



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



Trade Advice Notice

on azoxystrobin and cyproconazole in the Product Amistar Xtra Fungicide for use
on oats, triticale and rye

APVMA product number 57949

March 2020

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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 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 Australian Pesticides and Veterinary Medicines Authority (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 vary the registration of **Amistar Xtra Fungicide** 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 **2 April 2020** 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)
- submission date.

All personal and *confidential commercial information (CCI)*¹ 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:

Residues and Trade
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 public release summaries can be found on the APVMA website: apvma.gov.au.

¹ 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 **SYNGENTA AUSTRALIA PTY LTD**, to vary the registration of the product **Amistar Xtra Fungicide** containing 200 g/L azoxystrobin and 80 g/L cyproconazole, to include new uses for oats (for grain and hay production), triticale and cereal rye.

Amistar Xtra Fungicide is currently approved for use in wheat and barley with similar use patterns as is proposed for the additional cereal crops. Azoxystrobin is approved for use in oats (P69803) but not triticale and cereal rye while cyproconazole is not currently approved for oats, triticale or cereal rye. The trade implications relating to the required MRLs for oats, triticale and cereal rye are discussed here.

2 TRADE CONSIDERATIONS

2.1 Commodities exported

Cereal grains and oaten hay are considered to be major export commodities², as are commodities of animal origin, such as meat, offal and dairy products, which may be derived from livestock fed feeds produced from treated oats, triticale and cereal rye. Residues in these commodities resulting from the use of **Amistar Xtra Fungicide** may have the potential to unduly prejudice trade.

No changes are required to the established azoxystrobin or cyproconazole animal commodity MRLs therefore the risk to trade in animal commodities (mammalian and poultry) associated with the proposed use is no greater than currently exists from other registered cereal uses. No further consideration to trade risk of animal commodities is required.

2.2 Destination and value of exports

The export value of Australian oat grain was \$151 million in 2016–17, \$104 million in 2017–18 and \$121 million in 2018–19³. Major export destinations in 2017 were Japan, India, Philippines, China and Singapore⁴.

The export value of Australian triticale grain was \$32 million in 2015–16, \$27 million in 2016–17 and \$20 million in 2017–18³. Major export destinations in 2017 were China and Japan⁴.

The export destinations for cereal rye in 2016 were Taiwan, New Zealand and China⁴.

² APVMA Regulatory Guidelines—Data Guidelines: Agricultural—Overseas trade (Part 5B)

³ ABARES Agricultural commodities and trade data: agriculture.gov.au/abares/research-topics/agricultural-commodities/agricultural-commodities-trade-data#2019

⁴ Australian Bureau of Statistics

Major export markets for Australian oaten hay are Japan, China, Taiwan and South Korea⁵.

2.3 Proposed Australian use pattern

Table 1: Proposed use pattern

Crop	Diseases	Rate	Critical comments
Cereal Rye	Powdery Mildew (Blumeria graminis tritici)	400 to 800 mL (80g ai/ha azoxystrobin and 32g ai/ha cyproconazole to 160g ai/ha azoxystrobin and 64g ai/ha cyproconazole	Spray at the first sign of the disease during the tillering stage.
	Scald (Rhynchosporium secalis)		A repeat spray 21 to 28 days later may be required. Ensure thorough coverage of stems and leaves. Higher rates provide longer protection.
	Leaf Rust (Puccinia triticina)		Apply from jointing (Z30) and before infection averages 10% on the flag-2 leaf. Ensure thorough coverage of stems and leaves. Use higher rates under high infection pressure or when longer residual protection is required. Lower rates are effective under low disease pressure but have reduced residual effect.
	Septoria leaf blotch and Septoria glume blotch (Septoria tritici and Septoria nodorum)		Repeat application at early booting stage if necessary. Two applications of the lower rate will generally provide better control than a single application at the higher rate. Addition of ADIGOR® at 2%.
Oats	Septoria avenae blotch (Stagonospora avenaria)	400 to 800 mL (80g ai/ha azoxystrobin and 32g ai/ha cyproconazole to 160g ai/ha azoxystrobin and 64g ai/ha cyproconazole	Apply at or prior to the first signs of disease. Ensure thorough coverage. Failure to apply AMISTAR XTRA before rust becomes well established in the crop may result in reduced disease control. Use the higher rate under high infection pressure or when longer residual protection is required.
	Leaf Rust (Puccinia coronata f.sp. avenae)		
	Stem Rust (Puccinia graminis		
			Continue to monitor crops after application and

