



**Australian Government**  
**Australian Pesticides and  
Veterinary Medicines Authority**



## TRADE ADVICE NOTICE

on Flubendiamide and Thiacloprid in the Product Lineout Insecticide

APVMA Product Number 63388

**MAY 2012**

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This document is published by the APVMA. In referencing this document the APVMA should be cited as both author and publisher.

ISBN: 978-0-9873041-5-5

ISSN: 2200-3894

Website: This publication is available from the APVMA website: <http://www.apvma.gov.au>

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## PREFACE

The Australian Pesticides and Veterinary Medicines Authority (APVMA) is an independent statutory authority with responsibility for assessing and approving agricultural and veterinary chemical products prior to their sale and use in Australia.

In undertaking this task, the APVMA works in close cooperation with advisory agencies, including the Department of Health and Aging, Office of Chemical Safety (OCS), Department of Sustainability Environment, Water, Population and Communities (DSEWPaC), and State Departments of Primary Industry.

The APVMA has a policy of encouraging openness and transparency in its activities and of seeking stakeholder involvement in decision making. Part of that process is the publication of Trade Advice Notices for all proposed extensions of use for existing products where there may be trade implications.

The information and technical data required by the APVMA to assess the safety of chemical products and the methods of assessment must be undertaken according to accepted scientific principles. Details are outlined in the APVMA's publication *Ag MORAG: Manual of Requirements and Guidelines*.

## About this document

This is a Trade Advice Notice.

It indicates that the Australian Pesticides and Veterinary Medicines Authority (APVMA) is considering an application for registration of an agricultural or veterinary chemical. It provides a summary of the APVMA's residue and trade assessment.

Comment is sought from industry groups and stakeholders on the information contained within this document.

Any advice the APVMA receives through this consultation which it relies on to grant this application will be noted in a subsequent Advice Summary.

Advice Summaries can be found on the APVMA website: <http://www.apvma.gov.au>

## Making a submission

The APVMA invites any person to submit a relevant written submission as to whether the application for registration of **Lineout Insecticide** should be granted. Submissions should relate only to matters that the APVMA is required by legislation to take into account in deciding whether to grant the application. These grounds relate to the **trade implications** of the extended use of the product. Submissions should state the grounds on which they are based. Comments received outside these grounds cannot be considered by the APVMA.

Submissions must be received by the APVMA by close of business on **Wednesday 20 June 2012** and be directed to the contact listed below. All submissions to the APVMA will be acknowledged in writing via email or by post.

Relevant comments will be taken into account by the APVMA in deciding whether to grant the application and in determining appropriate conditions of registration and product labelling.

When making a submission please include:

- Contact name
- Company or Group name (if relevant)
- Postal Address
- Email Address (if available)
- The date you made the submission.

All personal and **confidential commercial information (CCI)**<sup>1</sup> material contained in submissions will be treated confidentially.

Written submissions on the APVMA's proposal to grant the application for registration that relate to the **grounds for registration** should be addressed in writing to:

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**Email:** [pesticides@apvma.gov.au](mailto:pesticides@apvma.gov.au)

## Further information

Further information can be obtained via the contact details provided above.

Further information on Trade Advice Notices can be found on the APVMA website: <http://www.apvma.gov.au>

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<sup>1</sup> A full definition of "confidential commercial information" is contained in the Agvet Code.

## 1 INTRODUCTION

The Australian Pesticides and Veterinary Medicines Authority (APVMA) has before it an application from Bayer Crop Science Pty Ltd, to register Lineout Insecticide for control of cotton bollworm, native budworm and cotton aphid, and for suppression of green mirid, in cotton.

## 2 TRADE CONSIDERATIONS

### 2.1 Commodities exported

Cottonseed, and cottonseed meal and oil are exported, and are considered major export commodities in Appendix 1 of Part 5B of Manual of Requirements and Guidelines for Agricultural Products. Mammalian or poultry animal commodities derived from stock fed seed or meal from treated cotton crops may be exported. No changes are required to existing MRLs for mammalian animal commodities. New MRLs are proposed for poultry meat, offal and eggs.

