

## **Review of the uses of dimethoate and fenthion**

### **Frequently asked questions**

#### **What are dimethoate and fenthion, and what are they used for?**

Dimethoate is a contact and systemic organophosphorus insecticide and acaricide. It is used in agriculture and home gardens to control a range of insects and mites.

Fenthion is also a broad-spectrum organophosphorus insecticide. It is used to control a range of pest insects in agricultural, commercial and domestic situations.

These chemicals play an important role in the control of fruit fly in fruit and vegetable crops. Effective treatment against fruit fly allows fresh produce to be transported from infected areas to consumer markets in areas that do not have fruit fly. This limits the spread of fruit fly in Australia and ensures that important production regions remain free of this major insect pest.

#### **Who is doing the review?**

The Australian Pesticides and Veterinary Medicines Authority (APVMA) is conducting the review.

#### **Why is a review being conducted?**

The APVMA has a Chemical Review Program that considers new research or evidence regarding the use or safety of particular chemicals or products.

Reviews may focus on one or more areas including environmental safety, worker safety, public health, residues and trade, or less commonly, may consider product efficacy. The scope of a review is determined by the specific concerns about the chemical.

#### **When can a decision be expected?**

The review into dimethoate and fenthion has begun and a draft report is expected at the end of 2010.

The process for reviewing chemicals can be briefly summarised as:

- The APVMA is made aware of concerns about a chemical, product or label, and decides whether a review is warranted;
- The review is prioritised, scoped and scheduled based on the urgency and nature of the concerns;
- The APVMA notifies chemical companies with active constituent approvals and registered products containing the review chemical and writes to them to submit data relevant to the scope of the review;
- The APVMA calls for public submissions which address the benefits of, or problems with, the continued registration of the chemical under review;
- All submissions and scientific data are evaluated by the APVMA and external advisory Australian government agencies as appropriate;
- Based on these evaluations, a draft regulatory approach is developed. The draft report and regulatory approach are released for public comment for a period of 6-8 weeks, prior to any final regulatory decisions;

- The APVMA CEO makes the final decision on the future use of the chemical. Generation and then evaluation of additional data may be required for chemicals for which an interim regulatory approach has been approved;
- Participants in the review are notified of the APVMA's decision and the regulatory actions are implemented;
- Outcomes of the reviews are published in the APVMA's Agricultural and Veterinary Chemicals Gazette and the APMVA's website.

### **Do members of the public get to have a say in the review?**

The review process generally involves extensive consultation with the public and industry.

Submissions from farmers, householders, local government authorities, pest controllers and other chemical users help the APVMA to construct a picture of chemical use, identify problems or concerns and determine implications for agriculture if a chemical is to be withdrawn or its use continued.

Accurate information about a chemical and how it is used is important in the development of realistic regulatory recommendations. Opportunity to provide feedback on the draft review recommendations is provided through the public comment period before the APVMA makes its final decision about future use of the chemical.

Individuals who make submissions to the review are invited to provide evidence (where appropriate) of whether a chemical would or would not:

- adversely affect human beings
- be harmful to workers
- be hazardous to the environment
- pose a threat to trade, or
- be effective when used according to the label directions.

### **What is the likely outcome of the review?**

While the final outcome won't be known until the end of the process, it is expected that there will be some restrictions to the use of these chemicals.

### **In making its decision does the APVMA assess trade impact?**

APVMA takes advice from the Department of Agriculture, Fisheries and Forestry (DAFF) and requests wider comment through the APVMA website. It has no control over what importing countries or other stakeholders may do. APVMA must consider the impact on trade of allowing use of a product and will consider whether importing countries have lower maximum residue limits than here in Australia. However, the withdrawal of use of a product cannot be delayed on the grounds of trade impact.

### **In which fruit and vegetable crops are dimethoate and fenthion currently registered for use?**

Dimethoate and fenthion are currently registered for use with:

apples, avocados, babaco, bananas, black sapote, blueberries, capsicums, chillies, custard apples, durian, eggplant, grapes, grapefruit, jackfruit, jaboticaba, kiwifruit, lemons, limes, longan, lychees, mandarines, mangoes, mangosteen, oranges, papaya, passionfruit, pears, pomegranate, rambutan, stone fruits, strawberries, tamarillos, tangelos, tangerines, tangors, tomatoes.

