



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



Trade Advice Notice

on chlorantraniliprole in the product E2Y45 Insecticide for use on pulses

APVMA product number 89966

March 2021

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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.

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 active constituents where there may be trade implications.

The information and technical data required by the APVMA to assess the safety of new chemical products and the methods of assessment must be undertaken according to accepted scientific principles. Details are outlined in regulatory guidance published on the APVMA website.

About this document

This Trade Advice Notice indicates that the APVMA is considering an application to vary the use of an existing registered 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.

Making a submission

The APVMA invites any person to submit a relevant written submission as to whether the application to register E2Y45 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 Tuesday 6 April 2021 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 organisation name (if relevant)
- email or postal address (if available)

- the date you made the submission.

Please note: submissions will be published on the APVMA's website, unless you have asked for the submission to remain confidential, or if the APVMA chooses at its discretion not to publish any submissions received (refer to the [public consultation coversheet](#)).

Please lodge your submission using the [public consultation coversheet](#), which provides options for how your submission will be published.

Note that all APVMA documents are subject to the access provisions of the *Freedom of Information Act 1982* and may be required to be released under that Act should a request for access be made.

Unless you request for your submission to remain confidential, the APVMA may release your submission to the applicant for comment.

Written submissions should be addressed to:

Executive Director, Risk Assessment Capability
Australian Pesticides and Veterinary Medicines Authority
GPO Box 3262
Sydney NSW 2001

Phone: +61 2 6770 2300

Email: enquiries@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: apvma.gov.au.

Introduction

The APVMA has before it an application from FMC Australasia Pty Ltd to register E2Y45 Insecticide on pulses.

A use pattern for summer and winter pulses equivalent to that currently proposed was previously considered for DuPont Altacor Insecticide (61824). Following a response to the Trade Advice Notice consultation for that application in September 2017¹, DuPont changed the proposed label use pattern to address possible trade issues, until the establishment of a Codex MRL. The number of applications was restricted to one and the withholding period was extended from 14 to 28 days for pulse crops except chickpea, mung beans and soybean. This application seeks to register the original use pattern (2 applications with a 14 day withholding period) since the JMPR recommended MRLs for dry beans and dry peas at 0.3 mg/kg in 2019.

It is noted that Altacor Insecticide is registered for use on chickpea, mung bean and soybean with 2 applications and a 14 day withholding period and no changes are proposed to those registered use patterns.

Trade considerations

Commodities exported

Pulses (lupins, field peas, chickpeas, faba beans, navy beans and mung beans) are considered to be major export commodities, as are commodities of animal origin, such as meat, offal and dairy products, which may be derived from livestock fed feeds produced from treated pulses. Residues in these commodities resulting from the use of E2Y45 may have the potential to unduly prejudice trade.

Destination and value of exports

Total pulse exports were valued at \$1.246 billion, in 2019 to 2020, with the most significant export commodities being chickpeas (370 kt, \$306 million), lupins (230 kt, \$95 million) and field peas (59.9 kt, \$38.6 million) (ABARES). Major export markets for Australian pulse crops are presented in Table 1.

Table 1: Major export markets for Australian pulse crops

Crop	Major destinations
Beans, dry	Saudi Arabia, Sri Lanka, Egypt, Philippines
Chickpeas	Bangladesh, India, Pakistan, United Arab Emirates, United Kingdom
Faba beans	Middle East, Southern Europe, Southeast Asia
Lentils	Pakistan, Sri Lanka, Bangladesh, Egypt

¹ APVMA [Trade Advice Notice for Chlorantraniliprole in the product DuPont Altacor Insecticide for use on pulses](#), APVMA website, publication date 3 August 2017, accessed 19 February 2021.