### 2.2 Destination and value of exports of Cotton Products

Exports of Australian cottonseed, including oil and meal are detailed in the table below (Agricultural Commodity Statistics 2011, Australian Bureau of Agriculture and Resource Economics and Sciences, Commonwealth of Australia).

Table 1: Cottonseed, meal and oil exports

COMMODITY	EXPORT (KILOTONNES)		
	2008/09	2009/10	2010/11
Cottonseed	27.09	105.51	267.94
Cottonseed oil	9.98	5.35	18.24
Cotton and sunflower seed meal	10.72	12.70	33.49

Total exports of all oilseeds and vegetable oils in 2010/11 were 1728 and 146.7 kilotonnes respectively, worth \$954.01 million and \$225.78 million. Exports of oilseed meals were 103.9 kilotonnes in 2010/11, worth \$36.18 million. Cottonseed exports and cottonseed oil exports were around 16% and 12% respectively of the total exports (by volume) of oilseeds and vegetable oils.

Most cotton and sunflower seed meal is exported to Korea and New Zealand (20.62 and 10.14 kilotonnes respectively in 2010/11), while most cottonseed is exported to Japan and Korea (71.89 and 51.84 kilotonnes respectively in 2010/11).

### 2.3 Destination and Value of Exports of Animal Products

Poultry meat exports in 2010/11 were 31 kilotonnes (worth \$38 million), compared with the previous year when 28 kilotonnes were exported, worth \$36 million.

## 2.4 Proposed Australian use-pattern

Table 2: Proposed use pattern

CROP	PEST	STATE	RATE	CRITICAL COMMENTS
Cotton	Cotton bollworm ( <i>Helicoverpa armigera</i> )  Native budworm ( <i>Helicoverpa punctigera</i> )	QLD, NSW, WA, NT only	200 or 300 mL/ha (48 g ai/ha flubendiamide and 48 g ai/ha thiacloprid, or 72 g ai/ha flubendiamide and 72 g ai/ha thiacloprid)	<p>Apply Lineout Insecticide to brown eggs or at egg hatch to hatchling larvae when pest numbers reach treatment threshold levels as determined by field checks. Larvae in protected feeding sites (e.g. squares, flowers and bolls) will not be controlled. Use higher rate if egg or hatchling pressure is high.</p> <p>Ensure thorough spray coverage of plants is achieved. The addition of an adjuvant (Pulse Penetrant or Hasten) may improve the control of heliothis. Refer to "Adjuvant" section in GENERAL INSTRUCTIONS.</p> <p>Do not use more than 2 sprays per season. Do not re-apply Lineout Insecticide within 14 days of the previous Lineout Insecticide spray.</p>
	Green mirid ( <i>Creontiades dilutus</i> )		200 mL/ha (suppression) (48 g ai/ha flubendiamide and 48 g ai/ha thiacloprid)	<p>Apply when pest numbers reach treatment threshold levels as determined by field checks. Mirids treated with Lineout Insecticide may still be present but will not be feeding on plant parts. After treatment with Lineout Insecticide, the mirid population may take several days to decline.</p> <p>Ensure thorough spray coverage of plants is achieved. The addition of an adjuvant (Pulse Penetrant or Hasten) may improve the control of heliothis. Refer to "Adjuvant" section in GENERAL INSTRUCTIONS.</p> <p>Do not use more than 2 sprays per season. Do not re-apply Lineout Insecticide within 14 days of the previous Lineout Insecticide spray.</p>

	Cotton aphid ( <i>Aphis gossypii</i> )		300 mL/ha (control) (72 g ai/ha each of flubendiamide and thiacloprid)	<p>The lower rate will provide suppression of aphids only. Use the higher rate when control of aphids is required. Apply early in the establishment of an aphid infestation when numbers are low before honeydew is evident or aphid damage occurs. Applications made later than this may result in reduced control. Aphids treated with Lineout Insecticide may still be present on the plant but will not be feeding. Control of aphids should initially be assessed by a reduction in fresh honeydew and not on the presence of aphids on the plant. After ingesting Lineout Insecticide, aphids may take up to 5 days to die.</p> <p>Ensure thorough spray coverage of plants is achieved. The addition of an adjuvant (Pulse Penetrant or Hasten) may improve the control of heliothis. Refer to “Adjuvant” section in GENERAL INSTRUCTIONS.</p> <p>Do not use more than 2 sprays per season. Do not re-apply Lineout Insecticide within 14 days of the previous Lineout Insecticide spray.</p>
			200 mL/ha (suppression) (48 g ai/ha each of flubendiamide and thiacloprid)	

NOT TO BE USED FOR ANY PURPOSE OR IN ANY MANNER CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.

