Proposals to Amend the Maximum Residue Levels for Agricultural Compounds Food Notice 2016

MPI Discussion Paper No: 2017/08

Prepared by the Systems Audit, Assurance and Monitoring Directorate of the Ministry for Primary Industries

ISBN No: 978-1-77665-537-3 (online)
ISSN No: 2253-3907 (online)

March 2017

New Zealand Government

Growing and Protecting New Zealand

Disclaimer

Every effort has been made to ensure the information in this document is accurate.

MPI does not accept any responsibility or liability whatsoever for any error of fact, omission, interpretation or opinion that may be present, however it may have occurred.
Requests for further copies should be directed to:

Publications Logistics Officer
Ministry for Primary Industries
PO Box 2526
WELLINGTON 6140

Email: brand@mpi.govt.nz
Telephone: 0800 00 83 33
Facsimile: 04-894 0300

This publication is also available on the Ministry for Primary Industries website at http://www.mpi.govt.nz/news-and-resources/publications/

Contents

Page

1 Submissions

The Ministry for Primary Industries (MPI) invites public comment on this discussion document, which outlines proposals to amend the New Zealand (Maximum Residue Levels for Agricultural Compounds) Food Notice.

For **each compound** you are commenting on, please clearly answer the following questions. Any additional comment is welcome, along with supporting discussion, and data or examples to illustrate particular points.

On balance, do you oppose any of the commodity MRLs proposed for this compound?

Do you oppose an MRL being set <u>at all</u> for this compound for the commodity?

If an MRL is to be set for this compound for the commodity, do you disagree with the particular level proposed? If so, why do you disagree?

Submissions close at 5pm on **30 May 2017**. Your comments should be sent to:

MRL Amendments
ACVM Programmes and Appraisals
MPI Systems Audit, Assurance and Monitoring Directorate
PO Box 2526
Wellington 6140

Email: ACVM.Consultation@mpi.govt.nz

Please include your name and address on your submission. If you are making comments on behalf of an organisation, also include your title and the name of the organisation.

Please make sure your comments can be clearly read, as a number of copies of your submission may be made.

The Official Information Act

The Official Information Act 1982 (the OIA) states that information is to be made available unless there are grounds for withholding it. The grounds for withholding information are outlined in the OIA. Submitters may wish to indicate any grounds for withholding information contained in their submission. Reasons for withholding information could include that information is commercially sensitive or that the submitters wish personal information such as names or contact details to be withheld. MPI will take such indications into account when determining whether or not to release information. Any decision to withhold information requested under the OIA may be reviewed by the Ombudsman.

2 Introduction

Maximum residue levels (MRLs) are the maximum legal levels for residues of agricultural compounds and veterinary medicines in food for sale in New Zealand. MRLs are primarily a tool for monitoring the use of agricultural compounds in accordance with good agricultural practice (GAP). GAP is not explicitly defined or regulated, but is the generally accepted means for producing safe primary produce in a particular location while taking account of climate, pests or diseases and other environmental factors. MRLs are used to minimise risks to public health by ensuring that chemical residues in food are as low as practicable, without compromising the ability of the chemical to successfully do what is intended.

2.1 BACKGROUND

MRLs are set out in the New Zealand (Maximum Residue Levels for Agricultural Compounds) Food Notice. The MRL Food Notice is amended a number of times each year to reflect changes in the use of agricultural compounds in the production of food. The MRL Food Notice is available from the Ministry for Primary Industries (MPI) Food Safety website at: http://mpi.govt.nz/document-vault/11329.

MPI administers the MRL Food Notice, with the final decision on any changes to the Notice resting with the Director-General of MPI. The Food Notice is issued under sections 405 and 406(1) of the Food Act 2014. When setting or amending MRLs, the Director-General must take into account:

- the need to protect public health;
- the desirability of avoiding unnecessary restrictions on trade;
- the desirability of maintaining consistency between New Zealand's food standards and those applying internationally;
- New Zealand's obligations under any relevant international treaty, agreement, convention, or protocol, and, in particular, under the Australia-New Zealand Joint Food Standards Agreement; and
- such other matters as appropriate.

Once the amended MRL Food Notice is in place, official chemical residue monitoring programmes are reviewed and are amended as necessary.

Possible implications for public health are considered during the toxicological and dietary risk assessments, by comparing the estimated dietary intake with a Health Based Guidance Value (HBGV). This may be either a Potential Daily Exposure (food) ($PDE_{(food)}$) or an Acceptable Daily Intake (ADI). The ADI and $PDE_{(food)}$ are largely equivalent, as they are determined using the same set of toxicology data and through a very similar scientific process.

A $PDE_{(food)}$ is a value determined by a toxicological evaluation by the Environmental Protection Authority (EPA) as part of its responsibility for managing public health under the Hazardous Substances and New Organisms Act 1996 (the HSNO Act). A $PDE_{(food)}$ gives the potential daily exposure a person may be subject to from a substance, via food. MPI uses a $PDE_{(food)}$ where it is available, rather than the internationally-determined ADI, as required by the HSNO Act in New Zealand.

An ADI is defined by the World Health Organization (WHO) as: “the daily intake which, during an entire lifetime, appears to be without appreciable risk on the basis of all the known facts at the time”. “Without appreciable risk” has been further defined as: “the practical certainty that injury will not result even after a lifetime of exposure”. ADIs are established by the WHO and Food and Agriculture Organization (FAO) of the United Nations joint expert committees, which are made up of toxicologists and residue specialists. The ADI information from these joint committees also feeds into the Codex Alimentarius Commission (Codex), which sets

international MRLs. An ADI may also occasionally be set in New Zealand by the EPA. Where an EPA-determined or an internationally-determined ADI is not available, an ADI may be calculated by MPI to quantify the dietary exposure risk.

MPI uses the $PDE_{(food)}$ set by the EPA as the HBGV for the estimation of dietary intake when they are available. Where there is no $PDE_{(food)}$, the estimated dietary intake is compared with the ADI, set by the EPA, the WHO/FAO joint expert committees, or the European Food Safety Authority (EFSA). If none of these are available, the HBGV used will be the MPI-determined ADI.

The chronic dietary exposure to a substance is estimated by the National Estimated Dietary Intake (NEDI) calculation, encompassing all registered uses of the chemical and food consumption data based upon the 1997 National Nutritional Survey for adults and the 1995 National Nutrition Survey of Australia, for children. The NEDI calculation is made in accordance with Guidelines for predicting dietary intake of pesticide residues (revised) [World Health Organization, 1997]. The NEDI calculation provides an estimation of the portion of the $PDE_{(food)}$ or ADI that can be expected from consumption of food containing residues complying with existing and proposed MRLs to determine whether the chronic dietary exposure risk is acceptable

Clause 144 of the Food Regulations 2015 states that imported food must contain residues of agricultural compounds no greater than the MRLs specified for that food in a notice set under the Food Act 2014 (section (1)(a)), the default MRL of 0.1 mg/kg (section (1)(c)), or the current editions of either the Maximum Residue Limits (MRLs) and Extraneous Maximum Residue Limits (EMRLs) for Pesticides (Codex Pesticides Residues in Food Online Database), or the Maximum Residue Limits for Veterinary Drugs in Food (Codex Veterinary Drug Residue in Food Online Database) (section (1)(d)).

The “other international MRLs” listed in each entry is a summary of the MRLs set by Codex and other internationally regulatory bodies. For animal commodities, MRLs set by our major trading partners (Australia, Canada, China, Codex, the European Union, Japan, and the United States) are reviewed and compared; for horticultural commodities, only MRLs set by Codex and Australia are reviewed and compared unless there is a particular trade reason to include other regions. Where a particular international body or regulator does not have MRLs set for the species or crop for which a New Zealand MRL is being proposed, that international body or regulator is omitted from the “other international MRLs” section of the entry.

To meet New Zealand’s obligations under the Agreement on the Application of Sanitary and Phytosanitary Measures the proposed MRL will be notified to the World Trade Organization. Any country may choose to comment if they believe the proposed MRL represents a barrier to their trade.

2.2 SUMMARY OF PROPOSED AMENDMENT

The proposed MRLs have been thoroughly assessed in accordance with international methodologies such as those utilised by the expert committees advising Codex. Information on the technical assessment of each proposal is included in this document (refer section 3) and covers:

- rationale;
- chemical information;
- good agricultural practice;
- residues information;
- dietary risk assessment;
- toxicological/public health assessment; and
- MRLs set by Codex and other countries.

MPI reviewed the estimated dietary exposure assessments for the application of the proposals in this discussion paper and compared them with the appropriate HBGV (the $PDE_{(food)}$ or the ADI). MPI has determined that the residues associated with the proposed MRLs do not present any public health or food safety concerns.

2.2.1 New and Amended MRLS

MPI proposes to add the following new MRLs to the MRL Notice and/or amend the existing entries for certain compounds:

- Acephate: 0.1 mg/kg in avocados; 0.1 mg/kg in boysenberries; 2 mg/kg in cabbages; 2 mg/kg in cauliflowers; 5 mg/kg in citrus fruits; 2 mg/kg in lettuce; 1 mg/kg in tomatoes; and 0.01(*) mg/kg in any other food.
- Amitraz: 0.2 mg/kg in honey.
- Benzovindiflupyr: 0.03 mg/kg in cattle liver; 0.03 mg/kg in goat liver; 0.01 mg/kg in edible offal of mammals (except liver); 0.01 mg/kg in edible offal of poultry; 0.01 mg/kg in eggs; 0.03 mg/kg in horse liver; 0.01 mg/kg in mammalian meat; 0.01 mg/kg in mammalian fat; 0.01 mg/kg in milk; 0.01 mg/kg in pig liver; 0.01 mg/kg in poultry meat; 0.01 mg/kg in poultry fats; 0.01 mg/kg in sheep liver; and 0.05 mg/kg in wheat grain.
- Clopidol: 0.5 mg/kg in chicken fat; 0.5 mg/kg in chicken kidney; 1 mg/kg in chicken liver; and 0.5 in chicken meat.
- Cyazofamid: 0.01(*) mg/kg in onions.
- Derquantel: 0.007 mg/kg in sheep fat; 0.0008 mg/kg in sheep liver; 0.0004 mg/kg in sheep kidney; and 0.0003 mg/kg in sheep meat.
- Diazinon: 0.1 mg/kg in avocados; 0.5 mg/kg in carrots; 0.1 mg/kg in cereal grains; 0.5 mg/kg in mandarins; 0.5 mg/kg in oranges; 0.03 mg/kg in sheep kidney; 0.03 mg/kg in sheep liver; 0.7 mg/kg in sheep meat (as the fat soluble residue); 0.5 mg/kg in strawberries; 0.2 mg/kg in tomatoes; and 0.01(*) mg/kg in any other fruit, vegetable, or nut.
- Dichlorvos: 2 mg/kg in aubergines; 2 mg/kg in beetroot; 2 mg/kg in brassica vegetables; 2 mg/kg in capsicums; 2 mg/kg in cucurbits; 2 mg/kg in leafy vegetables; 2 mg/kg in persimmons; 2 mg/kg in radishes, 2 mg/kg in strawberries; 2 mg/kg in tomatoes; 0.01(*) mg/kg in any other fruit, nut or vegetable; 0.01(*) mg/kg in meat, fat, or offal from any animal; and 0.01(*) mg/kg in milk.
- Diclazuril: 1 mg/kg in chicken fat; 2 mg/kg in chicken kidney; 3 mg/kg in chicken liver; and 0.5 mg/kg in chicken meat.
- Fenamiphos: 0.2 mg/kg in carrots; 0.2 mg/kg in parsnips; 0.2 mg/kg in potatoes; 0.01(*) mg/kg in any other food.
- Fenpyrazamine: 3 mg/kg in grapes.
- Flonicamid: 0.15 mg/kg in potatoes.
- Florasulam: 0.01(*) mg/kg in barley grain; 0.01(*) mg/kg in triticale grain; and 0.01(*) mg/kg in wheat grain.
- Fluazinam: 0.02 mg/kg in onions.
- Fluopyram: 0.01(*) mg/kg in cereal grains; 0.2 mg/kg in carrots; 0.3 mg/kg in eggs; 0.5 mg/kg in mammalian meat and fat; 0.7 mg/kg in mammalian kidney; 3 mg/kg in mammalian liver; 0.3 mg/kg in mammalian milk; 0.2 mg/kg in poultry meat and fat; and 0.7 mg/kg in poultry offal.
- Fluxapyroxad: 0.2 mg/kg in bulb vegetables.

