APVMA ADVICE NOTICE TO THE OILSEEDS INDUSTRY

RESIDUES OF FENITROTHION IN EXPORTED CANOLA

Purpose
The purpose of this Advice Notice is to advise growers and the grains industry of recent detections of fenitrothion in canola at levels above the MRL of one of Australia's trading partners. It provides precautionary advice to help reduce the risk of further detections, in order to ensure continued access of Australian oilseeds to overseas markets.

Residues of Fenitrothion in Canola
Residues of fenitrothion which were above the Japanese maximum residue limit (MRL) have been detected in several consignments of Australian canola exported to Japan. This is the fourth detection within the past 12 months. Any further violations could jeopardise trade in Australian canola to Japan.

Trace-back investigations have indicated that these residue violations potentially have arisen from storing canola in both stationary structures such as silos and transportable structures such as bins treated with fenitrothion.

Fenitrothion Labels
In Australia, fenitrothion as a structural treatment for grain storage facilities was first registered in the mid-1980s. At that time, the oilseed industry was limited and most insect control work was concentrated on cereal grains (ie. the starchy grains of grasses such as wheat, oats, barley and corn, and not including oilseeds eg. canola).

The original risk assessment dealt with the use of the chemical on cereals only and thus the label wording on fenitrothion products referred to "cereal grain storage and equipment". As the uses and numbers of fenitrothion products intended for storage structure treatments expanded, the wording on labels did not keep pace with new crops and agricultural use practices. In places labels only referred to "grains" rather than specifically to "cereal grains". Indirectly, it was assumed that users would only be engaged in using fenitrothion on storage for cereal grains.

These labels will be considered in the current review of fenitrothion being conducted by the APVMA.

The label use-pattern "Cereal grain storage on farm, produce stores, feed and flour mills (etc)" means that the product is for use only for those situations where cereal grain is involved.
By "cereal grain", the APVMA means the starchy seeds produced by a variety of plants, primarily of the grass family (*Gramineae*), including wheat, barley, oats, rye, triticale, rice, sorghum and millet. Canola or pulse seeds are **not** covered by the terms "cereal grain" or "grain", where these terms are used on current fenitrothion labels.

Possible Reasons for Fenitrothion Residues in Canola
Oil-soluble (or lipophilic) pesticides such as fenitrothion are more readily taken up in canola and oilseeds than they are in wheat and other carbohydrate-based grains.

The APVMA realises that, by necessity, non-cereal grains may be stored in treated cereal storage structures, especially when there is an unexpectedly large volume of non-cereal grains in the storage and distribution system.

It is important for growers and distributors to realise that transfer of fenitrothion to non-cereal grain can occur from storage structure treatments.

MRLs for Fenitrothion in Canola
Recognising that oilseeds will be stored in structures legally treated with fenitrothion, the APVMA has established an MRL of 0.1 mg/kg for oilseeds such as canola. In undertaking its assessment the APVMA determined that there would not be a human health risk from consumption of residues if they were present in oilseeds at this level. Note that before this MRL becomes a legal standard in Australia, it has to be incorporated into the Australian Food Standards Code (FSC) maintained by Food Standards Australia New Zealand (FSANZ).

This limit applies to the domestic market only. Until such time as the Japanese authorities consider this value, they will continue to default to a uniform low limit of 0.01 mg/kg since they have not established an MRL for fenitrothion in oilseeds. Therefore, when undertaking residue testing on canola, it is important to ensure that the laboratory limit of reporting (LOR) of the analytical method is sufficiently sensitive to detect fenitrothion residues to at or below 0.01 mg/kg.

Consequently, before storing canola in any structure, growers and distributors should be aware of this, and the special propensity of canola (and other oilseeds) to absorb fenitrothion.

It is the responsibility of growers and distributors to ensure that exported canola complies with the Australian MRLs as well as the MRLs or import tolerances of the destination country.

Surface Treatment of Stored Canola
The fenitrothion label does **not** permit direct application to the surface of stored canola or other oilseeds. Again, such treatment is for cereal grains only.

It is important to note that the Australian MRL for fenitrothion in oilseeds is to cover its transfer from treated storage structures only. It is **NOT** to cover the use of fenitrothion for surface spraying of stored canola.

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