Withholding periods:

Harvest: DO NOT harvest for 21 days after application.

Grazing: DO NOT graze treated crops or cut for stock food.

GENERAL INSTRUCTIONS (only the relevant sections for residues concerns)

Export of treated produce

Growers should note that suitable MRLs or import tolerances may not be established in all markets for cotton treated with *Lineout Insecticide*. If you are growing cotton for export, please check with Bayer CropScience for the latest information on MRLs and export tolerances before using *Lineout Insecticide*.

## 2.5 Results from residues trials presented to the APVMA

### Cotton:

The applicant provided eight residues trials for each active constituent using suspension concentrate formulations of both flubendiamide and thiacloprid. Trials were conducted across the cotton growing areas of New South Wales and Queensland. Two applications were made at 14-day intervals with a 21-day pre-harvest interval, consistent with the proposed withholding period. Applications were made at 1-2.67x the proposed rate for flubendiamide and 0.67-1.33x the proposed rate for thiacloprid. Samples of raw cotton, stubble and trash were collected at the designated harvest time. Raw cotton was ginned to give seed samples for analysis, and from two trials, lint samples were also analysed.

Residues of flubendiamide in cottonseed from crops treated at 1X or 1.33X the proposed maximum application rate were <0.02, 0.03, <0.1 (3), 0.11, 0.15, and 0.21 mg/kg at the proposed harvest withholding period of 21 days. Residues of flubendiamide in cottonseed from crops treated at 2X or 2.67X the proposed maximum application rate were 0.07, 0.32, and 0.38 mg/kg at the proposed withholding period. The data supplied are sufficient to support an MRL of 0.5 mg/kg for flubendiamide in cotton seed in conjunction with a 21-day harvest withholding period.

Residues of thiacloprid in cottonseed from crops treated at 0.67X the proposed maximum application rate were <0.02 (7), and 0.03 mg/kg at the proposed harvest withholding period of 21 days. Residues of thiacloprid in cottonseed from crops treated at 1.33X the proposed maximum application rate were <0.02 (6), 0.03, and 0.05 mg/kg at the proposed withholding period. The data supplied are sufficient to support an MRL of 0.1 mg/kg for thiacloprid in cotton seed in conjunction with a 21-day harvest withholding period.

Processing studies in cotton were provided for both flubendiamide and thiacloprid. In each of these studies, cotton crops at sites in the USA were treated with applications of either flubendiamide or thiacloprid at 7-8 times the proposed label rate. Cotton was harvested, ginned and the seed processed using simulated commercial processes to give refined oil, meal and hulls, which were analysed for residues of flubendiamide and thiacloprid.

The processing studies showed that separate Maximum Residue Limits cottonseed oil are not required for either flubendiamide or thiacloprid (residues in cottonseed oil were below the LOQ for both actives even when finite residues were present in cottonseed). The processing factor for hulls was 0.083 for flubendiamide, while residues of flubendiamide were below the LOQ in meal. Processing factors of 0.16 and 0.30 were determined for thiacloprid in meal and hulls respectively. Stockfeed MRLs (Maximum Residue Limit Standard Table 4 entries) of 0.05 mg/kg are recommended for both flubendiamide and thiacloprid in cottonseed meal and hulls.

## Animal Commodities:

Lactating cattle feeding studies for flubendiamide<sup>2</sup> and thiacloprid<sup>3</sup> have been evaluated as part of previous product applications. Feeding of cotton seed, meal or hulls to mammalian livestock is not expected to result in finite residues of flubendiamide or thiacloprid in mammalian meat, milk or offal. No changes to existing mammalian animal commodity MRLs are required as a result of this application. Therefore it is expected that there will be no significant risk to export of mammalian meat or dairy products.

