



Australian Government

**Australian Pesticides and
Veterinary Medicines Authority**



Trade Advice Notice

on difenoconazole in the product Miravis Duo Adepidyn Technology Fungicide for
use on cotton under permit

APVMA permit number 96452

July 2026

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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 products and permits 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 use an existing registered agricultural chemical under permit.

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 for a permit for Miravis Duo Adepidyn Technology Fungicide for use on cotton 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 3 August 2026 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, Agricultural Chemicals Branch
Australian Pesticides and Veterinary Medicines Authority
GPO Box 574
Canberra ACT 2601

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 Cotton Australia Limited for a minor use permit to use Miravis Duo Apepidyn Technology Fungicide (APVMA product number 91192) on cotton to control *Alternaria* sp. *Ramulariopsis* sp. and *Corynespora cassicola*. The product is a suspension concentrate (SC) product containing 125 g/L difenoconazole and 75 g/L pydiflumetofen. An estimated 15,000 ha of cotton will be treated.

The use of pydiflumetofen has been previously assessed for use on cotton to control *Alternaria* under permit 96484 that involved two applications of Miravis Star Apepidyn Technology Fungicide (Product no. 89771) at 500 mL product/ha (75 g fludioxonil/ha and 50 g pydiflumetofen/ha) applied by ground boomspray or aerial application at seedling to 80% boll size with a retreatment interval 21 days and a harvest withholding period of 30 days and a grazing restraint, 'DO NOT feed treated cotton fodder or cotton trash to livestock'. A pydiflumetofen Maximum Residue Limit (MRL) has been established at T0.2 mg/kg for SO 0691 Cotton seed as contained in the Agricultural and Veterinary Chemicals (MRL Standard for Residues of Chemical Products) Amendment Instrument (No. 2) 2026¹. This was supported after a trade consultation for permit 96484 which closed on 02 February 2026². No changes are required to the previously recommended MRL for pydiflumetofen on cotton which does not require further consideration in this notice.

The use of difenoconazole on cotton has been previously considered under a research permit which is no longer current. The current difenoconazole MRL for Cotton seed is established at T0.05 mg/kg. The proposed use of difenoconazole on cotton requires an increase to the Cotton seed MRL for difenoconazole which is the reason for this Trade Advice Notice.

¹ Australian Government Federal register of Legislation [Agricultural and Veterinary Chemicals \(MRL Standard for Residues of Chemical Products\) Amendment Instrument \(No. 2\) 2026](#), website accessed June 2026

² [Trade Advice Notice on fludioxonil and pydiflumetofen in the product Miravis Star Apepidyn Technology Fungicide for use on cotton under permit](#), website accessed June 2026

Trade considerations

Commodities exported

Cotton seed and its derived oils and meals are major export commodities³, as are commodities of animal origin, such as meat, offal and dairy products, which may be derived from livestock fed feeds produced from treated cotton. Residues in these commodities resulting from the use of Miravis Duo may have the potential to unduly prejudice trade.

The risk to trade in animal commodities does not require further consideration here, as the maximum livestock dietary burden for difenoconazole is unchanged, noting the proposed grazing restraint of 'DO NOT feed cotton fodder or cotton trash to livestock', and the supervised trial median residue (STMR) of 0.02 mg/kg for difenoconazole in cotton seed. No changes are required to the animal commodity MRLs for difenoconazole.

Destination and value of exports

Australia exported an estimated ~836 kt of cottonseed worth ~AUD\$310 million in 2024–25 as reported by the Australian Bureau of Agricultural and Resource Economics (ABARES).⁴

The major export markets for cottonseed in 2024–25 were China, Japan and Korea³.

Proposed Australian use pattern

The proposed Australian use pattern for Miravis Duo Apepidyn Technology Fungicide (125 g/L difenoconazole and 75 g/L pydiflumetofen on cotton is summarised below.

Table 1: Proposed use pattern

Crop	Pest	Rate/concentration	Critical comments
Cotton (Field) Conventional and genetically modified	<i>Alternaria</i> sp.	500 mL/ha (62.5 g difenoconazole + 37.5 g pydiflumetofen/ha)	Spray volume: 100 L/ha (ground boomspray); 30 L/ha (aerial) Apply a maximum of 2 applications per crop from seedling to 80% boll size (up to BBCH 78). Minimum re-treatment interval: 21 days.

³ [APVMA Regulatory Guidelines – Data Guidelines: Agricultural - Overseas Trade \(Part 5B\)](#), website accessed May 2026.

⁴ Australian Bureau of Agricultural and Resource Economics – [Agricultural Commodity Statistics](#), website accessed May 2026.

Crop	Pest	Rate/concentration	Critical comments
	<i>Ramulariopsis</i> sp. <i>Ramularia</i> Leaf Spot/ <i>Corynespora</i> <i>cassicola</i> (Target Spot)	600 mL/ha (75 g difenoconazole + 45 g pydiflumetofen/ha)	Spray volume: 100 L/ha (ground boomspray); 30 L/ha (aerial) Apply a maximum of 2 applications per crop from seedling to 80% boll size (up to BBCH 78). Minimum re-treatment interval: 7 – 14 days.

Withholding periods:

Harvest: DO NOT harvest for 45 days after last application.

Grazing: DO NOT FEED TREATED COTTON FODDER OR COTTON TRASH TO LIVESTOCK.

