

Why are crop protection products used in pulse production?

Pulses are water-efficient crops and an affordable source of protein with a low greenhouse gas footprint that contribute to global goals to reduce the environmental footprint of the food system and increase food security. The use of crop protection products in pulse production is integral to meeting these global goals as the use of these products helps to significantly reduce pulse growers' reliance on conventional tilling as a means of preventing weed competition. The use of crop protection products has also made a positive contribution food security as these products reduce pest pressure and improve the yield of pulse crops globally. Prior to use, crop protection products must be proven to be safe for the environment and human health by the jurisdiction in which they are used. Importing countries establish residue tolerances in the form of MRLs for each crop and each crop protection product used during production.

What is a Maximum Residue Limit?

A maximum residue limit (MRL) is the highest level of crop protection product residue that should be found on a food product when a crop protection product is used according to label directions. MRLs are neither a safety limit nor a benchmark for human health. Rather MRLs are a measure used to ensure pesticides have been used properly.

Why do MRLs pose an issue to trade?

Meeting the MRL requirements in various markets is becoming increasingly challenging. The reasons for these trade challenges include:

- More missing MRLs and application of zero or near-zero defaults in various markets:
 - There are a growing number of different MRL-setting standards being used around the world. There is a movement toward more national MRL lists (a list or MRL standard set by an individual country or region rather than using internationally recognized standards such as Codex Alimentarius (Codex). The lack of an effective, functioning, and harmonized global standard has added a great deal of complexity and risk for growers, exporters, and importers of pulses. The implementation of national MRL lists by various markets often causes for missing or misaligned MRLs for active ingredients that are integral to the sustainable production of pulse crops.
- Residue testing is becoming more affordable and sensitive in various markets.
 - Standard laboratory equipment and methodologies can now identify hundreds of active ingredient residues at levels well below 1 part per billion (ppb) with a good level of selectivity.

- More markets are testing for crop protection product residues on imported pulses.
 - In October 2019, Food Safety and Standards Authority of India (FSSAI) issued a notification instructing internal staff to test for the presence of glyphosate in samples of imported pulses. The notification also instructs FSSAI staff to utilize the MRLs specified by Codex for the purpose of import clearances.
 - In January 2019, the Pakistan Department of Plant Protection (DPP) implemented a policy to randomly test imported shipments of lentils from all origins for glyphosate residues. DPP is utilizing the Maximum Residue Limits (MRLs) specified by Codex Alimentarius for the purpose of import clearances.
- The list of approved uses for crop protection products is expanding in pulse producing nations, but not all importing nations are establishing an import tolerance (MRL) within the same timeframe.

What can be done to mitigate MRL-related trade risks?

The Global Pulse Confederation (GPC) champions the development of clear, fair and predictable trade policies that protect the interests of importing and exporting nations. GPC also supports protection of the health of people and the environment by ensuring adherence to science-based international plant protection policies. GPC members should encourage their government to ensure that standards are in place that both a) allow for predictable and open trade and b) protect human health and the environment by adhering to standards that are internationally recognized. In the case of MRLs, if the implementation of national list is incomplete (some MRLs for crop protection products used on pulses have not been established) countries should be encouraged to implement an interim MRL that allows trade to continue unimpeded while still protecting human health and the environment.

To do this, countries should be encouraged to accept an interim MRL as established by an agency such as Codex or the MRL established by a recognized regulatory authority in another country. Some countries also choose to accept the lowest MRL established by regulators such as Codex, Health Canada and the Environmental Protection Agency in the United States.