No MRLs for flubendiamide in poultry meat, offal or eggs are currently established. Cottonseed meal (but not cottonseed or hulls) can be fed to poultry at up to 20% of the diet. The estimate exposure for poultry is shown in the table below.

**Table 3: Estimated Dietary Burden for flubendiamide in poultry- 2 kg bw, 0.15 kg DM/day**

FEED GROUP	COMMODITY	% IN DIET	FEED INTAKE	RESIDUE, mg/kg	% DM	LIVESTOCK DIETARY EXPOSURE		
						mg/animal	ppm	mg/kg bw
By-products	Cottonseed meal	20	0.03	0.017	89	0.00057	0.0038	0.00029

In poultry metabolism studies, laying hens were given flubendiamide labelled with <sup>14</sup>C at either the phthalic acid or the aniline ring daily for 14 days at a dose of 1 mg/kg bw/day. The highest residues of flubendiamide and the iodophthalimide metabolite were 2.70, 1.01, 17.7, and 3.3 mg/kg in eggs, muscle, fat and liver respectively. Scaling these figures for the estimated dietary burden of flubendiamide in feed (0.00029 mg/kg bw/day) gives expected residues of 0.0008, 0.0003, 0.0051, and 0.001 mg/kg in eggs, muscle, fat and liver respectively. The limit of quantitation (LOQ) for flubendiamide in animal tissues is 0.01 mg/kg for the methods evaluated previously. Therefore, residues of flubendiamide in poultry meat, offal and eggs are expected to be below the LOQ. The following new MRLs are therefore proposed for

PE 0112	Eggs	*0.01 mg/kg
PO 0111	Poultry, edible offal of	*0.01 mg/kg
PM 0110	Poultry meat (in the fat)	*0.01 mg/kg

MRLs have not been established for thiacloprid in poultry meat, offal or eggs. Cottonseed meal can be fed to poultry at up to 20% of the diet. The estimated exposure for poultry is shown in the table below.

<sup>2</sup> [http://www.apvma.gov.au/registration/assessment/docs/tan\\_flubendiamide.pdf](http://www.apvma.gov.au/registration/assessment/docs/tan_flubendiamide.pdf)

<sup>3</sup> <http://www.apvma.gov.au/registration/assessment/trade.php>

Table 4: Estimated Dietary Burden for thiacloprid in poultry- 2 kg bw, 0.15 kg DM/day

FEED GROUP	COMMODITY	% IN DIET	FEED INTAKE	RESIDUE, mg/kg	% DM	LIVESTOCK DIETARY EXPOSURE		
						mg/animal	ppm	mg/kg bw
Byproducts	Cottonseed meal	20	0.03	0.015	89	0.00051	0.0034	0.00025

In a poultry metabolism study, methylene <sup>14</sup>C-labelled thiacloprid was fed to laying hens at 10 mg/kg bw/day for 3 consecutive days. Another group was given a single dose of 9.7 mg/kg bw. Given that the estimated dietary burden from cottonseed by-products is much lower than the dose given in the metabolism study, the metabolism study is acceptable for use in MRL establishment. Maximum residues of thiacloprid found in tissues and eggs are tabulated below.

Table 5: Residues of thiacloprid in eggs and tissues of laying hens after feeding at 10 mg/kg bw/day for 3 days

MATRIX	THIACLOPRID RESIDUES IN MG/KG
Liver	0.54
Eggs	0.059
Muscle	0.028
Fat	0.077

Scaling these residues for the expected feeding level gives a maximum expected residue of 0.000014 mg/kg (for liver).

It is recommended that MRLs at the LOQ for thiacloprid be established for poultry meat, offal and eggs.

