



Feeding Crop Waste to Livestock and the Risk of Chemical Residues

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Introduction

In times of feed shortages, livestock producers often consider using unusual plant material as stockfeed. However, producers need to be aware that chemical residues may be present in these novel stockfeeds and may present a risk of unacceptable residues in livestock and the meat, milk and eggs they produce.

Australian livestock and unacceptable chemical residues

Livestock producers are responsible for ensuring that the livestock they sell do not contain unacceptable chemical residues. If unacceptable residues are detected in livestock products, our valuable export and domestic markets are put at risk, along with Australia's reputation as a producer of safe, quality food. Food exports are worth billions of dollars to Australia each year and both export and domestic markets are becoming increasingly sensitive to chemical residues in food commodities. It is therefore essential that Australia's livestock products do not contain any unacceptable residues.

Concerns with using plant waste as feed

Extreme care should be taken if producers are considering feeding livestock with crop by-products or plant waste that may have been exposed to agricultural chemicals. Feeding livestock with stockfeed containing even trace quantities of certain agricultural chemicals may lead to unacceptable residues occurring in livestock products, such as meat, milk and eggs.

Agricultural chemicals

Agricultural chemicals are commonly used to treat crops and pastures to prevent or treat a disease or weed problem. However, before an agricultural chemical is registered, it must be assessed for its safety and effectiveness by a national body called the Australian Pesticides and Veterinary Medicines Authority (APVMA). Labels containing directions for use must also be approved as part of the registration process undertaken by the APVMA. If a chemical product is used in accordance with its label directions, any residues present on the grain, crop or pasture will be at a safe level once the withholding period

has expired. Contamination of livestock from consuming conventional crops, such as pasture, lucerne and cereals, is a very low risk provided label directions and withholding periods have been observed.

Risk of residues

The risk of livestock becoming contaminated increases when they consume plant waste that has not been specifically produced for either human consumption or use as a stockfeed. Such plant material includes vegetables by-products (eg potato skin/peel, cabbage or lettuce leaves), crop waste (eg corn trash, rice straw) and by-products from the fruit processing industry (eg citrus pulp, grape marc and apple pomace). The risk of residues is higher when feeding these materials because chemical residues can concentrate in the skin or outer leaves of these products.

Best practice to avoid residue contamination

The use of plant waste is often tempting because it may be cheap and readily available when normal stockfeed supplies are expensive or in short supply as a result of a poor cropping season or adverse natural events, such as drought, flood or fire. The best practice for avoiding problems is to only feed conventional stockfeed and obtain a declaration from the supplier certifying that the plant material is suitable for feeding to livestock.

To minimise the risk of feeding livestock contaminated plant material, producers need to follow a number of steps to assess the residue status of such material. Such an assessment must determine whether:

- the intended stockfeed has been treated with chemicals;
- all chemical treatments were carried out in accordance with label directions;
- feeding of plant material from the treated crop is not stated as prohibited on the label of the chemical product used;
- any chemical treatments had a grazing or harvesting withholding period;

- all grazing or harvesting withholding periods were observed.

Further inquiries may be required to determine whether the harvested plant material had been treated with chemical products from other sources such as post-harvest treatments (eg apples or citrus) or treatments during storage (eg cereals or pulses).

Residue testing

If it is assessed that the plant material may be contaminated with chemical residues, and the specific chemical is known, samples can be tested by a laboratory to determine if residues are present, and at what level.

Commodity Vendor Declarations & records

It is considered good risk management to obtain a Commodity Vendor Declaration for each consignment of stockfeed so a risk assessment can be conducted. For more information on Commodity Vendor Declarations, visit www.safemeat.com.au.

In all cases where livestock are fed stockfeed, regardless of its origin, it is good practice to maintain records which include the:

- type of stockfeed fed;
- source of the stockfeed;
- vendor declaration;
- chemical residue test results (if available);
- date the stockfeed was first fed and percentage included in ration;
- identification of livestock fed; and
- date the stockfeed was last fed.

If the chemical treatment history of the plant material cannot be determined, it is likely to be cost prohibitive for a laboratory to test the material for all agricultural chemicals that may have been used. The best advice where the residue status of a plant material cannot be determined is not to feed it to livestock.

National Vendor Declaration (NVD)

When selling livestock, purchasers expect that the feeding history of livestock will be accurately recorded on accompanying National Vendor Declaration (NVD) forms. The information provided on an NVD helps buyers determine the residue risk of livestock offered for sale. NVDs for cattle, sheep and goats currently have a specific

question in relation to the use of by-product stockfeed, which is why obtaining Commodity Vendor Declarations for stockfeed is important. Vendors who provide false or misleading information on an NVD may face prosecution or civil action from the purchaser.

Ruminant Feed Ban

Producers must also remember that it is now illegal to feed restricted animal material (RAM), including meat and bone meal, feather meal and fish meal to ruminants species. The only exemptions from this prohibition relate to stockfeed containing tallow, gelatin, milk products, oils extracted from fish and used cooking oil that has been collected, filtered and packaged in accordance with *The Australian Renderers' Association – Code of Practice for the Collection, Processing and Recycling of Fats and Oils*.

Further Information

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- DPI Chemical Standards website - www.dpi.vic.gov.au/chemicalstandards
- Meat & Livestock Australia Limited (MLA) website - www.mla.com.au
- Safemeat website - www.safemeat.com.au
- Australian Renderers' Association - www.ausrenderers.com.au

Acknowledgement

This Information Note was originally developed by Geoff Bennett, and was previously published in May 2007.

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