- Halauxifen-methyl: 0.01(*) mg/kg in wheat, triticale and barley.
- Ipconazole: 0.01(*) mg/kg in cereal grains; 0.01(*) mg/kg in sweetcorn.
- Maldison (Malathion): 1 mg/kg in asparagus; 8 mg/kg in broccoli; 2 mg/kg in avocados; 8 mg/kg in Brussels sprouts; 5 mg/kg in bulb vegetables; 5 mg/kg in cabbages; 1 mg/kg in cattle fat; 5 mg/kg in cauliflowers; 5 mg/kg in celery; 8 mg/kg in cereal grains; 5 mg/kg in citrus fruits; 0.2 mg/kg in cucumbers; 1 mg/kg in eggs; 8 mg/kg in fruiting vegetables (except cucumbers, melons, mushrooms, sweet peppers, sweetcorn, and tomatoes); 5 mg/kg in grapes; 1 mg/kg horse fat; 5 mg/kg in leafy vegetables; 3 mg/kg in legume vegetables; 2 mg/kg in melons; 1 mg/kg in mushrooms; 1 mg/kg in sweet peppers; 1 mg/kg in pig fat; 0.5 mg/kg in pomefruit; 3 mg/kg in root vegetables; 5 mg/kg in stonefruit; 1 mg/kg in sweetcorn; 5 mg/kg in tomatoes; 3 mg/kg in tuber vegetables; 0.5 mg/kg in meat, fat or offal from any animal; and 0.5 mg/kg in milk.
- Mandestrobin: 0.7 mg/kg in beans (with pods); and 0.01(*) mg/kg in bulb onions.
- Metalaxyl: 0.01(*) mg/kg in cereal grains; 0.01(*) mg/kg in sweetcorn.
- Methamidaphos: 1 mg/kg in broccoli, Brussels sprouts, cabbages, and cauliflowers; 0.5 mg/kg in citrus fruits; 0.01(*) mg/kg in kumara; 0.2 mg/kg in lettuce; 0.1 mg/kg in maize; 0.05 mg/kg in onions; 0.01(*) mg/kg in potatoes; 0.1 mg/kg in sweetcorn; 0.05 mg/kg in tamarillos; 0.1 mg/kg in tomatoes; and 0.01(*) mg/kg in any other food.
- Metrafenone: 0.01(*) mg/kg in grapes.
- Monepantel: 7 mg/kg in cattle fat; 1 mg/kg in cattle kidney; 2 mg/kg in cattle liver; 0.3 mg/kg in cattle meat; and 0.05 mg/kg in cattle milk.
- Prothioconazole: 0.01(*) mg/kg in cereal grains.
- Pyrimethanil: 0.02 mg/kg in onions.
- Pyroxsulam: 0.01(*) mg/kg in cereal grains; and 0.01(*) mg/kg in mammalian fat, kidney, meat, liver and milk.
- Sulfoxaflor: 0.04 mg/kg in mammalian fat; 0.1 mg/kg in mammalian kidney; 0.2 mg/kg in mammalian liver; 0.07 mg/kg in mammalian muscle; and 0.03 mg/kg in milk.
- Tau-fluvalinate: 0.01(*) mg/kg in potatoes.

Note: (*) indicates that the maximum residue level has been set at or about the limit of analytical quantification.

2.2.2 New Exceptions from Maximum Residue Levels

MPI proposes to add the following exception from Maximum Residue Levels for Agricultural Chemicals (Schedule 2):

- C9 – C16 alkanes, for use as an agricultural compound.

2.2.3 Other Amendments

MPI proposes to amend the residue definitions for the following compounds:

- Abamectin, to harmonise with overseas trading partners and Codex.

MPI proposes to amend the Schedule 1 Notice entries for the following compounds:

- Cyproconazole, to revise the presentation of the Notice entry.

- Tribenuron-methyl, to revise the presentation of the Notice entry.
- Trifloxystrobin, to correct style inconsistencies
- Xylazine, to correct a typographical error

MPI proposes to amend the Schedule 2 Notice entry for the following compound:

- Plant extracts (unrefined), to revise the reference to the Notice (it currently references "this standard").

3 Proposals

3.1 PROPOSAL TO AMEND THE RESIDUE DEFINITION FOR ABAMECTIN

It is proposed that the residue definition for abamectin is amended.

The current entry for abamectin in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Abamectin	71751-42-2	*Sum of:*	Avocados	0.02(*)
		avermectin B1a	Bulb onions	0.01
		avermectin B1b	Cattle fat	0.02
		(Z)-8,9 avermectin B1a	Cattle liver	0.015
		(Z)-8,9 avermectin B1b	Cattle meat	0.01
			Green onions	0.02
			Kiwifruit	0.02(*)
			Pome fruits	0.02(*)
			Sheep fat	0.05
			Sheep kidney	0.02
			Sheep liver	0.025
			Sheep meat	0.02
			Strawberries	0.02(*)
			Tomatoes	0.1

The revised entry for abamectin in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Abamectin	71751-42-2	*Sum of:*	Avocados	0.02(*)
		avermectin B1a	Bulb onions	0.01
		avermectin B1b	Cattle fat	0.02
			Cattle liver	0.015
			Cattle meat	0.01
			Green onions	0.02
			Kiwifruit	0.02(*)
			Pome fruits	0.02(*)
			Sheep fat	0.05
			Sheep kidney	0.02
			Sheep liver	0.025
			Sheep meat	0.02
			Strawberries	0.02(*)
			Tomatoes	0.1

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.1.1 Amendment Rationale

In 2016, the residue definition for abamectin was amended in Australia to omit the reference to the (Z)-8,9 isomers of avermectin B1a and B1b. This was based on a lack of significant residues of the 8,9-Z isomers, and the lack of any quantifiable residues of toxicological significance associated with them. This approach has also been taken by Codex, the EU, and many of New Zealand's major trading partners, who have set residue definitions based on avermectin B1a alone, the sum of avermectin B1a and B1b, or the sum of B1a, B1b, and the delta 8,9 isomer. It is noted that Japan is the only major trading partner that has retained the 8,9-Z isomers in their residue definition.

In New Zealand, there has been a lack of detectable residues for the 8,9-Z isomers. With a lack of any detections, and a lack of any toxicologically significant residues associated with these isomers, it is considered that there is no need to continue to include them in the New Zealand residue definition.

All currently established MRL values for this compound will remain unchanged.

3.1.2 Chemical Information

Common name of compound	Abamectin
Use of compound	Pesticide
Chemical Abstract Services (CAS) Registry number	71751-42-2
Type of compound	Avermectin
Administration method	Topical, oral, and parenteral (animal); Spray (plant)

3.1.3 Good Agricultural Practice

Abamectin is used as an insecticide on a number of horticultural crops, and as an endo- and ectoparasiticide in production animals. The current use patterns, withholding periods, and MRLs are still considered appropriate to support GAP and will not change.

3.1.4 Residue Information

The residue data for the approved crops and target animal species support the current MRLs, and demonstrate consistently low levels of total abamectin residues, as well as demonstrating that levels of the 8,9-Z isomers are below the limit of detection. In addition, in most test methodologies the small amount of 8,9-Z isomers that are present are captured in the assay of avermectin B1a and do not warrant a separate identifier in the residue definition. It is therefore considered that the residue data supports the change in the residue definition.

3.1.5 Other International Residue Definitions for Abamectin

Country	Commodity Type	Residue Definition
Australia	Plants and animal commodities	Avermectin B1a
Canada	Plant and animal commodities	Avermectin B1 (a mixture of avermectins ≥ 80% avermectin B1a (5-O-demethyl avermectin A1a) and ≤ 20% avermectin B1b (5-O-demethyl-25-de(1-methylpropyl)-25-(1-methylethyl) avermectin A1a) and its delta-8,9-isomer)
China		Total of avermectin B1a and B1b
Codex	Plants and animal commodities	Avermectin B1a
European Union	Plants commodities	Abamectin (sum of avermectin B1a, avermectin B1b and delta-8,9 isomer of avermectin B1a, expressed as avermectin B1a)
	Animal commodities	Avermectin B1a
Japan	Plant commodities	Sum of residues of avermectin B1a, avermectin B1b, 8,9-Z-avermectin B1a, and 8,9-Z-avermectin B1b
	Animal commodities	Sum of residues of avermectin B1a and 8,9-Z-avermectin B1a
USA	Plants and animal commodities	Avermectin B1, a mixture of avermectins containing greater than or equal to 80% avermectin B1a (5-O-demethyl avermectin A1) and less than or equal to 20% avermectin B1b (5-O-demethyl-25-de(1-methylpropyl)-25-(1-methylethyl) avermectin A1), and its delta-8,9-isomer.

3.2 PROPOSAL TO AMEND THE MRLS FOR ACEPHATE

It is proposed that MRLs are amended for acephate to support the good agricultural practice (GAP) use of the compound on crops.

The current entry for acephate in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Acephate	30560-19-1	Acephate	Brassica vegetables	2
			Citrus fruits	5
			Fruiting vegetables	1
			Leafy vegetables	6
			Potatoes	0.5
			Tamarillos	0.5

The revised entry for acephate in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Acephate	30560-19-1	Acephate	Avocados	0.1
			Boysenberries	0.1
			Cabbages	2
			Cauliflowers	2
			Citrus fruits	5
			Lettuce	2
			Tamarillos	0.5
			Tomatoes	1
			Any other food	0.01(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.2.1 Amendment Rationale

The proposed MRLs are representative of the outcomes of the organophosphate and carbamate (OPC) reassessment as they pertain to acephate. The new MRLs will allow for the continued use of the compound in compliance with GAP, and the restrictions applied to use and exposure at the completion of the New Zealand Environmental Protection Authority (EPA)'s reassessment.

3.2.2 Chemical Information

Common name of compound	Acephate
Use of compound	Insecticide
Chemical Abstract Services (CAS) Registry number	30560-19-1
Type of compound	Organophosphate
Administration method	Spray

3.2.3 Good Agricultural Practice

Acephate is used as an insecticide on avocados, citrus fruits, cabbages, cauliflowers, lettuce, tamarillos, tomatoes, and boysenberries for the control of a range of insect pests. As a result of the OPC reassessment, label claims for potatoes and tomatoes grown indoors have been removed, and the withholding periods for lettuce and outdoor tomatoes have been changed from 3 days to 14 days.

The MRL for 'any other food' will ensure compliance with the restriction to on-label uses only, and will support GAP.

3.2.4 Residue Information

With the changes to the approved crops and withholding periods, the residue data for the retained crops support the MRLs as proposed. The new MRLs have been proposed to support GAP.

3.2.5 Dietary Risk Assessment

The Health Based Guidance Value (HBGV) of 0.0012 mg/kg bw/d was considered appropriate for use in the assessment.

The active ingredient methamidaphos is the primary metabolite of acephate. The dietary risk assessment incorporated exposure to both acephate and methamidaphos to ensure exposure was accurately represented in the associated crops. Based on the residues expected in food from crops treated according to existing and proposed GAP uses, the NEDI for acephate as 'acephate and methamidaphos' is equivalent to less than 93% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is acceptable.

3.2.6 Toxicological/Public Health Assessment

It has been determined that the use of acephate on the crops listed above, according to the GAP specified above, is unlikely to pose any health risks from consumption of treated produce.

3.2.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	Brassica (cole or cabbage) vegetables	5
	Citrus fruits	5
	Lettuce, head	10
	Lettuce, leaf	10
	Tomato	5
	Tree tomato (tamarillo)	0.5
Codex	Cabbages, head	2
	Tomatoes	1

3.3 PROPOSAL TO AMEND THE MRLS FOR AMITRAZ

It is proposed that the MRL for amitraz in honey is amended to support the GAP use of the compound in bee hives.

The current entry for amitraz in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Amitraz	33089-61-1	*Sum of:* Amitraz and metabolites containing the 2,4-dimethylaniline moiety *Expressed as:* Amitraz	Honey Other bee products	0.1 1

The revised entry for amitraz in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Amitraz	33089-61-1	*Sum of:* Amitraz and metabolites containing the 2,4-dimethylaniline moiety *Expressed as:* Amitraz	Honey Other bee products	0.2 1

3.3.1 Amendment Rationale

The proposed MRL for honey is the outcome of a review of the residue profile of amitraz when used according to what is considered GAP in New Zealand. The proposed MRL will manage the residues in honey following the use of amitraz in bee hives in accordance with use rates and withholding periods established as GAP in New Zealand.

There is no data to suggest that the current MRL for 'other bee products' is insufficient to continue to manage residues in those products. As such, the current MRL of 1 mg/kg will be retained.

3.3.2 Chemical Information

Common name of compound	Amitraz
Use of compound	Acaricide
Chemical Abstract Services (CAS) Registry number	33089-61-1
Type of compound	Triazapentadiene
Administration method	Sustained-release impregnated strip

3.3.3 Good Agricultural Practice

Amitraz is used as an acaricide for the treatment and control of infestations of the mite *Varroa destructor* on honey bees. A maximum of two strips impregnated with 33g/kg amitraz each are suspended in the brood chamber for sustained-release of the compound in the spring, before the first honey flow, for a maximum of six weeks. In cases where infestation is severe, a second treatment period can be initiated in the autumn after honey has been removed from the hive. Strips are not to be used during honey production.

3.3.4 Residue Information

The new residue data provided supports an amitraz MRL of 0.2 mg/kg in honey when the compound is used on honey bees. The MRL is proposed to support GAP.

3.3.5 Dietary Risk Assessment

The HBGV of 0.01 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops treated according to existing and proposed GAP uses, the NEDI for amitraz is equivalent to less than 17% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.3.6 Toxicological/Public Health Assessment

It has been determined that the use of amitraz in bee hives, according to the GAP specified above, is unlikely to pose any health risks from consumption of treated produce.

3.3.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Canada	Honey	0.1
China	Honey	0.2
EU	Honey	0.2
Japan	Honey (including royal jelly)	0.2
United States	Honey	0.2

3.4 PROPOSAL TO SET MRLS FOR BENZOVINDIFLUPYR

It is proposed that MRLs are set for benzovindiflupyr to support the GAP use of the compound on wheat.

