

Recent industry monitoring data and commentary from National Residue Survey

Table 1. Grain monitoring results comparison

Year	Bulk Samples	Bulk Compliance (%)	Container Samples	Container Compliance (%)
2004-05	3,659	99.9	77	100
2005-06	2,953	100	89	100
2006-07	2,085	100	168	100
2007-08	2,055	100	565	99.6
2008-09	2,621	100	391	98.2
2009-10	2,673	99.8	827	98.3
2010-11	3,302	99.8	821	98.9
2011-12	4,005	99.9	886	99.0
2012-13	3,802	99.8	1,229	98.9
2013-14	3,351	99.7	1,802	98.9
2014-15	3,452	99.9	2,034	98.8

Bulk results are slightly better than container because:

- Aggregation can dilute a residue issue
- Bulk handlers have consistent application of grain protectants
- Container packers will at times source grain direct off farm

Export grain monitoring results indicate two things:

- Good agricultural practice by Australian grain producers and grain handlers
- Indirectly, a good understanding of overseas market requirements by exporters

However, ongoing vigilance is paramount to market access

NRS programs seek to identify emerging issues and facilitate industry resolution

The following slides flag two issues at the forefront of industry attention

Table 2. Haloxyfop – Six year snapshot

	Grain	Samples tested	> LOR < Aust MRL	> Australian Std
2009-10	canola	70	25	3
	chickpea	20	8	1
2010-11	canola	64	36	5
	chickpea	18	4	0
2011-12	canola	56	26	2
	chickpea	9	3	0
2012-13	canola	83	43	8
	chickpea	30	12	0
2013-14	canola	131	48	11
	chickpea	34	19	0
2014-15	canola	120	51	7
	chickpea	41	19	2

Traceback investigations indicate application of Verdict:

- later in the canola growth cycle than is indicated on the label
- on canola windrows – not in accordance with any label instruction
- to control grass in chickpea crops

Table 3. Flutriafol – 6 year snapshot

Year	Samples tested	> LOR < Aust MRL	> Aust MRL
2009-10	4539	11	5
2010-11	5220	13	8
2011-12	5718	9	6
2012-13	5836	16	20
2013-14	6137	9	10
2014-15	6239	13	15

Traceback investigations indicate that:

- flutriafol detections most commonly caused by back-loading trucks with fertiliser
- results from in-adequate cleaning – some samples found with fertiliser
- contamination of on-farm storage has also caused residues (includes silos and augers)

Herbicides in barley

7 February 2014, a grain exporter notified of MAFF surveillance sample results

Formal MAFF notification to NRS via our Minister-Agriculture (Tokyo)

- notification - herbicide residues of imazapyr and imazapic - levels > Japanese MRLs

Intervix is the only registered product for use on barley in Australia

- contains imazapyr and imazamox (not imazapic)

Australia imazapyr MRL 0.05 mg/kg – No Codex or Japan MRL

No products registered in Australia for imazapic use on barley. QLD and NSW only have registration for use at pre-sowing – if used according to label no residues expected.

NRS added all 5 imidazolinone analytes to grain screen - no imi herbicides detected since Feb 2014

Communication

- Japan warns barley exporters about residues

<http://grdc.com.au/Media-Centre/Ground-Cover/GC110/Japan-warns-barley-exporters-about-residues>

Common residues detected in 2014-15

49 residues > Aust APVMA MRL including:

- flutriafol in bran/canola/chickpea/field pea/lupin/oat/wheat (15 samples)
- haloxyfop canola/chickpea (9 samples)
- carbaryl in canola (2 samples)
- bifenthrin in sorghum (2 samples)
- spinosad in canola (2 samples)
- thiabendazole in lentil/field pea (3 samples)

Residues detected exceeding import tolerances in 2014-15

98 residues > import tolerance MRL including:

- fenitrothion in wheat/barley/oat/chickpea/canola (15 samples)
- glyphosate in barley/sorghum/canola/oat (23 samples)
- haloxyfop in chickpea (5 samples)
- methoprene in wheat/sorghum (12 samples)
- piperonyl butoxide in canola/wheat/chickpea (18 samples)
- spinosad in wheat/canola/lentil (7 samples)

Market access – be aware

Australian MRLs and overseas standards can differ

Compliance with Australian MRL DOES NOT mean compliance with trading partners

No MRLs for certain chemical-commodity combinations

Information sources:

- Out-turn tolerances on GTA website
- NRS MRL database - <https://www.edaff.gov.au/NRSMRLExternal/Public/Disclaimer.aspx>
- Other international databases
 - USA - <http://www.globalmrl.com>
 - EU - <http://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=homepage&language=EN>
 - Codex – <http://www.codexalimentarius.org/standards/pestres/en/>