PE 0112	Eggs	*0.02 mg/kg
PO 0111	Poultry, edible offal of	*0.02 mg/kg
PM 0110	Poultry meat	*0.02 mg/kg

## 2.6 Overseas registration and approved label instructions

The applicant indicated that flubendiamide products are registered for use in Chile, Colombia, India, Japan, Kenya, Pakistan, the Philippines and Thailand and registration was being sought in the USA and the European Union. Since the application was made, registration has been granted in the USA. Flubendiamide is registered for use in cotton in Brazil at the same maximum rate as proposed for Australia (72 g ai/ha) with a 20-day withholding period. It is registered for use in cotton in India and Pakistan with a 25-day WHP at a lower rate (60 g ai/ha).

Thiacloprid is an older active constituent. The applicant indicated that it is currently registered in over 80 countries. It is registered for use in cotton at the same or higher rates than those proposed for Australia (72 g ai/ha) in Bolivia, Brazil, Cuba, the Dominican Republic, El Salvador, Greece, Guatemala, Honduras, India, Iran, Israel, Jordan, Madagascar, Mexico, Pakistan, Panama, Peru, Spain, Turkey, and the USA. Withholding periods range from 14-28 days, comparable with the proposed Australian WHP of 21 days, with the exception of India, where a 52-day WHP applies.

## 2.7 Codex alimentarius commission and overseas MRLs

The Codex Alimentarius Commission (Codex) is responsible for establishing Codex Maximum Residue Limits (CXLs) for pesticides. Codex CXLs are primarily intended to facilitate international trade, and accommodate differences in Good Agricultural Practice (GAP) employed by various countries. Some countries may accept Codex CXLs when importing foods.

Flubendiamide and thiacloprid have both been evaluated by JMPR and Codex MRLs have been established.

The following relevant residue tolerances for flubendiamide and thiacloprid in cotton and poultry commodities have been established:

**Table 6: Proposed Australian and overseas MRLs/tolerances for flubendiamide**

COUNTRY	COMMODITY	TOLERANCE, mg/kg	REFERENCE
Australia	Cottonseed	0.5 (HR = 0.21)	This evaluation.
	Eggs	*0.01	
	Poultry meat	*0.01	
	Poultry edible offal	*0.01	
Codex	Cotton seed	1.5	Codex MRL Database ( <a href="http://www.codexalimentarius.net/pestres/data/index.html">http://www.codexalimentarius.net/pestres/data/index.html</a> )
Japan	Cottonseed	0.9	<a href="http://www.mrldatabase.com">http://www.mrldatabase.com</a>
USA	Cotton gin by-products	60	US Code of Federal Regulations Part 180, Tolerances and Exemptions from Tolerances for Pesticide Chemicals in Food, subpart C, section 180.639, 10 May 2012 ( <a href="http://www.gpoaccess.gov/cfr/index.html">www.gpoaccess.gov/cfr/index.html</a> )
	Cotton, undelinted seed	0.9	
	Eggs	0.4	
	Poultry fat	3	
	Poultry liver	0.6	
	Poultry meat	0.1	

EU	Cottonseed	*0.01	EU Pesticides Database ( <a href="http://ec.europa.eu/sanco/pesticides/public/index.cfm">http://ec.europa.eu/sanco/pesticides/public/index.cfm</a> ).
	Poultry meat	*0.01	
	Poultry fat	*0.01	
	Poultry liver	*0.01	
	Poultry kidney	*0.01	
	Poultry edible offal	*0.01	
	Poultry, other products	*0.01	
	Eggs (chicken, duck, goose, quail and others)	*0.01	
India	Cottonseed	0.1	Applicant
Brazil	Cottonseed	0.1	Applicant

Table 7: Proposed Australian and overseas MRLs/tolerances for thiacloprid

COUNTRY	COMMODITY	TOLERANCE, mg/kg	REFERENCE
Australia	Cottonseed	0.1 (HR = 0.05)	This evaluation.
	Eggs	*0.02	
	Poultry meat	*0.02	
	Poultry edible offal	*0.02	
Codex	Cottonseed	*0.02	Codex MRL Database ( <a href="http://www.codexalimentarius.net/pestres/data/index.html">http://www.codexalimentarius.net/pestres/data/index.html</a> )
	Eggs	*0.02	
	Poultry meat	*0.02	
	Poultry, edible offal of	*0.02	
Japan	Cottonseed	*0.02	<a href="http://www.mrldatabase.com">http://www.mrldatabase.com</a>
USA	Cotton gin byproducts	11	US Code of Federal Regulations Part 180, Tolerances and Exemptions from Tolerances for Pesticide Chemicals in Food, subpart C, section 180.594, 10 May 2012 ( <a href="http://www.gpoaccess.gov/cfr/index.html">www.gpoaccess.gov/cfr/index.html</a> )
	Cotton, undelinted seed	*0.02	

