

# Vegetable ~~Matters of~~ Facts

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

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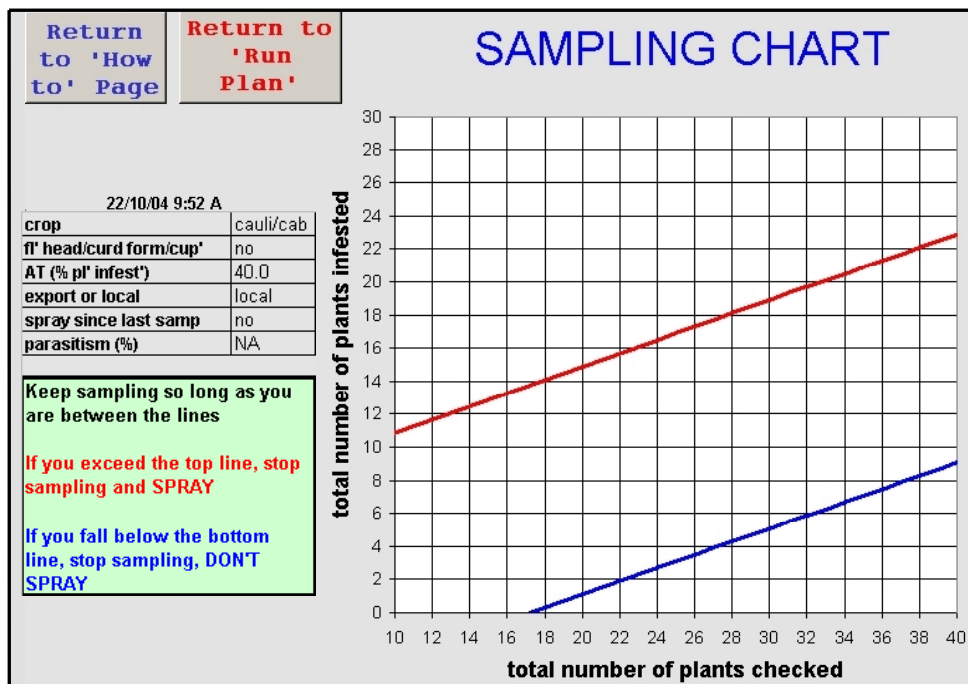


Vegetables

## Crop scouting software for Diamondback Moth - *Plutella xylostella*

You only need to look for caterpillars!

- This **Diamondback Moth Sampling Plan** is designed to assist Australian *Brassica* vegetable growers with pest management decisions.
- The software is **informative and simple to use**, you only need to look for caterpillars
- For growers using IPM, the software includes a **Insecticide Toxicity Chart** for beneficial insects.
- The software also includes **Insecticide Resistance Management Strategies** for DBM in each state.



Decisions about when to apply insecticides should be based on sound estimates of pest numbers. This software has been carefully created using all our latest understanding of DBM in brassica crops.

**You can expect this plan will save you time and money  
by minimising the number of sprays required to produce a high quality crop**

In this demonstration the software asked me several questions about the crop:

- Is the crop cauliflower/cabbage or broccoli?..... I answered "C" for cauliflower
- Is the crop at the cupping stage or later?..... I answered "N" for no
- Is the crop destined for export or domestic market?.....I answered "D" for domestic
- Have insecticides other than BT's been used in the past week? ...I answered "N" for no
- Do you have an estimate of DBM parasitism?.....I answered "N" for no.

The sampling chart shown above was then generated by the software.

- IF I check 12 plants and at least one caterpillar on every plant, I can stop scouting and spray.
- IF I check 20 plants and find more than 2 with caterpillars, I need to keep scouting.
- IF I check 40 plants and find less than 9 with caterpillars, I will not spray but check again next week.

## “Implementing Pest Management of Diamondback Moth”

### HAL project VG 00055

This Diamondback Moth Sampling Plan is a decision support tool developed to assist growers and crop advisers make better insecticide application decisions to control diamondback moth.

This sampling plan is the latest monitoring tool developed by the levy funded **National Diamondback Moth Project**.

When the crop is at a critical stage (cupping or buttoning), it is critical to minimise insect damage or contamination so the recommendation will be conservative. When the crop is not at a critical stage the recommendation will favour either not spraying or checking more plants before a making a decision.

#### OK... where can I get a copy?

The most recent version of the **Diamondback Moth Sampling Plan** is only available from the DPI web site

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

Follow the links to:

>Agriculture & Food > Horticulture > Pests & Disease



Diamondback moth caterpillar

#### Are you on our mailing list?

If you would like to receive your own copy of **Vegetable Matters-of-Facts** or have changed your address, please mail or fax this coupon to:

**Craig Murdoch, Private Bag 15, Ferntree Gully Delivery Centre 3156; Fax (03) 9800 3521.**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Postcode \_\_\_\_\_ Email \_\_\_\_\_

Organisation/Business \_\_\_\_\_

Crops of interest \_\_\_\_\_

#### Check us out and view our other fact sheets:

<http://www.dpi.vic.gov.au/agvic/ihd/projects/vchq.htm>

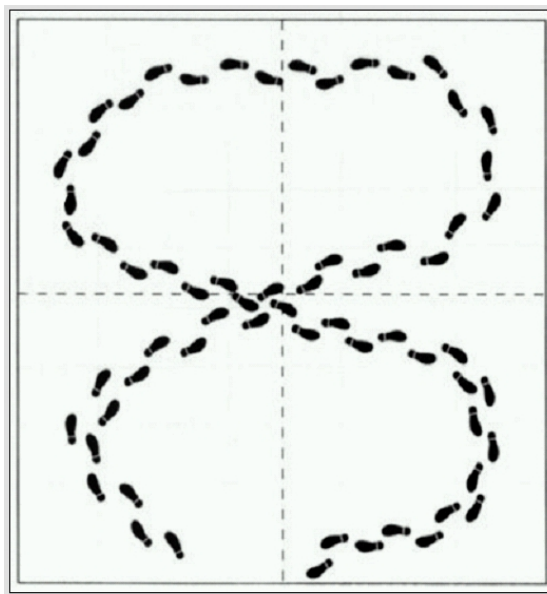
#### For more information please contact your local VegCheque officer.

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Bruce Fry	South West Vic	5233 5510
Craig Murdoch	Melbourne	9210 9354

#### What to look for:

You will need to look at a minimum of ten plants per crop to make an informed decision about pest control. You are only looking for caterpillars, not eggs or moths. The number of caterpillars per plant is not important. A single grub per plant counts as infested. Keep weekly records of changes in pest numbers and note the effectiveness of any previous sprays!

Inspect plants throughout the crop not just at the edges or in one spot as this can be misleading. Vary the route you take from one time to the next. Walk a zig-zag or figure-8 pattern through the crop, starting at a different place each time and inspecting plants at regular intervals.



Look at the whole plant, including both sides of each leaf. You can stop looking when you find the first grub and move on to check another plant. Sprays are not effective on the egg stage, and first instar grubs are mining inside the leaf and not affected by contact insecticides.

#### For more information please contact:

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#### Useful Websites for more information:

For information about the biology and ecology of DBM visit:

<http://www.nysaes.cornell.edu/ent/dbm/>

For more references or other management information for DBM, refer to your 'Handbook of Integrated Management of DBM in Crucifers' or the 'Brassica IPM National Newsletter'.

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