Results from residues trials presented to the APVMA

The proposed use of Miravis Duo Apepidyn Technology Fungicide on cotton involves 2 applications at up to 600 mL/ha (45 g pydiflumetofen + 75 g difenoconazole/ha), commencing at seedling to 80% boll size (up to BBCH 78), at re-treatment intervals of 7 – 21 days, in conjunction with a harvest withholding period of 45 days and a grazing restraint, 'DO NOT feed treated cotton fodder or cotton trash to livestock'.

Cotton seed - difenoconazole

A summary of 12 US difenoconazole trials involving 3-5 foliar applications at ~1.7× the maximum proposed rate has been provided.

Residues of difenoconazole in cotton seed following three applications at 45 days DALA were <0.01 (4), 0.01, 0.03 (2), 0.04, 0.05, 0.06, 0.18 and 0.31 mg/kg (n=12). After scaling to the proposed rate of 75 g ai/ha residues would be expected to be <0.01 (5), 0.02 (3), 0.03, 0.04, 0.11 and 0.18 mg/kg (n=12). The Organisation for Economic Cooperation and Development (OECD) MRL calculator estimates an MRL of 0.3 mg/kg. STMR = 0.02 mg/kg.

A difenoconazole MRL of 0.3 mg/kg for [SO 0691] Cotton seed is recommended in conjunction with a harvest withholding period of 45 days, replacing the current difenoconazole MRL of 0.05 mg/kg.

Processing

A cotton processing study demonstrated that difenoconazole residues did not concentrate in cotton processed commodities (oil, hulls and meal). As all the processing factors were <1, it is not necessary to set separate MRLs for these commodities.

Overseas registration and approved label instructions

The details of overseas registrations have not been provided. Several overseas MRLs are established for difenoconazole on cotton (see below).

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 Good Agricultural Practice (GAP) employed by various countries. Some countries may accept Codex CXLs when importing foods. Difenconazole has been considered by Codex. The following relevant Codex CXLs and international MRLs have been established for difenconazole.

Table 2: International MRLs for difenoconazole

Commodity	Tolerance for residues arising from the use of difenoconazole (mg/kg)							
	Australia	Codex ⁵	China ⁶	EU ⁷	Japan ⁸	Korea ⁹	Taiwan ¹⁰	USA ¹¹
Residue Definition	Difenoconazole	For compliance with the MRL and for estimation of dietary exposure for plant commodities: Difenoconazole.	Difenoconazole	Difenoconazole	Sum of Difenoconazole and metabolite D[1-[2-chloro-4-(4-chlorophenoxy)phenyl]-2-(1H-1,2,4-triazole-1-yl)ethanol], calculated as Difenoconazole.	-	-	Difenoconazole
Cotton seed	T0.05 (current) T0.3 (Proposed)	0.4	0.1	*0.05	0.1 (other oilseeds)	-	-	0.4

⁵ Food and Agriculture Organisation of the United Nations, [Codex Alimentarius, International Food Standards](#), FAO website, accessed February 2026.

⁶ United States Department of Agriculture, [Translation of Maximum Residues Limits for Pesticides in Foods, China, People's Republic of](#), accessed May 2026

⁷ European Commission, [EU Pesticide residue\(s\) and maximum residue levels \(mg/kg\)](#), European Commission website, accessed February 2026.

⁸ Japanese Food Chemistry Research Foundation, [Table of MRLs for Agricultural Chemicals](#), JFCRPF website, accessed February 2026.

⁹ Ministry of Food and Drug Safety, Korea, [MRLs in Pesticides](#), accessed February 2026.

¹⁰ Laws & Regulations Database of the Republic of China (Taiwan), [Standards for Pesticide Residue Limits in Foods](#), accessed February 2026.

¹¹ Electronic Code of Federal Regulations, [USA Electronic Code of Federal Regulations](#), eCFR website, accessed February 2026.

Current and proposed Australian MRLs for difenoconazole

Table 3: Current MRL Standard – Table 1

Compound	Food	MRL (mg/kg)
Difenoconazole		
SO 0691	Cotton seed	T0.05

Table 4: Proposed MRL Standard – Table 1

Compound	Food	MRL (mg/kg)
Difenoconazole		
Delete:		
SO 0691	Cotton seed	T0.05
Add:		
SO 0691	Cotton seed	T0.3

Potential risk to trade

Export of treated produce containing finite (measurable) residues of difenoconazole 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 proposed Australian MRL of T0.3 mg/kg for difenoconazole on cotton seed is lower than those established by Codex and USA (0.4 mg/kg) but higher than that established by EU (*0.05 mg/kg) and China (0.1 mg/kg). However, the Supervised Trial Median Residue (STMR) is 0.02 mg/kg, which is lower than the EU and Chinese MRLs. Japan also has an MRL of 0.1 mg/kg for other oilseeds, but it is not clear if this applies to cotton. MRLs for difenoconazole in cotton seed are not established in Taiwan and Korea.

Comment is sought from relevant industry groups on the risk to trade from the proposed use of difenoconazole on cotton, noting that the recommended MRL is lower than those established by the Codex and USA and the STMR is lower than the other established overseas MRLs, given also the limited scale of this minor use permit.

Conclusion

Cotton Australia Limited have applied for a minor use permit for Miravis Duo Apepidyn Technology Fungicide on cotton for the control of *Alternaria* sp. *Ramulariopsis* sp. and *Corynespora cassicola*. The use on difenoconazole on cotton will require an increase to the Cotton seed MRL. Comment is sought from relevant industry groups on the potential risk to trade in cotton seed from this use.