Crop	Major destinations
Mung beans	India, Indonesia, Sri Lanka, Thailand, Vietnam
Peas, dry	India, Malaysia, Sri Lanka, Bangladesh

Proposed Australian use pattern

Table 2: Proposed use pattern E2Y45 Insecticide (600 g/L chlorantraniliprole)

Crop	Pest	Rate/HA	WHP	Critical comments
Chickpea*	Cotton bollworm (<i>Helicoverpa armigera</i>)	40 mL + non-ionic surfactant @ 125 gai/100 L	14 days	A maximum of 2 applications are to be applied to any one crop per season. Further treatments should be made with alternative mode of action insecticides. Regularly scout crops to monitor for larvae. Target sprays against larvae. Apply as larvae reach threshold numbers. Larvae in entrenched feeding sites will not be controlled.
	Native budworm (<i>Helicoverpa punctigera</i>)	(24 g chlorantraniliprole /ha)		
Mung bean, soybean*	Bean podborer (<i>Maruca vitrata</i>)			Use enough water to ensure thorough coverage of the crop. Target a minimum of 100 L/ha by ground rig and a minimum of 30 L/ha by aircraft. Use in accordance with CropLife Insecticide Resistance Management Strategy guidelines. Target brown eggs and hatchlings (neonates or first instar) to small larvae (second instar) when they reach the economic spray threshold and before they become entrenched in flowers or pods.
	Cotton bollworm (<i>Helicoverpa armigera</i>)			
	Native budworm (<i>Helicoverpa punctigera</i>)			
	Soybean looper (<i>Thysanoplusia orichalcea</i>)			
	Bean looper (<i>Mocis alterna</i>)			
	Irrorated tabby (<i>Anticarsia irrorata</i>)			
Winter pulse crops (except chickpea) including; faba/broad bean, field pea, lentil, lupin, vetch	Cotton bollworm (<i>Helicoverpa armigera</i>)	40 mL + non-ionic surfactant @ 125 gai/100 L	14 days	A maximum of 2 applications are to be applied to any one crop per season. Further treatments should be made with alternative mode of action insecticides. Regularly scout crops to monitor for larvae. Target sprays against larvae. Apply as larvae
	Native budworm (<i>Helicoverpa punctigera</i>)	(24 g chlorantraniliprole /ha)		

Crop	Pest	Rate/HA	WHP	Critical comments
Summer pulse crops (except mung bean and soybean) including; azuki/adzuki bean, cow pea, navy bean, pigeon pea	Bean podborer (<i>Maruca vitrata</i>)			reach threshold numbers. Larvae in entrenched feeding sites will not be controlled.
	Cotton bollworm (<i>Helicoverpa armigera</i>)			Use enough water to ensure thorough coverage of the crop. Target a minimum of 100 L/ha by ground rig and a minimum of 30 L/ha by aircraft.
	Native budworm (<i>Helicoverpa punctigera</i>)			Use in accordance with CropLife Insecticide Resistance Management Strategy guidelines.
	Soybean looper (<i>Thysanoplusia orichalcea</i>)			Target brown eggs and hatchlings (neonates or first instar) to small larvae (second instar) when they reach the economic spray threshold and before they become entrenched in flowers or pods.
	Bean looper (<i>Mocis alterna</i>)			
	Irrorated tabby (<i>Anticarsia irrorata</i>)			

*The chickpea, mung beans and soybean uses above are already approved for Altacor® Insecticide (61824).

Restrictions:

DO NOT make more than 2 applications per pulse crops per season. Applications must be a minimum of 7 days apart

HARVEST

Pulse crops: do not harvest for 14 days after application

GRAZING

Pulse crops: do not graze or cut for stock food for 14 days after application

Trade advice information:

EXPORT STATEMENT: Import tolerances for produce treated with E2Y45 insecticide may be pending in some countries. Consult with your exporter or FMC before applying E2Y45 to export crops.

Results from residues trials presented to the APVMA

The complete pulses data set of residues observed in Australian trials in faba beans, field peas, chickpeas and soybeans carried out at Good Agricultural Practice (GAP), are in rank order:

<0.005 (3), 0.009, <0.01 (7), 0.015, 0.024, 0.025 and 0.029 mg/kg (n = 15, STMR = <0.01 mg/kg).

The data relevant to the currently proposed use pattern supports the currently established MRL for pulses (except mung bean, dry) at 0.07 mg/kg. The MRL of 0.7 mg/kg established for VD 0536 mung bean (dry) will remain unchanged as no new data have been provided for mung beans.