⁵ agrifutures.com.au/farm-diversity/oats/

Crop	Diseases	Rate	Critical comments
	f.sp. avenae)		consider a second fungicide application if conditions continue to favour disease development after 21 days. Do not apply after Z59.
Triticale	Leaf Rust (Puccinia triticina)	400 to 800 mL (80g ai/ha azoxystrobin and 32g ai/ha cyproconazole to 160g ai/ha azoxystrobin and 64g ai/ha cyproconazole.	Apply after flag leaf is 70% emerged and before disease levels reach 1% of flag leaf area. Consider control if disease is greater than 5 to 10% on any lower leaf layer. Use higher rates under high infection pressure or when longer residual protection is required. Lower rates are effective under low disease pressure but have reduced residual effect. Ensure thorough coverage.
	Powdery Mildew (Blumeria graminis tritici)		Spray at the first sign of the disease during the tillering stage. A repeat spray 21 to 28 days later may be required. Ensure thorough coverage of stems and leaves. Higher rates provide longer protection.
	Stem rust (Puccinia graminis f.sp. tritici)		Apply at or prior to the first signs of disease. Ensure thorough coverage. Failure to apply AMISTAR XTRA before stem rust becomes well established in the crop may result in reduced disease control. Use the higher rate under high infection pressure or when longer residual protection is required. Continue to monitor crops after application and consider a second fungicide application if conditions continue to favour disease development.
	Stripe Rust (Puccinia striiformis)		Spray at the first sign of the disease and before 10 to 20% of leaves are infected. A repeat spray 21 to 28 days later may be required.

Crop	Diseases	Rate	Critical comments
			Use higher rates under high infection pressure or when longer residual protection is required.
	Yellow Spot (Pyrenophora tritici-repentis)		Apply once between 70% flag leaf emergence and early flowering. Use higher rates under high infection pressure or where longer residual protection is required. Apply after 70% flag leaf emergence and before disease levels reach 5% on flag leaf. Higher rates give longer residual protection and often better economic returns.
	Septoria leaf blotch and Septoria glume blotch (Septoria tritici and Septoria nodorum)		Apply at or prior to the first signs of disease. Ensure thorough coverage. Failure to apply AMISTAR XTRA before Septoria becomes well established in the crop may result in reduced disease control. Use the higher rate under high infection pressure or when longer residual protection is required. Continue to monitor crops after application and consider a second fungicide application if conditions continue to favour disease development.

Restrains:

DO NOT apply more than two applications of AMISTAR XTRA (or any other strobilurin or Group 3 fungicide) in any one season on the same paddock.

DO NOT exceed a combined total of 800 mL/ha of AMISTAR XTRA in any one season on the same paddock.

Oats: Do not apply after Z59

Withholding periods:

Harvest: Cereals except oats: Do not harvest for six weeks after final treatment.

Harvest: Oats: Not required when used as directed

Grazing: Do not graze or cut for livestock for 21 days after application.

Spray timing:

Always inspect crops to assess disease development immediately before spraying. Best results will be achieved from applications made in the earliest stages of disease development or as a protectant treatment following a disease risk assessment.

Cereals: Applications of AMISTAR XTRA should be made within the crop growth stages ranging from tillering to early flowering (Z26 to Z62), or for oats within the crop growth stages ranging from tillering to end of heading (Z26 to Z59). The object of spraying is to keep the upper two to three leaves green and functioning through grain filling stage.

