

# POTATO PRODUCTION STEWARDSHIP PROGRAMME

A COLLABORATIVE INITIATIVE OF POTATOES SOUTH AFRICA, CROPLIFE SOUTH AFRICA AND THE INSECTICIDE RESISTANCE ACTION COMMITTEE



## MONOGRAPH 2

### THE CRITICAL ROLE OF PESTICIDE MAXIMUM RESIDUE LIMITS IN MARKET ACCESS AND CONSUMER CONFIDENCE IN POTATO PRODUCERS

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Version 1: March 2021

#### Maximum residue limits

Pesticide residues are unavoidable in all crops when these essential agriculture inputs are used to control potato pests, potato diseases and weeds in potato production. It is seldom possible to produce a crop without a residue of the applied pesticide unless special measures are implemented to manage the residues down to below detectable limits. A Maximum Residue Limit or MRL is set for all pesticides (including plant growth regulants and insect growth regulants) that are registered in South Africa, and potatoes are no exception. MRLs are published in a regulation by the Department of Health in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972). It is therefore a legal requirement on the part of a potato producers to only sell their produce that meet the published MRLs of all pesticides used on the crop. If potato producers follow label instructions for dosages, application timings, repeated applications, application intervals and preharvest intervals, pesticide residues at the time of harvest should be below or equal to the published MRLs.

CropLife South Africa's Agri-Intel is the perfect tool for potato producers to check whether pesticides are registered for use on potatoes. It also offers a comprehensive dataset on MRLs for local consumption and export markets. Growers can subscribe to Agri-Intel via the website [www.agri-intel.com](http://www.agri-intel.com).

#### Market requirements

Markets, meaning buyers, processors such as crisp manufacturers, retailers and consumers are meticulous about food safety, with a strong focus on pesticides that are used on foodstuffs and residues thereof. Problems that may arise with potato buyers, processors and consumers are as follows:

- If pesticides which are not registered for use on potatoes are applied, the buyers, processors and retailers may simply reject the potatoes and such stocks will be returned to producers or destroyed at their expense. Even if residues of such unregistered pesticides are below detectable limits, the market will be within their rights to reject such potatoes.
- If pesticides that are registered for use on potatoes are not applied strictly according to label instructions, for example exceeding dosage rates, applying more frequently than what label instructions advise, applying too late in the season (within the pre-harvest interval or PHI) or any other deviation from label instructions, residues may very well exceed the published MRLs. Buyers, processors, and retailers analyze potatoes for pesticide residues and if the MRLs are exceeded, they are within their rights to reject batches that exceed the published MRLs.

## **Unexpected residue exceedance despite following label instructions.**

It is possible, though unlikely, that the MRL of a certain active ingredient may be exceeded even if producers strictly follow label instructions. In such a case the potato producers must inform the registration holders of such pesticides immediately for investigation and further action on their part. An example of such an incident occurred in 2015 when cyromazine residues on potatoes exceeded the South African MRL. CropLife SA members including the registration holders and Potatoes SA collaborated in an exercise to elevate the MRL and solved that problem for potato producers.

## **Potato producers determine their own destiny for market access and satisfaction**

Potato producers should decide whether market demands and satisfaction in terms of food safety are important or whether to take risks with pesticide applications. Their decision should be to only use pesticides that are registered for potatoes in South Africa and ensure that MRLs are not exceeded. Potato producers must take therefore note of the following:

- The label is the ONLY legal “advisor” of a pesticide; neither consultant nor crop advisor may advise a potato producer to use a pesticide “off-label” which means for any other purpose or in any other manner than what is instructed by the label.
- If a potato producer uses a pesticide off-label, any negative consequence of such off-label use is for the account of the potato producer even if the producer acted upon the advice of a third party.
- If a potato producer uses pesticides off-label, the consequences may be far reaching and affect all South African potato producers. Many producers export potatoes to other countries and a decision by such countries to prohibit import of South African potatoes because of misconduct with pesticides, will affect all South African potato producers.

## **Trade barriers and consumer resistance**

The trade in agricultural fresh produce is highly competitive. Certification agencies, buyers and export destinations use the slightest reason to try and terminate trade agreements with countries like South Africa. It is also evident in the retail market that certain retailers mark their foodstuffs as “chemical free”, etc. Should unacceptable pesticides residues be found in potatoes, trade may very well become a difficult issue for potato producers.

The slightest hint of “unsafe” potatoes, whether it is true or not, may also cause unfounded consumer resistance against potatoes and potato derived products. This is something that potato producers can ill afford.

## **Sustainability of potato growers in South Africa**

Potato producers have a responsibility towards themselves and their fellow producers to protect their commercial interest by –

- Only using pesticides that are registered for use on potatoes.
- Following label instructions meticulously to prevent unacceptable pesticide residues in potatoes.