### **Are occupational health and safety issues considered as part of this review?**

Given the direct and often long-term exposure to agricultural chemicals, worker safety is a key consideration when assessing the possible human health impacts.

### **Are dimethoate or fenthion used overseas?**

Australia is the only country still using dimethoate to treat fruit and vegetables after harvest. Fenthion has been used for bait spraying in citrus in Europe. In Australia, these chemicals are most commonly used to control Queensland fruit fly, a pest that is unique to Australia.

### **Have there been any human health/poisoning cases caused by these two chemicals?**

APVMA has a reporting program for health issues. There have been no reports through this program of any human health or poisoning cases due to dimethoate or fenthion. However, it is often difficult to recognise if a health issue is directly related to a specific chemical, particularly if the effects are subtle. The fact that an incident is not reported does not mean it has not happened.

### **Is any work being done to prepare for possible changes in regulations?**

The APVMA reviews of these chemicals have been underway for a number of years. During this time, horticultural industries through Horticulture Australia Limited have worked in conjunction with state government agencies and the APVMA to fund additional research on dimethoate and fenthion and to find alternative treatment regimes, such as systems approaches.

Now that the APVMA reviews are reaching completion the Department of Agriculture, Fisheries and Forestry is coordinating a process to prepare for the APVMA decision, which includes supporting a group of representatives from the Australian Government and state authorities, Plant Health Australia, Horticulture Australia, AusVeg and other representative industry bodies to provide advice and help to implement actions.

It is anticipated that research funding will continue to be allocated to further develop alternative fruit fly treatments in preparation for the decision.

### **What alternative treatments might be used by growers?**

A guidebook of alternative treatments is being prepared. This guidebook should be circulated by the middle of 2010. Irradiation, cold storage, heat treatment and a range of systems approaches are being considered.

### **What is a systems approach?**

A systems approach is when a number of measures are added together to reduce the risk. There is an international standard for systems approaches (ISPM 14). The system for Queensland citrus to enter Victoria and New South Wales is an Australian example. Other Industries are likely to develop similar systems approaches in consultation with regulators and researchers.

### **What can growers do?**

Growers should keep themselves informed through their industry bodies and state primary industries agencies. They should regularly check websites for information. They should start making plans now to deal with a restriction or withdrawal of the permit to use both dimethoate and fenthion. They should talk to other industry members to make sure they know what is happening. Growers should investigate alternatives to the chemicals for their specific situations.

### **What are industry bodies doing?**

Industry bodies are working closely with governments and their members to prepare for any changes. They are also providing information directly to the APVMA on the current uses of the chemicals to assist in the review.

### **What are state governments doing?**

State and territory governments are working with industry representatives and the Australian Government to ensure that growers are prepared for any changes. They are also working with other state governments on a range of domestic quarantine issues that may be affected if the chemicals are restricted or withdrawn.

State and territory governments have been actively trialling alternatives to dimethoate and fenthion to control of fruit fly for many years. The results of these trials will help to develop alternative treatments should the APVMA decide to restrict the use of dimethoate and fenthion.

### **What is the Australian Government doing?**

DAFF has convened a planning group to prepare for any decision by the APVMA. The group contains representatives from the Australian Government, state authorities, Plant Health Australia, Horticulture Australia, AusVeg and other representative industry bodies.

DAFF also chairs a communications sub-committee comprising representatives from these same groups, which is assisting with the coordination, consistency and distribution of information.

### **Where can I get more information? (links etc)**

[www.apvma.gov.au](http://www.apvma.gov.au)

<http://www.apvma.gov.au/products/review/current/dimethoate.php>

<http://www.apvma.gov.au/products/review/current/fenthion.php>

[www.planthealthaustralia.com.au](http://www.planthealthaustralia.com.au)

[www.horticulture.com.au](http://www.horticulture.com.au)

[www.ausveg.com.au](http://www.ausveg.com.au)

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