Export Slaughter Interval:

DO NOT slaughter animals destined for export within seven days of consumption of treated cereal forage or straw, or peanut forage or fodder.

2.4 Results from residues trials presented to the APVMA

Triticale and cereal rye

No residues data for triticale and cereal rye has been provided however these crops are in the same crop subgroup as wheat⁶ and no further data is required. It is considered appropriate to establish azoxystrobin and cyproconazole MRLs for triticale and cereal rye at the same levels as those established for wheat (0.1 mg/kg for azoxystrobin and *0.02 mg/kg for cyproconazole in grain).

Oats

Four Australian residue trials on oats involved two foliar applications made at the rate of 160 g ai/ha azoxystrobin and 64 g ai/ha cyproconazole (ie 1× the maximum proposed rate) with the final application applied at Z55 or Z59.

Azoxystrobin residues in oat grain were 0.01, 0.02 (2) and 0.03 mg/kg (STMR = 0.02 mg/kg) at commercial harvest. The OECD calculator recommends an MRL of 0.06 mg/kg based on this dataset. It is concluded that the current azoxystrobin MRL established for oats at 0.1 mg/kg remains appropriate.

⁶ apvma.gov.au/taxonomy/term/6251

Azoxystrobin residues in oat straw were 0.13, 0.14, 0.30 and 0.34 mg/kg (STMR =0.22 mg/kg) at commercial harvest. Azoxystrobin residues in oat forage were 1.53, 1.78, 2.43 and 2.52 mg/kg on a dry weight basis (STMR =2.1 mg/kg) at the proposed grazing withholding period of 21 days. MRLs for cereal straw and fodder at 3 mg/kg and cereal forage at 10 mg/kg will cover the proposed use in oats.

Cyproconazole residues in oat grain were 0.01 and 0.02 (3) mg/kg (STMR =0.02 mg/kg) at commercial harvest. The OECD calculator recommend an MRL of 0.04 mg/kg based on this dataset. A cyproconazole MRL of 0.05 mg/kg is considered appropriate for oats.

Cyproconazole residues in oat straw were 0.09, 0.12, 0.14 and 0.23 mg/kg (STMR = 0.13 mg/kg) at commercial harvest. Azoxystrobin residues in oat forage were 0.63, 0.67, 1.03 and 1.19 mg/kg on a dry weight basis (STMR=0.83 mg/kg) at the proposed grazing withholding period of 21 days. MRLs for cereal straw and fodder at 3 mg/kg and cereal forage at 10 mg/kg will cover the proposed use in oats.

2.5 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. Azoxystrobin and cyproconazole have been considered by Codex. The following relevant Codex and international CXLs have been established for azoxystrobin and cyproconazole.

Table 2: Overseas MRLs for azoxystrobin

Commodity	Australia	Codex ⁷	EU ⁸	Japan ⁹	Taiwan ¹⁰	USA ¹¹
Oats	0.1 mg/kg (established)	1.5 mg/kg	1.5	0.5 mg/kg (other cereals)	0.5	1.5 mg/kg
Triticale	0.1 mg/kg (proposed)	0.2 mg/kg	0.5 mg/kg (other cereals)	0.5 mg/kg (other cereals)	*0.01 (other cereals)	Not established
Cereal rye	0.1 mg/kg (proposed)	0.2 mg/kg	0.5	0.3 mg/kg	0.2	0.2 mg/kg
Straw and fodder of cereal grains	3 (proposed)	15	Not established	Not established	Not established	10 mg/kg (oat hay) 3 mg/kg (oat straw)

⁷ fao.org/fao-who-codexalimentarius/codex-texts/dbs/pestres/pesticide-detail/en/?p_id=239

⁸ ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=activesubstance.selection&language=EN

⁹ db.ffcr.or.jp/front/pesticide_comp

¹⁰ fda.gov.tw/ENG/lawContent.aspx?cid=16&id=304

¹¹ fao.org/fao-who-codexalimentarius/codex-texts/dbs/pestres/pesticide-detail/en/?p_id=239