There is currently no entry for benzovindiflupyr in Schedule 1 of the Notice.

The new entry for benzovindiflupyr in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Benzovindiflupyr	1072957-71-1		Cattle liver	0.03
			Goat liver	0.03
			Mammalian edible offal (except liver)	0.01
			Poultry edible offal	0.01
			Eggs	0.01
			Horse liver	0.03
			Mammalian meat	0.01
			Mammalian fat	0.01
			Milk	0.01
			Pig liver	0.01
			Poultry meat	0.01
			Poultry fats	0.01
			Sheep liver	0.03
			Wheat grain	0.05

3.4.1 MRL Promulgation Rationale

The proposed MRLs are the result of the registration of a new product containing a new active ingredient for use as a fungicide on wheat. It will manage the use of benzovindiflupyr in accordance with the application rates and withholding periods that are considered GAP in New Zealand.

3.4.2 Chemical Information

Common name of compound	Benzovindiflupyr
Use of compound	Fungicide
Chemical Abstract Services (CAS) Registry number	1072957-71-1
Type of compound	Pyrazolecarboxamide
Administration method	Spray

3.4.3 Good Agricultural Practice

Benzovindiflupyr is used as a preventative fungicide in wheat at a maximum of two applications of 75 gai/ha, in combination with another approved fungicide with a different mode of action. The compound is used for the prevention of glume blotch, leaf rust, speckled leaf blotch, and stripe rust in wheat, and is applied not after GS69 (end of flowering). Use of benzovindiflupyr attracts withholding periods of 42 days for wheat grain and 28 days for wheat forage (green feed).

3.4.4 Residue Information

The residue data supports a MRL of 0.05 mg/kg for benzovindiflupyr in wheat grain. Animal transfer residue data supports the following MRLs in animal commodities: 0.01 mg/kg in mammalian meat, 0.01 mg/kg in mammalian fat, 0.01 mg/kg, 0.01 mg/kg in edible offal of mammals except liver, 0.03 mg/kg in cattle, sheep, horse and goat liver, 0.01 mg/kg in pig liver, 0.01 mg/kg in meat, fats, eggs and edible offal of poultry, and 0.01 mg/kg in milk. The MRLs are proposed to support GAP in New Zealand.

3.4.5 Dietary Risk Assessment

The HBGV of 0.035 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops treated according to proposed GAP uses and in commodities from animals that have been exposed during consumption of treated crops, the NEDI for benzovindiflupyr is equivalent to less than 2% of the HBGV. It is

therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.4.6 Toxicological/Public Health Assessment

It has been determined that the use of benzovindiflupyr on wheat, in accordance with the GAP specified above, is unlikely to pose any health risks from consumption of treated produce with the proposed MRL in place.

3.4.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Codex	Edible offal (mammalian)	0.01
	Eggs	0.01
	Mammalian fats (except milk fats)	0.01
	Meat (from mammals other than marine mammals)	0.01
	Milks	0.01
	Poultry fats	0.01
	Poultry meat	0.01
	Poultry, edible offal of	0.01

It is noted that the proposed New Zealand MRLs for liver are higher than those set by Codex. However, when used in accordance with New Zealand GAP, liver residues are expected to exceed the 0.01 mg/kg Codex MRL but remain below 0.03 mg/kg in all species except pigs. Although alignment with Codex would be ideal, in this case the Codex MRL would be too low to support GAP in New Zealand.

3.5 PROPOSAL TO SET MRLS FOR CLOPIDOL

It is proposed that MRLs are set for clopidol to support the GAP use of the compound in chickens.

There is no current entry for clopidol in Schedule 1 of the Notice.

The new entry for clopidol in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Clopidol	2971-90-6	Clopidol	Chicken fat	0.5
			Chicken kidney	0.5
			Chicken liver	1
			Chicken meat	0.5

3.5.1 MRL Promulgation Rationale

The proposed MRLs are the result of the registration of a new product containing a new active ingredient for use as a coccidiostat in broiler chickens. They will manage the use of clopidol in accordance with the dose rates and approved withholding periods that are considered GAP in New Zealand.

3.5.2 Chemical Information

Common name of compound	Clopidol
Use of compound	Coccidiostat
Chemical Abstract Services (CAS) Registry number	2971-90-6
Type of compound	Pyridinol
Administration method	Oral

3.5.3 Good Agricultural Practice

Clopidol is used in the prevention of coccidiosis caused by certain *Eimeria* species in broiler chickens at a continuous feeding rate of 125 grams clopidol per tonne finished feed. A withdrawal period of two days applies to this use.

3.5.4 Residue Information

The residue data provided to support the use of clopidol in broiler chickens supports the proposed MRLs of 0.5 mg/kg in chicken meat, fat and kidney, and 1 mg/kg in chicken liver. These MRLs are proposed to support GAP.

3.5.5 Dietary Risk Assessment

The HBGV of 0.007 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from animals treated according to proposed GAP uses, the NEDI for clopidol is equivalent to less than 13% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.5.6 Toxicological/Public Health Assessment

It has been determined that the use of clopidol in broiler chickens, in accordance with the GAP specified above, is unlikely to pose any health risks from consumption of treated produce with the proposed MRLs in place.

3.5.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Canada	Kidney, chickens	15
	Liver, Chickens	15
	Muscle, Chickens	5
Japan	Edible Offal, Chicken	20
	Fat, Chicken	5
	Kidney, Chicken	20
	Liver, Chicken	20
	Muscle, Chicken	5
United States	Kidney, Chicken	15
	Liver, Chicken	15
	Muscle, chicken	5

3.6 PROPOSAL TO AMEND THE MRLS FOR CYAZOFAMID

It is proposed that the MRLs for cyazofamid are amended to support the GAP use of the compound on onions.

The current entry for cyazofamid in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Cyazofamid	120116-88-3	Cyazofamid	Potatoes	0.01(*)

The revised entry for cyazofamid in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Cyazofamid	120116-88-3	Cyazofamid	Potatoes	0.01(*)
			Onions	0.01(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.6.1.1 Amendment Rationale

The new MRL has been proposed to support an additional use for cyazofamid. The proposed MRL will manage the use of cyazofamid on onions in accordance with the application rates and withholding periods that are proposed as GAP in New Zealand.

3.6.2 Chemical Information

Common name of compound	Cyazofamid
Use of compound	Fungicide
Chemical Abstract Services (CAS) Registry number	120116-88-3
Type of compound	Imidazole
Administration method	Spray

3.6.2.1 Good Agricultural Practice

The proposed use of cyazofamid is to control Downy Mildew (*Peronospora destructor*) in onions using consecutive sprays of 80 gai/ha at a minimum of 7-10 day intervals, with a maximum of six applications per treated crop. This use attracts a withholding period of 14 days in onions.

3.6.2.2 Residue Information

The residue data for use in onions supports an MRL of 0.01(*) mg/kg. The MRL is proposed to support GAP.

3.6.2.3 Dietary Risk Assessment

The HBGV of 0.67 mg/kg bw/d was considered appropriate for use in this assessment.

Based on the residues expected in food from crops treated according to existing and proposed GAP uses, the NEDI for cyazofamid is equivalent to less than 1% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure from all sources is small and can be considered acceptable.

3.6.2.4 Toxicological/Public Health Assessment

It has been determined that the use of cyazofamid on onions, according to the GAP specified above, is very unlikely to pose any health risks from consumption of treated produce.

3.6.2.5 Other International MRLs

There have been no MRLs set by either Codex or Australia for the use of cyazofamid in onions.

3.7 PROPOSAL TO AMEND THE NOTICE ENTRY FOR CYPROCONAZOLE

It is proposed that the Notice entry for cyproconazole is amended to change the presentation of commodities.

The current entry for cyproconazole in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Cyproconazole	94361-06-5	Cyproconazole, sum of isomers	Bulb onions	0.01(*)
			Edible offal (mammalian)	0.5
			Fat (mammalian)	0.02
			Garlic	0.01(*)
			Grapes	0.05(*)
			Meat (mammalian)	0.02
			Milk	0.01
			Peas	0.01(*)

The revised entry for cyproconazole in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Cyproconazole	94361-06-5	Cyproconazole, sum of isomers	Bulb onions	0.01(*)
			Garlic	0.01(*)
			Grapes	0.05(*)
			Mammalian edible offal	0.5
			Mammalian fat	0.02
			Mammalian meat	0.02
			Milk	0.01
			Peas	0.01(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.7.1 Amendment Rationale

The amendment represents a reorganisation of existing MRLs for better clarity and readability. There is no change to the actual MRL values or commodities for which MRLs are approved.

3.8 PROPOSAL TO AMEND THE MRLS FOR DERQUANTEL

It is proposed that the MRLs for derquantel are amended to support the GAP use of the compound in sheep.

The current entry for derquantel in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Derquantel	187865-22-1	Derquantel	Sheep fat	0.1
			Sheep meat	0.1
			Sheep offal	0.1

The proposed entry for derquantel in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Derquantel	187865-22-1	Derquantel	Sheep fat	0.007
			Sheep liver	0.0008
			Sheep kidney	0.0004
			Sheep meat	0.0003

3.8.1 Amendment Rationale

The new MRLs have been proposed to align with the Codex MRLs that were promulgated in 2015. The current New Zealand MRLs were promulgated as a place holder until Codex MRLs were set, and are no longer considered appropriate. Alignment to the Codex MRLs for this compound will better support New Zealand GAP.

3.8.2 Chemical Information

Common name of compound	Derquantel
Use of compound	Endoparasiticide and ectoparasiticide
Chemical Abstract Services (CAS) Registry number	187865-22-1
Type of compound	Spiroindole
Administration method	Oral

3.8.3 Good Agricultural Practice

Derquantel used proposed for the treatment and control of gastrointestinal parasites, lungworm, nasal bot and itch mites in sheep, at a dose rate of 2 mg derquantel/kg body weight. The dose rate and withholding periods currently applicable to the use of derquantel in sheep remain unchanged, and are considered GAP.

3.8.4 Residue Information

The residue data on file for derquantel supports MRLs of 0.007 mg/kg in sheep fat, 0.0008 mg/kg in sheep liver, 0.0004 mg/kg in sheep kidney, and 0.0003 mg/kg in sheep meat at the withholding period currently applied to the product containing derquantel. As such, the MRLs are proposed to support GAP as well as align with Codex limits.

The existing withholding periods applied to the registered products containing derquantel are considered sufficient to manage residues at the proposed MRLs, and will remain unchanged.

3.8.5 Dietary Risk Assessment

The HBGV of 0.005 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from animals treated according to existing and proposed GAP uses, the NEDI for derquantel is equivalent to less than 5% of the HBGV. It is

therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.8.6 Toxicological/Public Health Assessment

It has been determined that the use of derquantel as an endoparasiticide and ectoparasiticide in the management of intestinal and external parasites in sheep, when administered in accordance with GAP, is very unlikely to pose any health risks from consumption of treated produce.

3.8.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	Sheep fat	0.0002
	Sheep liver	0.0002
	Sheep kidney	0.0002
	Sheep muscle	0.0002
Codex	Sheep fat	0.007
	Sheep liver	0.0008
	Sheep kidney	0.0004
	Sheep muscle	0.0003
EU	Sheep fat	0.04
	Sheep liver	0.02
	Sheep kidney	0.005
	Sheep muscle	0.002

3.9 PROPOSAL TO AMEND THE MRLS FOR DIAZINON

It is proposed that MRLs are amended for diazinon to support the GAP use of the compound on crops and sheep.

The current entry for diazinon in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Diazinon	333-41-5	Diazinon	Fats (except milk fats)	0.7
			Fruits	0.5
			Vegetables	0.5

The revised entry for diazinon in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Diazinon	333-41-5	Diazinon	Avocados	0.1
			Carrots	0.5
			Cereal grains	0.1
			Mandarins	0.5
			Oranges	0.5
			Fats (except milk fats)	0.7
			Sheep kidney	0.03
			Sheep liver	0.03
			Sheep meat (as the fat soluble residue)	0.7
			Strawberries	0.5
			Tomatoes	0.2
			Any other fruit, vegetable, or nut	0.01*

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.9.1 Amendment Rationale

The proposed MRLs are representative of the outcomes of the OPC reassessment as they pertain to diazinon. The new MRLs will allow for the continued use of the compound in compliance with GAP, and the restrictions applied to use and exposure at the completion of the EPA's reassessment.

3.9.2 Chemical Information

Common name of compound	Diazinon
Use of compound	Insecticide
Chemical Abstract Services (CAS) Registry number	333-41-5
Type of compound	Organophosphate
Administration method	Spray

3.9.3 Good Agricultural Practice

Diazinon is used as an insecticide on certain fruits, vegetables, and cereal grains for the control of a range of insect pests, and as an ectoparasiticide in sheep. As a result of the OPC reassessment, label claims for a number of horticultural crops have been removed, requiring the entry to be revised to specify those crops for which approval is being retained. The withholding periods for some of the remaining crops have also been amended.

The sheep kidney and liver MRLs, proposed to align with Codex and overseas trading partners, will support the GAP use of diazinon in that species.