EU	Cottonseed	*0.05	EU Pesticides Database ( <a href="http://ec.europa.eu/sanco/pesticides/public/index.cfm">http://ec.europa.eu/sanco/pesticides/public/index.cfm</a> ).
	Poultry meat	0.05	
	Poultry fat	0.05	
	Poultry liver	0.3	
	Poultry kidney	0.3	
	Poultry edible offal	*0.01	
	Poultry other products	*0.01	
	Eggs (chicken, duck, goose, quail, others)	*0.01	
Brazil	Cottonseed	0.1	Applicant
Colombia	Cottonseed	*0.02	Applicant
Greece	Cottonseed	*0.02 (provisional)	Applicant
India	Cotton, delinted seed	0.05	Applicant
	Cottonseed oil	0.05	
Israel	Cotton, American upland	0.02	Applicant
Mexico	Cottonseed	0.02	Applicant
Turkey	Cotton, American upland	0.1	Applicant

## 2.8 Current and proposed Australian MRLs for flubendiamide and thiacloprid

The Australian residue definition for flubendiamide is:

Commodities of plant origin: Flubendiamide

Commodities of animal origin: sum of flubendiamide and 3-iodo-*N*-(2-methyl-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]phenyl)phthalimide, expressed as flubendiamide.

The Australian residue definition for thiacloprid is:

Thiacloprid.

Table 8: Current Food MRLs in the Maximum Residue Limit Standard (Table 1)

COMPOUND	FOOD	MRL (mg/kg)	
Flubendiamide	VB 0040	Brassica (cole or cabbage) vegetables, head cabbages, flowerhead brassicas	5
	VP 0526	Common bean (pods and/or immature seeds)	T2
	SO 0691	Cotton seed	T0.5
	MO 0105	Edible offal (mammalian)	0.03
	VC 0045	Fruiting vegetables, Cucurbits	0.2
	VO 0050	Fruiting vegetables, other than Cucurbits [except Sweet corn (corn-on-the-cob)]	2
	VL 0053	Leafy vegetables [except Lettuce, head]	10
	VL 0482	Lettuce, head	5
	MM 0095	Meat (mammalian) [in the fat]	0.05
	ML 0106	Milks	*0.01
	FM 0183	Milk fats	0.05
	VR 0589	Potato	*0.02
	VL 0447	Sweet corn (corn on the cob)	T*0.05
	Thiacloprid	SO 0691	Cotton seed
MO 0105		Edible offal (mammalian)	*0.02
MM 0095		Meat (mammalian)	*0.02
ML 0106		Milks	*0.01
FP 0009		Pome fruits	1
FS 0012		Stone fruits	2

Table 9: Current Animal feed Commodities in the Maximum Residue Limit Standard (Table 4)

COMPOUND	ANIMAL FEED COMMODITY	MRL (mg/kg)
Flubendiamide	Tomato pomace, dry	20
Thiacloprid	AB 0226 Apple pomace, dry	3

Table 10: Proposed changes for Lineout Insecticide in the Maximum Residue Limit Standard (Table 1)

COMPOUND	FOOD	MRL (mg/kg)
Flubendiamide		
DELETE:	SO 0691 Cotton seed	T0.5
ADD:	SO 0691 Cotton seed	0.5
	PE 0112 Eggs	*0.01
	PO 0111 Poultry, edible offal of	*0.01
	PM 0110 Poultry meat (in the fat)	*0.01
Thiacloprid		
DELETE:	SO 0691 Cotton seed	T0.1
Thiacloprid		
ADD:	SO 0691 Cotton seed	0.1
	PE 0112 Eggs	*0.02
	PO 0111 Poultry, edible offal of	*0.02
	PM 0110 Poultry meat	*0.02

