	various	Foliar	30-Sept-07
7629	NSW, QLD, NT & WA	Silverleaf white fly	Pymetrozine	Chess®	Foliar	31-Mar-06
7421	All states (except VIC)	Damping off	Metalaxyl-M	Ridomil gold®	Granules to the soil	30-May-07
7416	All states (except VIC)	Lettuce aphid	Imidacloprid	Confidor®	Seedling drench	30-Jun-06
7301	QLD, NT & WA	Silverleaf white fly	Bifenthrin	Talstar®	Foliar	31-May-06

When using a chemical under an APVMA permit, spray operators are required to carry a copy of the appropriate permit. For copies or more information on these permits, visit the APVMA website at www.apvma.gov.au

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