The MRL for 'any other fruit, vegetable or nut' will ensure compliance with the restriction to on-label uses only, and will support the GAP use of diazinon in crops.

3.9.4 Residue Information

With the changes to the approved crops and withholding periods, residue data for the retained crops and animal uses support the MRLs as proposed. The new MRLs have been proposed to support GAP.

3.9.5 Dietary Risk Assessment

The HBGV of 0.0002 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops and animals treated according to the uses now proposed as GAP, the NEDI for diazinon is equivalent to less than 94% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is acceptable.

3.9.6 Toxicological/Public Health Assessment

It has been determined that the use of diazinon as an insecticide on food crops, and as an ectoparasiticide for use on sheep, when applied according to GAP, is very unlikely to pose any health risks from consumption of treated produce.

3.9.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	Cereal grains	0.1
	Citrus fruits	0.7
	Edible offal (mammalian)	0.7
	Fruits (except citrus fruits; grapes; olives; peach)	0.5
	Meat (mammalian)(in the fat)	0.7
	Milks (in the fat)	0.5
China	Sheep milk	0.02
	Sheep muscle	0.02
	Sheep fat	0.7
	Sheep liver	0.02
	Sheep kidney	0.02
Codex	Carrots	0.5
	Kidney of cattle, goats, pigs and sheep	0.03
	Liver of cattle, goats, pigs, and sheep	0.03
	Sheep meat	2
	Strawberry	0.1
	Tomato	0.5
European Union	Citrus fruits	0.01
	Avocados	0.01
	carrots	0.01
	Cereal grains	0.01
	Sheep muscle	0.02
	Sheep fat	0.7
	Sheep liver	0.03
	Sheep kidney	0.03
	Edible offals of sheep (other than liver and kidney)	0.01
	Strawberries	0.01
	Tomatoes	0.01
Japan	Avocados	0.1
	Carrots	0.5
	Cereal grains	0.1
	Fats (except milk fats)	2
	Muscle	0.02
	Liver	0.03
	Kidney	0.03
	Oranges	0.1
	Strawberry	0.1
	Tomato	0.1
United States	Carrot	0.75
	Strawberry	0.5
	Tomato	0.75

3.10 PROPOSAL TO AMEND THE MRLS FOR DICHLORVOS

It is proposed that MRLs are amended for dichlorvos to support the GAP use of the compound on crops.

The current entry for dichlorvos in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Dichlorvos	62-73-7	Dichlorvos	Cereal grains	2
			Fruits	2
			Vegetables	2

The revised entry for dichlorvos in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Dichlorvos	62-73-7	Dichlorvos	Beetroot	2
			Brassica vegetables	2
			Capsicums	2
			Cucurbits	2
			Egg plants	2
			Leafy vegetables	2
			Persimmons	2
			Radishes	2
			Strawberries	2
			Tomatoes	2
			Any other fruit, vegetable, or nut	0.01(*)
			Meat, fat or offal from any animal	0.01(*)
			Milk	0.01(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.10.1 Amendment Rationale

The proposed MRLs are representative of the outcomes of the OPC reassessment as they pertain to dichlorvos. The new MRLs will allow for the continued use of the compound in compliance with GAP, and the restrictions applied to use and exposure at the completion of the EPA's reassessment.

3.10.2 Chemical Information

Common name of compound	Dichlorvos
Use of compound	Insecticide
Chemical Abstract Services (CAS) Registry number	62-73-7
Type of compound	Organophosphate
Administration method	Spray

3.10.3 Good Agricultural Practice

Dichlorvos is used as an insecticide on brassica vegetables, cucurbits, leafy vegetables, persimmons, root vegetables, strawberries, tomatoes, and capsicums. As a result of the OPC reassessment, label claims for a number of horticultural crops have been removed, requiring the entry to be revised to specify those crops for which approval is being retained.

The MRL for 'any other fruit, vegetable or nut' will ensure compliance with the restriction to on-label uses only, and will support GAP.

Because none of the crops for which use is being retained are considered primary animal feeds, it is considered that the proposed MRLs for animal commodities are also reflective of GAP.

3.10.4 Residue Information

With the changes to the approved crops, the residue data for the retained crops support the MRLs as proposed. The new MRLs have been proposed to support GAP.

3.10.5 Dietary Risk Assessment

The HBGV of 0.001 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops and animals treated according to the uses now proposed as GAP, the NEDI for dichlorvos is equivalent to less than 63% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is acceptable.

3.10.6 Toxicological/Public Health Assessment

It has been determined that the use of dichlorvos as an insecticide on food crops, when applied according to GAP, is very unlikely to pose any health risks from consumption of treated crops or animal commodities.

3.10.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	Edible offal (mammalian)	0.01
	Eggs	0.01
	Meat (mammalian)	0.01
	Milks	0.01
	Poultry, Edible offal of	0.01
	Poultry meat	0.01
Codex	Edible offal (mammalian)	0.01
	Eggs	0.01
	Mammalian fats (except milk fats)	0.01
	Meat (from mammals other than marine mammals)	0.01
	Milks	0.01
	Poultry fats	0.01
	Poultry meat	0.01
	Poultry, edible offal of	0.01

3.11 PROPOSAL TO AMEND THE MRLS FOR DICLAZURIL

It is proposed that the MRLs for diclazuril are amended to support the GAP use of the compound in broiler chickens.

The current entry for diclazuril in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Diclazuril	1019831-37-2	Diclazuril	Cattle fat	1.0
			Cattle kidney	2.0
			Cattle muscle	0.5
			Cattle liver	3.0
			Sheep fat	1.0
			Sheep kidney	2.0
			Sheep muscle	0.5
			Sheep liver	3.0

The revised entry for diclazuril in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Diclazuril	1019831-37-2	Diclazuril	Cattle fat	1
			Cattle kidney	2
			Cattle liver	3
			Cattle meat	0.5
			Chicken fat	1
			Chicken kidney	2
			Chicken liver	3
			Chicken meat	0.5
			Sheep fat	1
			Sheep kidney	2
			Sheep liver	3
			Sheep meat	0.5

3.11.1.1 Amendment Rationale

The MRL amendment represents an additional use for diclazuril. The proposed MRLs will manage the use of diclazuril in broiler chickens in accordance with the dose rates and withholding periods that are proposed as GAP in New Zealand.

It is noted that the references to “muscle” in the other species commodities have also been changed to “meat”. There is no change to the MRL values for these commodities.

3.11.2 Chemical Information

Common name of compound	Diclazuril
Use of compound	Coccidiostat
Chemical Abstract Services (CAS) Registry number	1019831-37-2
Type of compound	Benzeneacetonitrile derivative
Administration method	In-feed granule

3.11.2.1 Good Agricultural Practice

The proposed new use of diclazuril is as an aid in the prevention of coccidiosis caused by *Eimeria acervulina, E. maxima, E. brunetti, E. necatrix,* and *E. tenella* in broiler chickens at a dose rate of 1g diclazuril/tonne of finished feed. A nil meat withholding period will apply to the use of diclazuril in broiler chickens.

3.11.2.2 Residue Information

The residue data for use in broiler chickens supports MRLs for diclazuril of 1 mg/kg in chicken fat, 2 mg/kg in chicken kidney, 3 mg/kg in chicken liver, and 0.5 mg/kg in chicken muscle. The MRLs are proposed to support GAP.

3.11.2.3 Dietary Risk Assessment

The HBGV of 0.015 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from animals treated according to existing and proposed GAP uses, the NEDI for diclazuril is equivalent to less than 20% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is minimal and can be considered acceptable.

3.11.2.4 Toxicological/Public Health Assessment

It has been determined that the use of diclazuril in broiler chickens, according to the GAP specified above, is very unlikely to pose any health risks from consumption of treated produce.

3.11.2.5 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	Edible offal of chicken	1
	Meat, Chicken	0.2
Canada	Fat, avian	1
	Kidney, avian	2
	Liver, avian	3
	Muscle, avian	0.5
Codex	Fat/skin, poultry	1
	Kidney, poultry	2
	Liver, poultry	3
	Muscle, poultry	0.5
European Union	Kidney, poultry	1
	Liver, poultry	1.5
	Muscle, poultry	0.5
	Skin and fat, poultry	0.55
China	Fat, avian	1
	Kidney, avian	2
	Liver, avian	3
	Muscle, avian	0.5
Japan	Edible offal, chicken	1
	Fat, chicken	1
	Kidney, chicken	2
	Liver, chicken	3
	Muscle, chicken	0.5
United States	Chicken skin/fat	1
	Liver, Chicken	3
	Muscle, Chicken	0.5

3.12 PROPOSAL TO AMEND THE MRLS FOR FENAMIPHOS

It is proposed that MRLs are amended for fenamiphos to support the GAP use of the compound on crops.

The current entry for fenamiphos in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Fenamiphos	22224-92-6	*Sum of:* fenamiphos and its sulphoxide and sulphone *Expressed as:* fenamiphos	Kiwifruit Root vegetables Tuber vegetables	0.05(*) 0.2 0.2

The revised entry for fenamiphos in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Fenamiphos	22224-92-6	*Sum of:* fenamiphos and its sulphoxide and sulphone *Expressed as:* fenamiphos	Carrots Parsnips Potatoes Any other food	0.2 0.2 0.2 0.01(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.12.1 Amendment Rationale

The proposed MRLs are representative of the outcomes of the OPC reassessment as they pertain to fenamiphos. The new MRLs will allow for the continued use of the compound in compliance with GAP, and the restrictions applied to use and exposure at the completion of the EPA's reassessment.

3.12.2 Chemical Information

Common name of compound	Fenamiphos
Use of compound	Nematicide
Chemical Abstract Services (CAS) Registry number	22224-92-6
Type of compound	Organophosphate
Administration method	Spray

3.12.3 Good Agricultural Practice

Fenamiphos is used as a nematicide on carrots, parsnips, and potatoes at a rate of 8 kg active ingredient/ha in a single application per crop. This use attracts a withholding period of 90 days.

As a result of the OPC reassessment, label claims for kiwifruit and kumara have been removed, and the use of the active has been restricted to on-label uses only. This has required the MRL entry for fenamiphos to be revised to specify those crops for which approval is being retained. The MRL for 'any other food' will ensure compliance with the restriction to on-label uses only, and will support GAP.

3.12.4 Residue Information

With the changes to the approved crops, the residue data for the retained crops support the MRLs as proposed. The new MRLs have been proposed to support GAP.

3.12.5 Dietary Risk Assessment

The HBGV of 0.0001 mg/kg bw/d as was considered appropriate for use in the assessment.

Based on the residues expected in food from crops treated according to the uses now proposed as GAP, the NEDI for fenamiphos is equivalent to less than 69% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is acceptable.

3.12.6 Toxicological/Public Health Assessment

It has been determined that the use of fenamiphos as a nematicide on food crops, when applied according to GAP, is very unlikely to pose any health risks from consumption of treated produce.

3.12.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	Root and tuber vegetables	0.2

3.13 PROPOSAL TO SET AN MRL FOR FENPYRAZAMINE

It is proposed that an MRL is set for fenpyrazamine to support the GAP use of the compound on grapes.

There is currently no entry in Schedule 1 of the Notice.

The proposed entry for fenpyrazamine in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Fenpyrazamine	473798-59-3	Fenpyrazamine (parent only)	Grapes	3

3.13.1 MRL Promulgation Rationale

The amendment represents the registration of a product containing a new active ingredient. The proposed MRL will manage the use of fenpyrazamine as a fungicide when used on grapes in accordance with the application rates and withholding periods that are proposed as GAP in New Zealand.

An MRL was previously proposed for fenpyrazamine at 0.05 mg/kg to support the use pattern considered GAP for grapes in New Zealand. In response to a submission from one trading partner, requesting consideration of a higher MRL that reflects their GAP for grapes, the New Zealand MRL has been reconsidered in order to facilitate trade. It is considered that the new proposed MRL will support both trade and GAP in New Zealand.

3.13.2 Chemical Information

Common name of compound	Fenpyrazamine
Use of compound	Fungicide
Chemical Abstract Services (CAS) Registry number	473798-59-3
Type of compound	Phenylpyrazole
Administration method	Spray

3.13.3 Good Agricultural Practice

Fenpyrazamine is proposed for use on wine grapes for the treatment of grey mould (*Botrytis cinerea*) at up to 2 foliar sprays of 40 gai/100L, applied to full coverage up to full bunch closure. This use is considered GAP in New Zealand as part of a season-long control programme. The applicable withholding period is use up to pre-bunch closure but not less than 65 days before harvest.

It is noted that overseas, fenpyrazamine is used later in the season for fungicidal control, and GAP includes application at early bloom, pre-bunch closure, or veraison. This had led to the need for a higher MRL than would be applied if use was limited to that considered GAP in New Zealand.

3.13.4 Residue Information

The residue data supports an MRL for fenpyrazamine in grapes of 3 mg/kg. This MRL is proposed to facilitate trade.

3.13.5 Dietary Risk Assessment

The HBGV of 0.091 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the proposed MRL, the NEDI for fenpyrazamine is equivalent to less than 0.2% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.13.6 Toxicological/Public Health Assessment

It has been determined that the use of fenpyrazimine as a fungicide for use on wine grapes, when applied according to GAP, is very unlikely to pose any health risks from consumption of treated produce.