Codex Alimentarius Commission and overseas MRLs

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

Chlorantraniliprole has been considered by Codex. However, Codex CXLs have not been established for use of chlorantraniliprole on pulses (except soya bean dry at 0.05 mg/kg) at this time but have been considered by the JMPR in 2019. The JMPR 2019 recommended a VD 2065 dry beans (except dry soya beans) of 0.3 mg/kg and VD 2066 dry peas at 0.3 mg/kg. Due to the postponement of the 2020 Codex meeting these MRLs have not yet progressed. The applicant indicated that they expect that the chlorantraniliprole MRLs on pulses will be discussed at a Codex meeting scheduled for July 2021 and may be established as Codex MRLs in late 2021.

The following relevant international MRLs have been established for chlorantraniliprole.

Table 3: International MRLs

Commodity	Tolerance for residues arising from the use of chlorantraniliprole (mg/kg)						
	Australia	Canada	EU	Japan	Korea	Taiwan	USA
Adzuki beans (dry)		2					
Beans, dry		2		1			
Blackeyed peas (dry)		2					
Broadbeans		2 (dry)		1		1 (fresh)	
Chickpea		2 (dry)				1	
Cow pea (dry)					0.05	0.3 1 (fresh)	
Field peas (dry)		2					
Kidney beans (dry)		2			0.05		
Lentils (dry)		2					
Lima bean		2				1	
Mung beans	0.7 (dry)	2 (dry)			0.05	0.3	
Navy beans (dry)		2					
Pea					0.05	1	
Pigeon pea (dry)		2				0.3	

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Commodity	Tolerance for residues arising from the use of chlorantraniliprole (mg/kg)						
	Australia	Canada	EU	Japan	Korea	Taiwan	USA
						1 (fresh)	
Pulses, dry	0.07 (except mung-bean)		0.3				
Soybean					0.05	0.3 0.5 (vegetable soybean)	
Soybeans, dried		2	0.05	0.2			
Other legumes, pulses				1			
Vegetable, legume, Group 6							2.0

Current and proposed Australian MRLs for chlorantraniliprole

Table 4: Current MRL Standard – Table 1

Compound	Food	MRL (mg/kg)
Chlorantraniliprole		
MO 0105	Edible offal (mammalian)	0.02
PE 0112	Eggs	0.03
MM 0095	Meat (mammalian) (in the fat)	0.02
FM 0183	Milk fats	0.1
ML 0106	Milks	0.02
VD 00536	Mung bean (dry)	0.7
PM 0110	Poultry meat (in the fat)	*0.01
PO 0111	Poultry, edible offal of	*0.01
VD 0070	Pulses (except mung bean (dry))	0.07

Proposed MRL Standard

No changes are required to the current MRLs for chlorantraniliprole should the application be approved.

Potential risk to trade

Export of treated produce containing finite (measurable) residues of chlorantraniliprole 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.

The current Australian pulse (except mung bean (dry)) MRL at 0.07 mg/kg is comparable to or lower than other pulse MRLs established for chlorantraniliprole in overseas countries. For example, Japan has MRLs at 1 mg/kg for various pulses. Korea has MRLs at 0.05 mg/kg for a range of pulses and Taiwan has MRLs at either 1 mg/kg (chickpea, lima bean and pea) or 0.3 mg/kg (cow pea, mung bean, pigeon pea and soybean). Canada and the USA have established MRLs for pulses at 2 mg/kg.

A Codex MRL is not currently established but has been recommended for dry bean and dry pea at 0.3 mg/kg at a JMPR meeting in 2019.

The applicant has proposed the following trade advice label statement to highlight that not all markets currently have appropriate MRLs established:

EXPORT STATEMENT:

Import tolerances for produce treated with E2Y45 insecticide may be pending in some countries. Consult with your exporter or FMC before applying E2Y45 to export crops.

Conclusion

The APVMA has before it an application from FMC Australasia Pty Ltd to register E2Y45 Insecticide, an SC formulation containing chlorantraniliprole, for use on pulses.

Comment is sought on the potential for the proposed use to prejudice Australian trade and the ability of industry to manage any international trade risk.