Table 11: Proposed changes for Lineout Insecticide in the Maximum Residue Limit Standard (Table 4)

COMPOUND	ANIMAL FEED COMMODITY	MRL (mg/kg)
Flubendiamide		
ADD:	Cottonseed meal and hulls	0.05
Thiacloprid		
ADD:	Cottonseed meal and hulls	0.05

## 2.9 Potential risk to trade

Export of treated produce containing finite (measurable) residues of flubendiamide and/or thiacloprid may pose a risk to Australian trade in situations where (i) no residue tolerance (import tolerance) is established in the importing country or (ii) where residues in Australian produce are likely to exceed a residue tolerance (import tolerance) established in the importing country.

### Cotton

Exports of cottonseed oil or meal are unlikely to be prejudiced by use of *Lineout Insecticide*, as processing studies show that residues of both flubendiamide and thiacloprid in cottonseed oil or meal will be below the limit of quantitation (the highest expected residue is for thiacloprid in cottonseed meal, where an HR-P value of 0.008 mg/kg, below the LOQ of 0.01 mg/kg, was calculated based on a processing factor of 0.16 and a highest residue in cottonseed of 0.05 mg/kg).

There is a possible risk to trade in cottonseed as detectable residues of both flubendiamide and thiacloprid may be found in cottonseed. In trials in accordance with the proposed GAP, the highest residue for flubendiamide was 0.21 mg/kg (STMR 0.1 mg/kg; proposed MRL = 0.5 mg/kg) while that for thiacloprid was 0.05 mg/kg (STMR <0.02; proposed MRL = 0.1 mg/kg). Japan, a major destination for cottonseed exports, has an MRL of 0.9 mg/kg for flubendiamide in cottonseed. The MRL for thiacloprid in Japan is 0.02 mg/kg, lower than the highest residue observed during the trials but the same as the STMR which was at the limit of quantitation. Korea, another major destination for Australian cottonseed exports, does not have MRLs for flubendiamide or thiacloprid in cottonseed.

The applicant has proposed that the following statement will be included on the product label:

“Export of treated produce

Growers should not that suitable MRLs or import tolerances may not be established in all markets for cotton treated with *Lineout Insecticide*. If you are growing cotton for export, please check with Bayer CropScience for the latest information on MRLs and export tolerances before using *Lineout Insecticide*.”

Stakeholders are requested to provide comment on the potential risks to trade in cottonseed and cottonseed products.

### Animal commodities derived from livestock that have been fed treated cottonseed

Feeding of cotton seed, meal or hulls to mammalian livestock is not expected to result in finite residues of flubendiamide or thiacloprid in mammalian meat, milk or offal. No changes to existing mammalian animal commodity MRLs are required as a result of this application. Therefore, there is not expected to be any significant risk to exports of mammalian meat or dairy products.

Exports of poultry products are relatively small and finite residues of flubendiamide or thiacloprid are not expected to arise in poultry products as a result of the proposed use. Proposed MRLs for flubendiamide in poultry meat, offal and eggs are at the LOQ of 0.01 mg/kg and are the same or lower than existing MRLs in

the USA and the EU. Proposed MRLs for thiacloprid in poultry meat, offal and eggs are at the LOQ of 0.02 mg/kg.

Comment is sought on the risk to trade in poultry products from the proposed use of Lineout Insecticide on cotton.

### 3 CONCLUSIONS

Use of flubendiamide and thiacloprid (as Lineout Insecticide) may result in detectable residues in cottonseed. Residues of flubendiamide are expected to be below the established Japanese MRL. The high residues for thiacloprid were above the established MRL for cottonseed in Japan however the STMR, which is a better estimate of likely residue in the bulked commodity, was below the LOQ of 0.02 mg/kg.

Comments are sought on the potential for Lineout Insecticide to unduly prejudice Australian export trade in cottonseed, cottonseed oil and meal and poultry products when it is used on cotton to control cotton bollworm, native budworm, green mirid or cotton aphid.