3.13.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	Dried Grapes (currants, raisins, and sultanas)	10
	Table Grapes	2
	Wine Grapes	0.05
Canada	Grapes	3
European Union	Table Grapes	3
	Wine Grapes	3
Japan	Grape	10
United States	Table grapes	3
	Wine grapes	3

3.14 PROPOSAL TO SET AN MRL FOR FLONICAMID

It is proposed that an MRL is set for flonicamid to support the GAP use of the compound on potatoes.

There is currently no entry for flonicamid in Schedule 1 of the Notice.

The proposed entry for flonicamid in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Flonicamid	158062-67-0	Flonicamid and its metabolites TFNA, TFNA-AM, and TFNG	Potatoes	0.15

3.14.1 MRL Promulgation Rationale

The amendment represents the registration of a product containing a new active ingredient for use on potatoes. The proposed MRL will manage the use of flonicamid and its metabolites TFNA (4-trifluoromethylnicotinic acid), TFNA-AM (4-trifluoromethylnicotinamide), and TFNG (N-(4-trifluoromethylnicotinoyl)glycine), when flonicamid is used as an insecticide

on potatoes in accordance with the application rates and withholding periods that are proposed as GAP in New Zealand.

3.14.2 Chemical Information

Common name of compound	Flonicamid
Use of compound	Insecticide
Chemical Abstract Services (CAS) Registry number	158062-67-0
Type of compound	Nicotinoid
Administration method	Spray

3.14.3 Good Agricultural Practice

Flonicamid is proposed for use as an insecticide on potatoes at a rate of 80 gai/ha with two applications 7 days (psyllid treatment) or 7-14 days (aphid treatment) apart at the first sign of infestation. The withholding period applicable to this use is 7 days.

3.14.4 Residue Information

The residue data for the crop proposed supports an MRL of 0.15 mg/kg in potatoes. This MRL is proposed to support GAP.

3.14.5 Dietary Risk Assessment

The HBGV of 0.511 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops treated according to the proposed GAP use, the NEDI for flonicamid is equivalent to less than 2% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.14.6 Toxicological/Public Health Assessment

It has been determined that the use of flonicamid as an insecticide in potatoes, when used according to GAP, is very unlikely to pose any health risks from consumption of treated produce.

3.14.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	Potato	0.2

3.15 PROPOSAL TO SET MRLS FOR FLORASULAM

It is proposed that MRLs are set for florasulam to support the GAP use of the compound on barley, triticale, and wheat.

There is currently no entry for florasulam in Schedule 1 of the Notice.

The proposed entry for florasulam in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Florasulam	145701-23-1	Florasulam	Barley grain	0.01(*)
			Triticale grain	0.01(*)
			Wheat grain	0.01(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.15.1 MRL Promulgation Rationale

The proposed MRLs represent the registration of a product containing a new active ingredient for use on barley, triticale, and wheat. The proposed MRLs will manage the use of florasulam as a herbicide when used on the specified grain crops in accordance with the application rates and withholding periods that are proposed as GAP in New Zealand.

3.15.2 Chemical Information

Common name of compound	Florasulam
Use of compound	Herbicide
Chemical Abstract Services (CAS) Registry number	145701-23-1
Type of compound	Sulfonanilide
Administration method	Spray

3.15.3 Good Agricultural Practice

Florasulam is proposed for use as a selective herbicide for post-emergent control of broadleaf weeds in barley, triticale, and wheat, at a rate of 25 gai/ha for a maximum of two post-emergent applications applied between GS13 (three-leaf crop stage) and GS39 (flag leaf stage). It is not to be applied after GS39. The livestock withholding period applicable to this use is 7 days (forage).

3.15.4 Residue Information

The residue data for the crops proposed supports MRLs of 0.01 mg/kg in barley, triticale and wheat grain. These MRLs are proposed to support GAP.

3.15.5 Dietary Risk Assessment

The HBGV of 0.035 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops treated according to the proposed GAP use, the NEDI for florasulam is equivalent to less than 1% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.15.6 Toxicological/Public Health Assessment

It has been determined that the use of florasulam as a herbicide on barley, triticale, and wheat, when used according to GAP, is very unlikely to pose any health risks from consumption of treated produce.

3.15.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	Cereal grains	0.01
Canada	Barley	0.01
	Wheat	0.01
China	Wheat	0.01
European Union	Barley	0.01
	Wheat	0.01
	Other cereals	0.01
Japan	Wheat	0.01
	Barley	0.01
	Other cereal grains	0.01
United States	Barley grain	0.01
	Triticale grain	0.01
	Wheat grain	0.01

3.16 PROPOSAL TO AMEND THE MRLS FOR FLUAZINAM

It is proposed that the MRLs for fluazinam are amended to support the GAP use of the compound on onions.

The current entry for fluazinam in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Fluazinam	79622-59-6	Fluazinam	Brassica vegetables	0.02(*)
			Grapes	1
			Potatoes	0.02(*)
			Tomatoes	0.02(*)

The revised entry for fluazinam in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Fluazinam	79622-59-6	Fluazinam	Brassica vegetables	0.02(*)
			Grapes	1
			Onions	0.02
			Potatoes	0.02(*)
			Tomatoes	0.02(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.16.1 Amendment Rationale

The amendment represents the approval of an additional use for fluazinam. The proposed MRL will manage the use of fluazinam when used on onions in accordance with the application rates and withholding periods that are proposed as GAP in New Zealand.

3.16.2 Chemical Information

Common name of compound	Fluazinam
Use of compound	Fungicide
Chemical Abstract Services (CAS) Registry number	79622-59-6
Type of compound	Pyridine
Administration method	Spray

3.16.3 Good Agricultural Practice

Fluazinam is used as a fungicide on grapes, tomatoes, potatoes, brassica vegetables, and now onions. The new use in onions requires a foliar application rate of 400gai/ha between bulb formation and pre-harvest, with a maximum of two applications per season, for the control of *Botrytis* (neck rot). This use attracts a 14 day withholding period in onions.

3.16.4 Residue Information

The residue data for the crop supports a fluazinam MRL of 0.02 mg/kg on onions. This MRL is proposed to support GAP.

3.16.5 Dietary Risk Assessment

The HBGV of 0.004 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops treated according to existing and proposed GAP uses, the NEDI for fluazinam is equivalent to less than 51% of the HBGV. It is

therefore concluded that the risk associated with chronic dietary exposure is considered acceptable.

3.16.6 Toxicological/Public Health Assessment

It has been determined that the use of fluazinam as a fungicide on onions, when used according to GAP, is unlikely to pose any health risks from consumption of treated produce.

3.16.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Canada	Onions (all varieties)	0.2
European Union	Onions	0.05
Japan	Onions	0.1
United States	Onions	0.2

3.17 PROPOSAL TO AMEND MRLS FOR FLUOPYRAM

It is proposed that the MRLs for fluopyram are amended to support the proposed use of the compound on carrots and cereal grains.

The current entry for fluopyram in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Fluopyram	658066-35-4	Plant commodities: Fluopyram Animal commodities: Sum of fluopyram and 2-(trifluoromethyl) benzamide, expressed as fluopyram	Bulb onions Fruiting vegetables (except cucurbits) Grapes Mammalian meat Mammalian offal Milk	0.01(*) 1.0 0.05 0.1 0.7 0.07

The revised entry for fluopyram in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Fluopyram	658066-35-4	Plant commodities: Fluopyram Animal commodities: Sum of fluopyram and 2-(trifluoromethyl) benzamide, expressed as fluopyram	Bulb onions Cereal grains Carrots Eggs Fruiting vegetables (except cucurbits) Grapes Mammalian meat Mammalian fat Mammalian kidney Mammalian liver Milk	0.01(*) 0.01(*) 0.2 0.3 1.0 0.05 0.5 0.5 0.7 3 0.3

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.17.1 Amendment Rationale

The proposed new crop MRLs represent the expansion of use for fluopyram. The proposed MRLs will manage the use of fluopyram as a fungicidal seed treatment in cereals, and for

control of nematodes in carrots. These uses are in accordance with the application rates that are proposed as GAP in New Zealand.

The new and amended animal MRLs are being proposed to align with those set in the EU and Japan. The proposed revised MRLs will be compliant with those set by Codex in animal commodities.

3.17.2 Chemical Information

Common name of compound	Fluopyram
Use of compound	Fungicide and Nematicide
Chemical Abstract Services (CAS) Registry number	658066-35-4
Type of compound	Pyridylethylamide
Administration method	Spray

3.17.3 Good Agricultural Practice

Fluopyram is proposed for use as a fungicidal seed treatment for control of seed- and soil-borne diseases in barley, oats, triticale, and wheat at a rate of 10 gai/tonne of seed as a single treatment. Because this treatment is only used on seeds that will be supplied for the planting of crops and will not be used for human or animal consumption, no withholding period applies to this use.

Fluopyram is also proposed for use as a nematicide in carrots for the control of root knot nematode at a rate of 500 gai/ha in 200L of water/ha as a single application. The withholding period applied to this use is 100 days in carrots, with a restriction that fluopyram must not be used on carrots that will be harvested less than 100 days from planting (e.g. baby carrots).

3.17.4 Residue Information

The residue data for the crops supports a MRLs at 0.01 mg/kg for cereal crops and 0.2 mg/kg in carrots. These MRLs are proposed to support GAP.

The residue data evaluating the potential for transfer of residues to animals fed treated crops supports the amendment of the existing animal commodity MRLs and the addition of poultry MRLs. Although these amendments are being proposed more for trade purposes, the new MRLs are still considered to support GAP.

3.17.5 Dietary Risk Assessment

The HBGV of 0.0084 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops treated according to existing and proposed GAP uses, the NEDI for fluopyram is equivalent to less than 39% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is considered acceptable.

3.17.6 Toxicological/Public Health Assessment

It has been determined that the use of fluopyram as a fungicide for cereal crop seeds and as a nematicide on carrots, when treated according to GAP, is very unlikely to pose any health risks from consumption of treated produce.

3.17.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Codex	Carrot	0.4
	Eggs	1
	Kidney of cattle, goats, pigs and sheep	0.8
	Liver of cattle, goats, pigs & sheep	5
	Meat (from mammals other than marine mammals)	0.8
	Milks	0.6
	Poultry meat	0.5
	Poultry, edible offal of	2

3.18 PROPOSAL TO AMEND MRLS FOR FLUXAPYROXAD

It is proposed that MRLs for fluxapyroxad are amended to support the GAP use of the compound on onions.

The current entry for fluxapyroxad in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Fluxapyroxad	907204-31-3	Fluxapyroxad	Apples	0.02
			Barley grain	0.3
			Edible offal	0.03
			Mammalian fat	0.05
			Mammalian meat	0.01(*)
			Milk	0.005
			Pears	0.02
			Wheat grain	0.1

The revised entry for fluxapyroxad in Schedule1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Fluxapyroxad	907204-31-3	Fluxapyroxad	Apples	0.02
			Barley grain	0.3
			Bulb vegetables	0.2
			Edible offal	0.03
			Mammalian fat	0.05
			Mammalian meat	0.01(*)
			Milk	0.005
			Pears	0.02
			Wheat grain	0.1

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.18.1.1 Amendment Rationale

The new MRL is proposed to support a new use for fluxapyroxad on onions in accordance with the application rates and withholding periods that are proposed as GAP in New Zealand. Although the new use is specific to bulb onions, the proposed MRL will cover the use of fluxapyroxad on onions and accommodate the presence of residues in bulb vegetables planted in rotation with treated onions.

3.18.2 Chemical Information

Common name of compound	Fluxapyroxad
Use of compound	Fungicide
Chemical Abstract Services (CAS) Registry number	907204-31-3
Type of compound	Pyrazole-carboxamide
Administration method	Spray

3.18.2.1 Good Agricultural Practice

The proposed use of fluxapyroxad is to control is to control white rot in onions by applying 210 gai/ha at 2-3 week intervals, either as a block of two consecutive sprays or in a programme alternating fluxapyroxad and a fungicide with a different mode of action. This use attracts a withholding period of 21 days from the last application.

3.18.2.2 Residue Information

The residue data for onions and other bulb vegetables supports a fluxapyroxad MRL of 0.2 mg/kg. This MRL is proposed to support GAP.

3.18.2.3 Dietary Risk Assessment

The HBGV of 0.014 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops treated according to existing and proposed GAP uses, the NEDI for fluxapyroxad is equivalent to less than 5% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.18.2.4 Toxicological/Public Health Assessment

It has been determined that the use of fluxapyroxad in onions, according to the GAP specified above, is very unlikely to pose any health risks from consumption of treated or exposed produce.

3.18.2.5 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	All other foods [specific MRLs are set for animal products, wheat, barley, and barley bran]	0.1
Codex	Garlic	0.07
	Onion, bulb	0.07

3.19 PROPOSAL TO SET MRLS FOR HALAUXIFEN-METHYL

It is proposed that MRLs are set for halauxifen-methyl to support the GAP use of the compound on wheat, triticale, and barley.

There is currently no entry for halauxifen-methyl in Schedule 1 of the Notice.

