

USING PARAQUAT IN CANOLA, WHEAT OR BARLEY CROPS WILL CAUSE RESIDUE VIOLATIONS

Australian growers and advisors have a responsibility to ensure chemicals are used in line with label instructions and that harvested crops do not contain chemical residues at above Maximum Residue Levels (MRLs).

MRLs are the maximum concentration of a crop protection product legally permitted in or on food, agricultural commodities or animal foodstuffs. They are intended to provide a measure of whether an agricultural chemical has been used in line with its label instructions. MRLs provide a important framework to allow crops to be traded within and between countries.

The use of paraquat herbicides, including GRAMOXONE and SPRAY.SEED in the lead up to harvest in canola, wheat or barley crops contravenes product labels, *is illegal* and *will lead to residue violations at above Australian and export MRLs*!

Illegal use patterns have the potential to threaten individual growers, their advisors and the entire Australian grain and oilseed industry.

CANOLA (OVER THE TOP APPLICATIONS) = MRL VIOLATIONS

Research trials indicate that using paraquatbased herbicides over the top of canola crops will lead to residues up to 134-times the Japanese MRL! The Australian MRL for paraquat in canola seed is ZERO!



Paraguat residues from over the top application Canola - Trial: AU10-95-H201 (Whitton NSW) 8 7 • 6.7 6 Paraquat residues (mg/kg) • 5.6 • 5.4 5 4 3 2 • 1.4 5 6 7 8 10 11 12 13 Timing (days prior to harvest) Paraquat Residue (mg/kg) MRL

CANOLA (APPLICATION WHILE SWATHING) = MRL VIOLATIONS

Plot experiments indicate that using paraquat-based herbicides while swathing has the potential to result in detectable residues in harvested canola seed, breaching the Australian MRL. These variable results were observed using a 7.6m wide swather with a commercially available swather spray kit under controlled conditions. Residues levels could potentially be higher under commercial scale application conditions.



Paraquat residues in canola seed from under the cutter bar application ASA-11-131 (trial conducted by DAFWA - Mt Barker, WA, 2010)

Specimen code	Specimen type	Paraquat residues (mg/kg)
10MT07-30	Canola seed	0.05
10MT07-35	Canola seed	0.08
10MT07-06	Canola seed	<l0q*< td=""></l0q*<>

*LOQ = Limit of Quantification - 0.01mg/kg (paraquat cation)







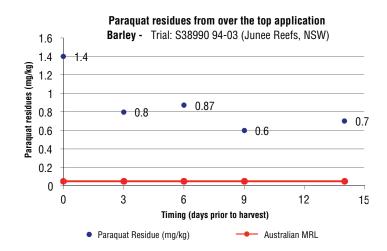




BARLEY (OVER THE TOP APPLICATIONS) = MRL VIOLATIONS

Research trials indicate that using paraguatbased herbicides over the top of barley crops will lead to residues at up to 28-times the Australian MRL.





WHEAT (OVER THE TOP APPLICATIONS) = MRL VIOLATIONS

Research trials indicate that using paraguatbased herbicides over the top of wheat crops will lead to residues at up to 12-times the **Australian MRL.**



Paraguat residues from over-the-top application Wheat - Trial: 05-MS-097-641 (United States) 0.7 Paraquat residues (mg/kg) 0.6 0.6 0.5 0.4 0.3 • 0.25 0.2 0.2 • 0.2 0.1 4 8 10 12 6 Timing (days after application) Paraquat Residue (mg/kg)

DO MRL BREACHES POSE A FOOD SAFETY RISK?

Although MRLs are not intended to be a direct measure of food safety, through following labels and complying with MRLs. growers can ensure their crops are fit for sale as either food ingredients or animal feed.

FOR MORE INFORMATION

For further information please call the Syngenta Technical Product Advice Line on 1800 067 108 or please visit: http://www.grdc.com.au/Resources/Factsheets/2012/09/Late-Season-Herbicide-Use-Factsheet or www.syngenta.com.au (stewardship)

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