Table 3: Overseas MRLs for cyproconazole

Commodity	Australia	Codex	EU	Japan	Taiwan	USA
Oats	0.05 mg/kg (proposed)	0.08 mg/kg (cereals)	0.2 mg/kg	0.1 mg/kg (other cereals)	*0.02 (other cereals)	Not established
Triticale	*0.02 mg/kg (proposed)	0.08 mg/kg (cereals)	0.1 mg/kg (other cereals)	0.1 mg/kg (other cereals)	*0.02 (other cereals)	Not established
Cereal rye	*0.02 mg/kg (proposed)	0.08 mg/kg (cereals)	0.1 mg/kg	0.1 mg/kg	*0.02 (other cereals)	Not established
Straw and fodder of cereal grains	3 (proposed)	5 mg/kg	Not established	Not established	Not established	1.3 mg/kg (wheat hay)

2.6 Proposed Australian MRLs for azoxystrobin and cyproconazole

Table 4: Proposed MRL Standard—Table 1

COMPOUND	FOOD	MRL (mg/kg)
AZOXYSTROBIN		
ADD:		
GC 0650	Rye	0.1
GC 0653	Triticale	0.1
CYPROCONAZOLE		
ADD:		
GC 0647	Oats	0.05
GC 0650	Rye	*0.02
GC 0653	Triticale	*0.02

Table 5: Proposed MRL Standard—Table 4

COMPOUND	FOOD	MRL (mg/kg)
AZOXYSTROBIN		
DELETE:		
	Barley forage	10
AS 0640	Barley straw and fodder, dry	3
AF 0647	Oat forage (green)	7

COMPOUND		FOOD	MRL (mg/kg)
AS	0647	Oat straw and fodder, dry	3
		Wheat forage	10
AS	0654	Wheat straw and fodder, dry	3
ADD:			
AF	0081	Forage of cereal grains (green) {except Maize forage}	10
AS	0081	Straw and fodder (dry) of cereal grains {except Maize fodder; Rice straw and fodder, dry}	3
CYPROCONAZOLE			
DELETE:			
		Barley forage	10
AS	0640	Barley straw and fodder, dry	3
		Wheat forage	10
AS	0654	Wheat straw and fodder, dry	3
ADD:			
AF	0081	Forage of cereal grains (green) {except Maize forage}	10
AS	0081	Straw and fodder (dry) of cereal grains {except Maize fodder}	3

2.7 Potential risk to trade

Export of treated produce containing finite (measurable) residues of azoxystrobin and cyproconazole 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 use in oats, triticale and cereal rye is similar to that currently approved for the major cereal crops of wheat and barley.

For azoxystrobin in oats, an MRL at 0.1 mg/kg is currently established for another registered use pattern. The proposed azoxystrobin MRL for cereal rye (0.1 mg/kg) is lower than MRLs established overseas. For triticale, the Taiwanese MRL (*0.01 mg/kg) is lower than the MRL proposed in Australia (0.1 mg/kg).

The proposed cyproconazole MRL for oats of 0.05 mg/kg is lower than those established by Codex (0.08 mg/kg) and Japan (0.1 mg/kg for other cereals) but higher than the Taiwanese MRL of *0.02 mg/kg noting the HR was 0.02 mg/kg). The proposed cyproconazole MRLs for triticale and cereal rye are at the LOQ of 0.02 mg/kg.

MRLs for azoxystrobin and cyproconazole in oaten hay have been established by Codex at levels higher than proposed in Australia (3 mg/kg), but not in the major export markets of Japan, China, Taiwan and South Korea.

3 CONCLUSION

SYNGENTA AUSTRALIA PTY LT, have applied to vary the registration of the product *Amistar Xtra Fungicide* to include new uses for oats, triticale and cereal rye. The proposed use will require the establishment of the new MRLs for azoxystrobin and cyproconazole in these cereal crops.

Comment is sought on the potential for *Amistar Xtra Fungicide* to prejudice Australian trade when used on oats (for grain and hay production), triticale and cereal rye according to the proposed label directions.