The proposed entry for halauxifen-methyl in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Halauxifen-methyl	943831-98-9	Halauxifen-methyl	Barley grain	0.01(*)
			Triticale grain	0.01(*)
			Wheat grain	0.01(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.19.1.1 MRL Promulgation Rationale

The proposed MRLs represent the registration of a product containing a new active ingredient for use on barley, triticale, and wheat. The proposed MRLs will manage the use of halauxifen-methyl in accordance with the application rates and withholding periods that are proposed as GAP in New Zealand.

3.19.1.2 Chemical Information

Common name of compound	Halauxifen-methyl
Use of compound	Herbicide
Chemical Abstract Services (CAS) Registry number	943831-98-9
Type of compound	Picolinic acid
Administration method	Spray

3.19.1.3 Good Agricultural Practice

Halauxifen-methyl is to be used as a selective herbicide for the control of broadleaf weeds in barley, triticale, and wheat. The use will be for a single treatment between GS13 and GS39 or two treatments (the first between GS13 and GS29, and the second before GS39) at a rate of 5 gai/ha; it is not to be applied after GS39. The livestock withholding period applicable to this use is seven days (for fodder or green feed).

3.19.1.4 Residue Information

The residue data supports MRLs of 0.01 mg/kg for halauxifen-methyl in all three commodities. The MRLs are proposed to support GAP.

3.19.1.5 Dietary Risk Assessment

The HBGV of 0.0406 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops treated according to the proposed GAP uses, the NEDI for halauxifen-methyl is equivalent to less than 1% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.19.1.6 Toxicological/Public Health Assessment

It has been determined that the use of halauxifen-methyl in barley, triticale, and wheat, according to the GAP specified above, is very unlikely to pose any health risks from consumption of treated produce.

3.19.1.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	Cereal grains	0.01

3.20 PROPOSAL TO SET MRLS FOR IPCONAZOLE

It is proposed that MRLs are set for ipconazole to support the GAP use of the compound on cereals and sweetcorn.

There is currently no entry for ipconazole in Schedule 1 of the Notice.

The proposed entry for ipconazole in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Ipconazole	125225-28-7	Ipconazole	Cereal grains	0.01(*)
			Sweetcorn	0.01(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.20.1 MRL Promulgation Rationale

The proposed MRLs represent the registration of a product containing ipconazole for use on cereals (barley, oats, triticale and wheat) and sweetcorn. The proposed MRLs will manage the use of ipconazole, in association with one other active ingredient as a fungicidal seed treatment in accordance with the application rates that are proposed as GAP in New Zealand.

3.20.2 Chemical Information

Common name of compound	Ipconazole
Use of compound	Fungicide
Chemical Abstract Services (CAS) Registry number	125225-28-7
Type of compound	Triazole
Administration method	Spray

3.20.3 Good Agricultural Practice

Ipconazole is proposed for use as a fungicidal seed treatment for control of seed- and soil-borne diseases in barley, oats, triticale, and wheat, as well as sweetcorn, at a rate of 80 gai/tonne of seed as a single treatment. Because this treatment is only used on seeds that will be supplied for the planting of crops and will not be used for human or animal consumption, no withholding period applies to this use.

3.20.4 Residue Information

The residue data supports MRLs of 0.01 mg/kg for ipconazole in all of the associated commodities. The MRLs are proposed to support GAP.

3.20.5 Dietary Risk Assessment

The HBGV of 0.0105 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from seeds treated according to the proposed GAP uses, the NEDI for ipconazole is equivalent to less than 1% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.20.6 Toxicological/Public Health Assessment

It has been determined that the application of ipconazole to cereal and sweetcorn seeds for the management of seed- and soil-borne diseases, when used according to GAP, is unlikely to pose health risks from consumption of treated produce.

3.20.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	Cereal grains	0.01

3.21 PROPOSAL TO AMEND MRLS FOR MALDISON (MALATHION)

It is proposed that MRLs are amended for maldison to support GAP use of the compound on crops. MRLs for animal commodities with residues from transfer from treated crops are also being amended.

The current entry for maldison in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Maldison	121-75-5	Maldison	Cattle fat	1
			Cereal Grains	8
			Eggs	1
			Fruits	8
			Horse fat	1
			Pig fat	1
			Vegetables	8
			Any other food	0.5

The revised entry for maldison in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Maldison (Malathion)	121-75-5	Maldison	Asparagus	1
			Broccoli	8
			Avocados	2
			Brussels sprouts	8
			Bulb vegetables	5
			Cabbages	5
			Cattle fat	1
			Cauliflowers	5
			Celery	5
			Cereal grains	8
			Citrus fruits	5
			Cucumbers	0.2
			Eggs	1
			Fruiting vegetables (except cucumbers, melons, mushrooms, sweet peppers, sweetcorn, and tomatoes)	8
			Grapes	5
			Horse fat	1
			Leafy vegetables	5
			Legume vegetables	3
			Melons	2
			Mushrooms	1
			Peppers (sweet)	1
			Pig fat	1
			Pomefruit	0.5
			Root vegetables	3
			Stonefruit	5
			Sweetcorn	1
			Tomatoes	5
			Tuber vegetables	3
				0.5

	Meat, fat or offal from any other animal	0.5
	Milk	

3.21.1 Amendment Rationale

The proposed MRLs represent the outcomes of the OPC reassessment as they pertain to maldison. The new MRLs will allow for the continued use of the compound in compliance with GAP and the restrictions applied to use and exposure at the completion of the EPA reassessment.

3.21.2 Chemical Information

Common name of compound	Maldison
Use of compound	Insecticide
Chemical Abstract Services (CAS) Registry number	121-75-5
Type of compound	Organophosphate
Administration method	Spray

3.21.3 Good Agricultural Practice

Maldison is used as an insecticide on a number of horticultural and agricultural crops for the control of a range of insect pests. As a result of the reassessment, the number of applications per crop have been reduced to two per season and the majority of the withholding periods were extended to adjust the estimated dietary intake. Withholding periods for grapes, pipfruit, stonefruit, avocados, citrus fruits, vegetables, and pasture have all been extended to 7 days; withholding periods for sweetcorn and cereals have also been extended, to 14 days.

The MRLs for cattle fat, horse fat, pig fat and eggs have been retained as previously promulgated. The new MRLs for ‘meat, fat or offal from any other animal’ and ‘milk’, previously captured in the ‘any other food’ MRL, will remain at 0.5 mg/kg to ensure residues are appropriately managed in any other grazing species.

3.21.4 Residue Information

With the changes to the approved crops and withholding periods, the residue data for the retained crops support the MRLs as proposed. These MRLs are proposed to support GAP.

3.21.5 Dietary Risk Assessment

The HBGV of 0.02 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops treated according to existing and proposed GAP uses and animal exposure to treated crops, the NEDI for maldison is equivalent to less than 76% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is acceptable.

3.21.6 Toxicological/Public Health Assessment

It has been determined that the use of maldison on the crops listed above, according to the GAP specified above, is unlikely to pose any health risks from consumption of treated produce.

3.21.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	Brassica (cole or cabbage) vegetables, head cabbages, flowerhead brassicas (except cauliflower, kohlrabi)	2
	Brassica leafy vegetables (except kale)	2
	Cauliflower	0.5
	Carrot	0.5
	Celery	2
	Cereal grains	8
	Citrus fruits	4
	Cucumbers	4
	Edible offal (mammalian)	1
	Eggs	1
	Fruiting vegetables, cucurbits (except cucumbers)	2
	Fruiting vegetables, other than cucurbits	3
	Fruits (except berries and other small fruits; citrus fruits; dried fruits; stone fruits)	2
	Grapes	8
	Legume vegetables	2
	Lettuce head	2
	Lettuce leaf	2
	Meat (mammalian, in the fat)	1
	Milks (in the fat)	1
	Poultry, Edible offal of	1
	Poultry meat (in the fat)	1
	Stonefruit	5

3.22 PROPOSAL TO SET MRLS FOR MANDESTROBIN

It is proposed that MRLs are set for mandestrobin to support the GAP use on beans and bulb onions.

There is currently no entry for mandestrobin in Schedule 1 of the Notice.

The proposed entry for mandestrobin in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Mandestrobin	173662-97-0	Mandestrobin	Beans (with pods)	0.7
			Bulb onions	0.01(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.22.1 MRL Promulgation Rationale

The proposed MRLs represent the registration of a product containing mandestrobin for use on beans and bulb onions. The proposed MRLs will manage the use of mandestrobin as a fungicide in accordance with the application rates and withholding periods that are proposed as GAP in New Zealand.

3.22.2 Chemical Information

Common name of compound	Mandestrobin
Use of compound	Fungicide
Chemical Abstract Services (CAS) Registry number	173662-97-0
Type of compound	Strobilurin
Administration method	Spray

3.22.3 Good Agricultural Practice

Mandestrobin is proposed for use as a fungicide for the control of *Sclerotinia* in beans, and white rot and downy mildew in bulb onions. The compound will be used at a rate of 375 gai/ha in 500L/ha of water on beans as a preventative treatment from early flowering with one repeat treatment 7-10 days later. In bulb onions, it will be used at a rate of 300 gai/ha in 500-1000L water/ha as a preventative treatment at 100-150 growing degree days (GDD) with one repeat treatment one month later. The withholding periods applicable to these uses are 30 days for onions and 7 days for beans. To manage the potential for residues in livestock, a statement applies that animals are not be grazed on treated bean crops or fed crop trash.

3.22.4 Residue Information

The residue data supports an MRL of 0.7 mg/kg in beans, including the pods, and 0.01 mg/kg in bulb onions. These MRLs are proposed to support GAP. With the 'do not graze treated bean crops or feed crop trash to livestock' statement in place, it is considered that animal commodity MRLs are not required.

3.22.5 Dietary Risk Assessment

The HBGV of 0.133 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops treated according to the proposed GAP use, the NEDI for mandestrobin is equivalent to less than 1% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.22.6 Toxicological/Public Health Assessment

It has been determined that the use of mandestrobin as a fungicide on beans and bulb onions, when used according to GAP, is very unlikely to pose any health risks from consumption of treated produce.

3.22.7 Other International MRLs

There have been no MRLs set by either Codex or Australia for the use of mandestrobin on beans and bulb onions.

3.23 PROPOSAL TO AMEND MRLS FOR METALAXYL AND METALAXYL-M

It is proposed that MRLs for metalaxyl and metalaxyl-m are amended to support the GAP use of metalaxyl on cereals, maize, and sweetcorn.

The current entry for metalaxyl and metalaxyl-m in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Metalaxyl and metalaxyl-m	57837-19-1 and 70630-17-0	Metalaxyl (sum of isomers). *Expressed as:* Metalaxyl	Asparagus	0.2
			Avocados	0.05(*)
			Berries and other small fruits	2
			Brassica vegetables	0.05(*)
			Fruiting vegetables (except tomatoes)	0.2
			Onions	0.05(*)
			Potatoes	0.05(*)
			Tomatoes	0.05(*)

The revised entry for metalaxyl and metalaxyl-m in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Metalaxyl and metalaxyl-m	57837-19-1 and 70630-17-0	Metalaxyl (sum of isomers). *Expressed as:* Metalaxyl	Asparagus	0.2
			Avocados	0.05(*)
			Berries and other small fruits	2
			Brassica vegetables	0.05(*)
			Cereal grains	0.01(*)
			Fruiting vegetables (except tomatoes)	0.2
			Onions	0.05(*)
			Potatoes	0.05(*)
			Sweetcorn	0.01(*)
			Tomatoes	0.05(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.23.1.1 Amendment Rationale

The new MRL is proposed to support a new use for metalaxyl for use on cereals (barley, oats, triticale and wheat) and sweetcorn. The proposed MRLs will manage the use of metalaxyl, in association with one other active ingredient as a fungicidal seed treatment in accordance with the application rates that are proposed as GAP in New Zealand.

3.23.2 Chemical Information

Common name of compound	Metalaxyl
Use of compound	Fungicide
Chemical Abstract Services (CAS) Registry number	57837-19-1
Type of compound	Acylalanine
Administration method	Spray

3.23.3 Good Agricultural Practice

Metalaxyl is proposed for use as a fungicidal seed treatment for control of seed- and soil-borne diseases in barley, oats, triticale, and wheat, as well as sweetcorn, at a rate of 64 gai/tonne of seed as a single treatment. Because this treatment is only used on seeds that will be supplied for the planting of crops and will not be used for human or animal consumption, no withholding period applies to this use.

3.23.4 Residue Information

The residue data supports MRLs of 0.01 mg/kg for metalaxyl in all of the associated crops. The MRLs are proposed to support GAP. Based on the residue data in animals, it was determined that animal commodity MRLs are not required.

3.23.5 Dietary Risk Assessment

The HBGV of 0.024 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from seeds treated according to the proposed GAP uses, the NEDI for metalaxyl is equivalent to less than 10% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.23.6 Toxicological/Public Health Assessment

It has been determined that the application of metalaxyl to cereal and sweetcorn seeds for the management of seed- and soil-borne diseases, when used according to GAP, is unlikely to pose health risks from consumption of treated produce.

3.23.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	Cereal grains	0.01
Codex	Cereal grains	0.05

3.24 PROPOSAL TO AMEND MRLS FOR METHAMIDOPHOS

It is proposed that MRLs are amended for methamidophos to support the GAP use of the compound on crops.

The current entry for methamidophos in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Methamidophos	10265-92-6	Methamidophos	Brassica vegetables	0.05(*)
			Bulb vegetables	0.05(*)
			Peas	0.05(*)
			Potatoes	0.05(*)

The revised entry for methamidophos in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Methamidophos	10265-92-6	Methamidophos	Broccoli	1
			Brussels sprouts	1
			Cabbages	1
			Cauliflowers	1
			Citrus fruits	0.5
			Kumara	0.01(*)
			Lettuce	0.2
			Maize	0.1
			Onions	0.05
			Potatoes	0.01(*)
			Sweetcorn	0.1
			Tamarillos	0.05
			Tomatoes	0.1
			Any other food	0.01(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.24.1 Amendment Rationale

The proposed MRLs represent the outcomes of the OPC reassessment as they pertain to methamidophos. The new MRLs will allow for the continued use of the compound in compliance with GAP, and the restrictions applied to use and exposure at the completion of the EPA's reassessment.

3.24.2 Chemical Information

Common name of compound	Methamidophos
Use of compound	Insecticide
Chemical Abstract Services (CAS) Registry number	10265-92-6
Type of compound	Organophosphate
Administration method	Spray

3.24.3 Good Agricultural Practice

Methamidophos is used an insecticide on certain fruits and vegetables for the control of pest insects. It is also a metabolite of acephate (see 3.2 above).

As a result of the OPC reassessment, label claims for snap beans and indoor tomatoes have been removed, and the use of the active has been restricted to on-label uses only. This has required the MRL entry for methamidaphos to be revised to specify those crops for which approval is being retained for methamidaphos-containing products, and to ensure appropriate levels are established for those crops that may contain methamidaphos residues as a result of acephate breakdown. The MRL for 'any other food' will ensure compliance with the restriction to on-label uses only, and will support GAP.

3.24.4 Residue Information

With the changes to the approved crops and withholding periods, residue data for the retained crops support the MRLs as proposed. The new MRLs have been proposed to support GAP.

3.24.5 Dietary Risk Assessment

The HBGV of 0.0001 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops and animals treated according to the uses now proposed as GAP, the NEDI for methamidophos is equivalent to less than 69% of

the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is acceptable.

3.24.6 Toxicological/Public Health Assessment

It has been determined that the use of methamidophos as an insecticide on food crops, when applied according to GAP, is very unlikely to pose any health risks from consumption of treated produce.

3.24.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Codex	Potato	0.05

3.25 PROPOSAL TO AMEND MRLS FOR METRAFENONE

It is proposed that MRLs for metrafenone are amended to support the GAP use of the compound on grapes.

The current entry for metrafenone in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Metrafenone	220899-03-6	Metrafenone	Pumpkins	0.01(*)
			Winter squash	0.01(*)

The revised entry for metrafenone in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Metrafenone	220899-03-6	Metrafenone	Grapes	0.01(*)
			Pumpkins	0.01(*)
			Winter squash	0.01(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.25.1.1 Amendment Rationale

The new MRL is proposed to support a new use for metrafenone on grapes. The proposed MRL will manage the use of metrafenone in accordance with the application rate that is proposed as GAP in New Zealand.

3.25.2 Chemical Information

Common name of compound	Metrafenone
Use of compound	Fungicide
Chemical Abstract Services (CAS) Registry number	220899-03-6
Type of compound	Aryl phenol ketone
Administration method	Spray

3.25.3 Good Agricultural Practice

Metrafenone is proposed for use as a fungicide on grapes up to pre-capfall, at no more than two applications of 10 gai/100L of water to the point of runoff on a 14-21 day interval in a

protectant programme. The withholding period that applies to this use is a restriction that the product must not be applied once capfall has commenced.

3.25.4 Residue Information

The residue data supports an MRL of 0.01 mg/kg for metrafenone in grapes. The MRL is proposed to support GAP. The potential for residues in animals grazing in vineyards will be appropriately managed with the on-label 6 month livestock withholding period; it is considered that animal commodity MRLs are not required.

3.25.5 Dietary Risk Assessment

The HBGV of 0.18 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops treated according to the proposed GAP uses, the NEDI for metrafenone is equivalent to less than 0.1% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.25.6 Toxicological/Public Health Assessment

It has been determined that the application of metrafenone to grapes as a fungicide, when used according to GAP, is unlikely to pose health risks from consumption of treated produce.

3.25.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	Grapes	1
Codex	Grapes	5

3.26 PROPOSAL TO AMEND MRLS FOR MONEPANTEL

It is proposed that an MRL is set for monepantel to support the GAP use of this product when administered to cattle.

The current entry for monepantel in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Monepantel	887148-69-8	Monepantel-sulphone	Goat fat	7
			Goat kidney	2
			Goat liver	5
			Goat meat	0.7
			Sheep fat	7
			Sheep kidney	2
			Sheep liver	5
			Sheep meat	0.7

The revised entry for monepantel in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Monepantel	887148-69-8	Monepantel-sulphone	Cattle fat	7
			Cattle kidney	1
			Cattle liver	2
			Cattle meat	0.3
			Cattle milk	0.05
			Goat fat	7
			Goat kidney	2
			Goat liver	5
			Goat meat	0.7
			Sheep fat	7
			Sheep kidney	2
			Sheep liver	5
			Sheep meat	0.7

3.26.1 Amendment Rationale

The proposed MRLs represent the expansion of use of monepantel to include use in cattle. The proposed MRLs will manage the use of monepantel when administered to cattle in accordance with the dose rates and withholding periods that are proposed as GAP in New Zealand.

3.26.2 Chemical Information

Common name of compound	Monepantel
Use of compound	Amino-acetonitrile anthelmintic
Chemical Abstract Services (CAS) Registry number	217500-96-4
Type of compound	Amino-acetonitrile
Administration method	Oral drench

3.26.3 Good Agricultural Practice

Monepantel is proposed for use in cattle for the control of gastrointestinal nematode infections in cattle at a dose rate of 2.5 mg/kg by a single oral dose. Use of monepantel in cattle will attract a meat withholding period of 5 days and milk withholding period of 35 days.

3.26.4 Residue Information

The residue data for the target species cattle supports monepantel MRLs of 7 mg/kg for cattle fat, 1 mg/kg for cattle kidney, 2 mg/kg for cattle liver, 0.3 mg/kg for cattle meat, and 0.05 mg/kg for cattle milk. These MRLs are proposed to support GAP.

3.26.5 Dietary Risk Assessment

The HBGV of 0.02 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from animals treated according to existing and proposed GAP uses, the NEDI for monepantel is equivalent to less than 12% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.26.6 Toxicological/Public Health Assessment

It has been determined that the administration of monepantel to cattle for the treatment of gastrointestinal nematodes, when used according to GAP, is unlikely to pose health risks from consumption of treated produce.

3.26.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
European Union	Bovine muscle	0.3
	Bovine fat	7
	Bovine liver	2
	Bovine kidney	1
Japan	Other terrestrial mammals, muscle	0.7
	Other terrestrial mammals, fat	7
	Other terrestrial mammals, liver	5
	Other terrestrial mammals, kidney	2
	Other terrestrial mammals, edible offal	5

3.27 PROPOSAL TO AMEND MRLS FOR PROTHIOCONAZOLE

It is proposed that MRLs for prothioconazole are amended to support the GAP use of the compound on cereals.

The current entry for prothioconazole in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Prothioconazole	178928-70-6	Prothioconazole-desthio	Barley grain	0.1
			Cereal grains (except barley grain)	0.02(*)

The revised entry for prothioconazole in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Prothioconazole	178928-70-6	Prothioconazole-desthio	Barley grain	0.1
			Cereal grains (except barley grain)	0.01(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.27.1.1 Amendment Rationale

The new MRL for cereal grains other than barley grain is an outcome of the change in the residue definition for prothioconazole promulgated in the last Notice amendment. The previous residue definition was “sum of prothioconazole and its desthio metabolite”, two metabolites, whereas the amended definition is for only one metabolite, prothioconazole-desthio. As such, the permissible residue level in cereal grains (except barley grain) is proposed to be reduced to 0.01 mg/kg to reflect the limit of quantification of the desthio metabolite.

There are no changes in the use patterns or GAP of the product associated with this amendment.

3.27.2 Chemical Information

Common name of compound	Prothioconazole
Use of compound	Fungicide
Chemical Abstract Services (CAS) Registry number	178928-70-6
Type of compound	Triazole
Administration method	Spray

3.27.3 Good Agricultural Practice

Prothioconazole is used as a fungicide in barley and other cereals. In barley, it is used at an application rate of 150 gai/ha for up to two applications at 3-4 week intervals). The withholding period is 56 days.

3.27.4 Residue Information

The residue data for the crop supports a prothioconazole MRL of 0.1 mg/kg in barley grain. This MRL is proposed to support GAP.

3.27.5 Dietary Risk Assessment

The HBGV of 0.008 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the proposed MRLs, the NEDI for prothioconazole is equivalent to less than 1% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.27.6 Toxicological/Public Health Assessment

It has been determined that the use of prothioconazole as a fungicide in barley, when used according to GAP, is unlikely to pose any health risks from consumption of treated produce.

3.27.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)	Residue Definition
Australia	Cereal bran, unprocessed Cereal grains	0.5 0.3	Sum of prothioconazole and prothioconazole desthio (2-(1-chlorocyclopropyl)-1-(2-chlorophenyl)-3-(1H-1,2,4-triazol-1-yl)-propan-2-ol), expressed as prothioconazole
Codex	Barley	0.2	Prothioconazole-desthio

3.28 PROPOSAL TO AMEND MRLS FOR PYRIMETHANIL

It is proposed that MRLs for pyrimethanil are amended to support the GAP use of the compound on onions.

The current entry for pyrimethanil in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Pyrimethanil	53112-28-0	Pyrimethanil	Grapes	5

The revised entry for pyrimethanil in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Pyrimethanil	53112-28-0	Pyrimethanil	Grapes	5
			Onions	0.02

3.28.1.1 Amendment Rationale

The new MRL is proposed to support a new use for pyrimethanil on onions. The proposed MRL will manage the use of pyrimethanil in accordance with the application rate that is proposed as GAP in New Zealand.

3.28.2 Chemical Information

Common name of compound	Pyrimethanil
Use of compound	Fungicide
Chemical Abstract Services (CAS) Registry number	53112-28-0
Type of compound	Pyrimidine
Administration method	Spray

3.28.3 Good Agricultural Practice

Pyrimethanil is used as a fungicide on grapes pome fruits, and now onions. The new use in onions requires a foliar application rate of 640 gai/ha between bulb formation and pre-harvest, with a maximum of two applications per season, for the control of *Botrytis* (neck rot). This use attracts a 14 day withholding period in onions.

3.28.4 Residue Information

The residue data supports an MRL of 0.02 mg/kg for pyrimethanil in onions, and the MRL is proposed to support GAP.

3.28.5 Dietary Risk Assessment

The HBGV of 0.12 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops treated according to the proposed GAP uses, the NEDI for pyrimethanil is equivalent to less than 3% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.28.6 Toxicological/Public Health Assessment

It has been determined that the application of pyrimethanil on onions as a fungicide, when used according to GAP, is unlikely to pose health risks from consumption of treated produce.

3.28.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Codex	Onion, bulb	0.2
	Spring onion	3

3.29 PROPOSAL TO SET MRLS FOR PYROXSULAM

It is proposed that MRLs are set for pyroxsulam to support the GAP use of the compound on cereals.

There is currently no entry for pyroxsulam in Schedule 1 of the Notice.

The proposed entry for pyroxsulam in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Pyroxsulam	422556-08-9	Pyroxsulam	Cereal grains	0.01(*)
			Mammalian fat	0.01(*)
			Mammalian kidney	0.01(*)
			Mammalian liver	0.01(*)
			Mammalian meat	0.01(*)
			Milk	0.01(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.29.1 MRL Promulgation Rationale

The proposed MRLs represent the registration of a product containing pyroxsulam for use on cereals. The proposed MRLs will manage the use of pyroxsulam as a herbicide in accordance with the application rates and withholding periods that are proposed as GAP in New Zealand. Animal commodity MRLs are being proposed to manage the potential for residue transfer to production animals via animal feeds produced from treated crops.

3.29.2 Chemical Information

Common name of compound	Pyroxsulam
Use of compound	Herbicide
Chemical Abstract Services (CAS) Registry number	422556-08-9
Type of compound	Sulfonamide
Administration method	Spray

3.29.3 Good Agricultural Practice

Pyroxsulam is used as a selective herbicide for the control of broadleaf weeds in cereal crops. The compound is used as a single treatment between GS13 and GS39, or two treatments (the first between GS13 and GS29, and the second before GS39) at a rate of 5 gai/ha; it is not to be applied after GS39. The livestock withholding period applicable to this use is seven days (for fodder or green feed).

3.29.4 Residue Information

The residue data supports the promulgation of MRLs of 0.01 mg/kg in all crops being treated and animal commodities that may be exposed to treated crops. These MRLs are proposed to support GAP.

3.29.5 Dietary Risk Assessment

The HBGV of 0.7 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops treated according to the proposed GAP use and in commodities from animals that have been exposed to treated crops, the NEDI for pyroxsulam is equivalent to less than 1% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.29.6 Toxicological/Public Health Assessment

It has been determined that the use of pyroxsulam as a herbicide on cereal crops, when used according to GAP, is very unlikely to pose any health risks from consumption of treated produce.

3.29.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	Edible offal (Mammalian)	0.01
	Meat (mammalian)	0.01
	Milks	0.01
	Rye	0.01
	Triticale	0.01
	Wheat	0.01

3.30 PROPOSAL TO AMEND MRLS FOR SULFOXAFLOR

It is proposed that MRLs for sulfoxaflor are amended to support the GAP use of the compound on forage brassicas.

The current entry for sulfoxaflor in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Sulfoxaflor	946578-00-3	Sulfoxaflor	Barley grain	0.01(*)
			Cauliflower	0.1
			Cucurbits (except pumpkins and winter squash)	0.5
			Edible mammalian offal	0.05
			Head lettuce	1.0
			Fruiting vegetables (except sweetcorn and mushrooms)	1.0
			Leafy vegetables (except head lettuce)	5
			Mammalian fat	0.01(*)
			Milk	0.01(*)
			Mammalian muscle	0.01(*)
			Root and tuber vegetables	0.05
			Vegetable brassicas (except cauliflower)	3
			Wheat grain	0.01(*)

The revised entry for sulfoxaflor in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Sulfoxaflor	946578-00-3	Sulfoxaflor	Barley grain	0.01(*)
			Cauliflower	0.1
			Cucurbits (except pumpkins and winter squash)	0.5
			Head lettuce	1.0
			Fruiting vegetables (except sweetcorn and mushrooms)	1.0
			Leafy vegetables (except head lettuce)	5
			Mammalian fat	0.04
			Mammalian kidney	0.1
			Mammalian liver	0.2
			Mammalian muscle	0.07
			Milk	0.03
			Root and tuber vegetables	0.05
			Vegetable brassicas (except cauliflower)	3
			Wheat grain	0.01(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.30.1.1 Amendment Rationale

The new MRLs in animal commodities are proposed to support a new use for sulfoxaflor on forage brassicas. The revised MRLs are proposed to allow for the use of sulfoxaflor in forage brassicas in accordance with the application rate that is proposed as GAP in New Zealand, and subsequent feeding of livestock. MRLs are not required for the forage brassicas themselves as they are not produced for human consumption.

3.30.2 Chemical Information

Common name of compound	Sulfoxaflor
Use of compound	Insecticide
Chemical Abstract Services (CAS) Registry number	946578-00-3
Type of compound	Sulfoximines
Administration method	Spray

3.30.3 Good Agricultural Practice

Sulfoxaflor is used as an insecticide on wheat, barley, vegetable crops, and now forage brassicas. The new use in forage brassicas requires an application rate of 24gai/ha when pest populations exceed threshold levels, with a maximum of two applications per season.

Existing livestock-specific withholding periods for sulfoxaflor include restricting grazing of wheat and barley fodder or green feed for 28 days from the last application. The withholding periods attracted by the new forage brassica use include a restriction to not cut, feed or graze treated crops until 14 days after the last application for animals intended for meat production, and for 28 days after application for animals intended for milk production.

3.30.4 Residue Information

The residue data supports sulfoxaflor MRLs of 0.07 mg/kg in mammalian meat, 0.04 mg/kg in mammalian fat, 0.2 mg/kg in mammalian liver, 0.1 mg/kg in mammalian kidney, and 0.03 mg/kg in milk. These MRLs are proposed to support GAP.

3.30.5 Dietary Risk Assessment

The HBGV of 0.028 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops treated according to the proposed GAP uses, and in commodities from animals that have been exposed to treated crops, the NEDI for sulfoxaflor is equivalent to less than 10% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is small and can be considered acceptable.

3.30.6 Toxicological/Public Health Assessment

It has been determined that the application of sulfoxaflor on forage brassicas as an insecticide, when used according to GAP, is unlikely to pose health risks from consumption of treated produce and animals exposed to treated crops.

3.30.7 Other International MRLs

Country	Food	Maximum Residue Limit (mg/kg)
Australia	Edible offal (mammalian)	0.5
	Meat (mammalian)	0.2
	Milks	0.1
Codex	Kidney of cattle, goats, pigs and sheep	0.04
	Liver of cattle, goats, pigs, and sheep	0.05
	Meat (from mammals other than marine mammals)	0.05
	Milks	0.02

It is noted that the Codex MRL for milk is lower than that proposed for New Zealand. Although alignment with codex would be ideal, in this case the Codex MRL would be too low to support GAP in New Zealand.

3.31 PROPOSAL TO AMEND MRLS FOR TAU-FLUVALINATE

It is proposed that MRLs for tau-fluvalinate are amended to support the GAP use of the compound on potatoes.

The current entry for tau-fluvalinate in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Tau-fluvalinate	102851-06-9	Tau-fluvalinate	Cereal grain	0.01(*)
			Edible mammalian offal	0.01(*)
			Mammalian fat	0.02
			Mammalian meat	0.01(*)
			Milk	0.01(*)

The revised entry for tau-fluvalinate in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Tau-fluvalinate	102851-06-9	Tau-fluvalinate	Cereal grain	0.01(*)
			Edible mammalian offal	0.01(*)
			Mammalian fat	0.02
			Mammalian meat	0.01(*)
			Milk	0.01(*)
			Potatoes	0.01(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.31.1.1 Amendment Rationale

The new MRL is proposed to support a new use for tau-fluvalinate on potatoes. The proposed MRL will manage the use of tau-fluvalinate in accordance with the application rate that is proposed as GAP in New Zealand.

3.31.2 Chemical Information

Common name of compound	Tau-fluvalinate
Use of compound	Insecticide
Chemical Abstract Services (CAS) Registry number	102851-06-9
Type of compound	Synthetic pyrethroid
Administration method	Spray

3.31.3 Good Agricultural Practice

Tau-fluvalinate is used as an insecticide on fruit, vegetable, and cereal crops, and now potato crops. The new use in potatoes, for management of aphids and psylla, requires an application rate of 180gai/ha in 200-500 litres of water with a maximum of 3 applications at 7-14 day intervals at the first sign of pest presence before rotating to another insecticide. The use of tau-fluvalinate in potatoes attracts a 7 day withholding period.

3.31.4 Residue Information

The residue data supports a MRL of 0.01 mg/kg in potatoes. This MRL is proposed to support GAP.

3.31.5 Dietary Risk Assessment

The HBGV of 0.005 mg/kg bw/d was considered appropriate for use in the assessment.

Based on the residues expected in food from crops treated according to the proposed GAP uses, the NEDI for tau-fluvalinate is equivalent to less than 20% of the HBGV. It is therefore concluded that the risk associated with chronic dietary exposure is minimal and can be considered acceptable.

3.31.6 Toxicological/Public Health Assessment

It has been determined that the application of tau-fluvalinate on potatoes as an insecticide, when used according to GAP, is unlikely to pose health risks from consumption of treated produce.

3.31.7 Other International MRLs

There have been no MRLs set by either Codex or Australia for the use of tau-fluvalinate on potatoes.

3.32 PROPOSAL TO AMEND THE NOTICE ENTRY FOR TRIBENURON-METHYL

It is proposed that the Notice entry for tribenuron-methyl is amended to change the presentation of commodities.

The current entry for tribenuron-methyl in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Tribenuron-methyl	101200-48-0	Tribenuron-methyl	Cereal grains (except maize)	0.01(*)
			Edible offal (mammalian)	0.01(*)
			Maize	0.05(*)
			Meat (mammalian)	0.01(*)
			Milks	0.01(*)

The revised entry for tribenuron-methyl in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Tribenuron-methyl	101200-48-0	Tribenuron-methyl	Cereal grains (except maize)	0.01(*)
			Maize	0.05(*)
			Mammalian edible offal	0.01(*)
			Mammalian meat	0.01(*)
			Milks	0.01(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.32.1 Amendment Rationale

The amendment represents a reorganisation of existing MRLs for better clarity and readability. There is no change to the actual content of the MRL notice or any residue levels.

3.33 PROPOSAL TO AMEND THE NOTICE ENTRY FOR TRIFLOXYSTROBIN

It is proposed that the Notice entry for trifloxystrobin is amended to change the presentation of commodities.

The current entry for trifloxystrobin in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Trifloxystrobin	141517-21-7	*Sum of*: trifloxystrobin and its free acid metabolite. *Expressed As:* Trifloxystrobin equivalents	Cereal grains	0.05(*)
			Citrus fruits (except Clementine and Satsuma mandarins)	0.3
			Cucurbits (inedible peel)	0.02(*)
			Fat (mammalian)	0.05
			Grapes	0.02(*)
			Kidney (mammalian)	0.04
			Kiwifruit	0.02(*)
			Liver (mammalian	0.05
			Meat (mammalian)	0.05
			Mandarins (Clementine and Satsuma)	0.02(*)
			Pome fruits	0.02(*)
			Stone fruits (except cherries)	0.02(*)

The revised entry for trifloxystrobin in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Trifloxystrobin	141517-21-7	*Sum of*: trifloxystrobin and its free acid metabolite. *Expressed As:* Trifloxystrobin equivalents	Cereal grains	0.05(*)
			Citrus fruits (except Clementine and Satsuma mandarins)	0.3
			Cucurbits (inedible peel)	0.02(*)
			Grapes	0.02(*)
			Kiwifruit	0.02(*)
			Mammalian fat	0.05
			Mammalian kidney	0.04
			Mammalian liver	0.05
			Mammalian meat	0.05
			Mandarins (Clementine and Satsuma)	0.02(*)
			Pome fruits	0.02(*)
			Stone fruits (except cherries)	0.02(*)

(*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification.

3.33.1 Amendment Rationale

The amendment represents a reorganisation of existing MRLs for better clarity and readability. There is no change to the actual content of the MRL notice or any residue levels.

3.34 PROPOSAL TO AMEND THE NOTICE ENTRY FOR XYLAZINE

It is proposed that the Notice entry for xylazine is amended to correct an administrative error.

The current entry for xylazine in Schedule 1 of the Notice is:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
NOTE: (*) indicates that the maximum residue limit has been set at or about the limit of analytical quantification. Xylazine	7361-61-7	*Sum of*: Xylazine 2,6-dimethylaniline *Expressed As:* 2,6-dimethylaniline	Deer velvet	0.5

The revised entry for xylazine in Schedule 1 of the Notice will read:

Compound Common Name	CAS#	Residue to which the maximum residue limit applies	Food	Maximum Permitted Residue Level (mg/kg)
Xylazine	7361-61-7	*Sum of*: Xylazine 2,6-dimethylaniline *Expressed As:* 2,6-dimethylaniline	Deer velvet	0.5

3.34.1 Amendment Rationale

The amendment represents a deletion of an extra notation in the ‘Compound Common Name’ column. There is no change to the actual content of the MRL notice or any residue levels.

3.35 PROPOSAL TO EXCEPT C9 – C16 ALKANES FROM COMPLIANCE WITH A MRL

It is proposed that an exception from compliance with an MRL is established for the use of C9 – C16 alkanes when used as an agricultural chemical. The use of these compounds will result in residues at low enough concentrations that there will be no residue or food safety concerns that would require a compound specific-MRL.

There is currently no entry in Schedule 2 for C9 – C16 alkanes.

The proposed entry in Schedule 2 will read:

Substance	CAS#	Condition
C9 – C16 Alkanes	N/A	When used as an agricultural chemical. Includes any structural isomer of linear alkanes, branched alkanes and cycloalkanes within the specified carbon number and containing no heteroatoms.

3.36 PROPOSAL TO AMEND THE EXCEPTION FOR PLANT EXTRACTS (UNREFINED)

The current exception makes reference to “this standard”, a reference which is now outdated due to the MRLs and exceptions being promulgated into a Food Notice. The amendment corrects this reference to “Notice”, with no other changes to the content of the exception.

The current entry in Schedule 2 of the Notice is:

Substance	CAS#	Condition
Plant extracts (unrefined)	n/a	Except where otherwise stated in this standard: Where the extract is registered under the Agricultural Compounds and Veterinary Medicines Act 1997 and intended for use as an agricultural chemical, and; Where the extract is derived from plants of the following species: *Camellia sinesis* (Tea) *Fallopia sachalinensis* (Giant knotweed), *Melaleuca alternifolia* (Tea Tree) *Optuntia linheimeri* (Texas prickly pear), *Quercus falcate* (Southern red oak), *Rhus aromatica* (Fragrant surmac), *Rhizophoria mangle* (Red mangrove)

The proposed entry in Schedule 2 will read:

Substance	CAS#	Condition
Plant extracts (unrefined)	n/a	Except where otherwise stated in this Notice: Where the extract is in a product registered under the Agricultural Compounds and Veterinary Medicines Act 1997 and intended for use as an agricultural chemical, and; Where the extract is derived from plants of the following species: *Camellia sinesis* (Tea) *Fallopia sachalinensis* (Giant knotweed), *Melaleuca alternifolia* (Tea Tree) *Optuntia linheimeri* (Texas prickly pear), *Quercus falcate* (Southern red oak), *Rhus aromatica* (Fragrant surmac), *Rhizophoria mangle* (Red mangrove)