

## **Evaluation Report for Category B, Subcategory 2.6 Application**

Application Number:	2015-3727
Application:	New product; new combination of TGAIs
Product:	Rancona V RTU FS Fungicide
<b>Registration Number:</b>	32668
Active ingredients (a.i.):	Ipconazole, carbathiin, metalaxyl
<b>PMRA Document Number:</b>	2737891

#### **Purpose of Application**

The purpose of this application was to register the end-use product, Rancona V RTU FS Fungicide (guarantee: 133.33 g carbathiin/L, 13.33 g metalaxyl/L and 5.0 g ipconazole/L), for use on cereal grains.

#### **Chemistry Assessment**

Rancona V RTU FS Fungicide is formulated as a suspension containing containing ipconazole at a nominal concentration of 5.0 g/L, carbathiin at a nominal concentration of 133.3 g/L, and metalaxyl at a nominal concentration of 13.33 g/L. This end-use product has a density of 1.040-1.080 g/mL and pH of 7.5-9.5. The chemistry requirements for this product have been fulfilled.

#### Health Assessments

In rats, Rancona V RTU FS Fungicide is of low acute toxicity by the oral, dermal, and inhalation routes of exposure. The formulation is minimally irritating to the rabbit eye and is slightly irritating to the rabbit skin. It is not a skin sensitizer in mice based on the local lymph node assay.

The registration of the seed treatment product Rancona V RTU FS Fungicide for commercial and on-farm use on cereal grains (spring and winter wheat, barley, oats, rye and triticale) fits within the existing use pattern for ipconazole and metalaxyl, but not for carbathiin. As such, occupational exposure and risk assessments were conducted and all new uses were supported. No health risks of concern are expected from the use of Rancona V RTU FS Fungicide provided that the recommended label amendments are made, and that workers follow all label directions, including wearing the appropriate personal protective equipment and using the engineering controls.

Previously reviewed residue data from field trials conducted in/on wheat, barley and corn were reassessed in the framework of this petition.



#### Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for carbathiin was based upon the previously reviewed field trial data, and the guidance provided in the <u>OECD MRL Calculator</u>. MRLs to cover residues of carbathiin, including metabolites determined as benzenamine and expressed as parent compound in/on crops and processed commodities are proposed as shown in Table 1. Residues in processed commodities not listed in Table 1 are covered under the proposed MRLs for the raw agricultural commodities (RACs).

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	Application	DAP (days)	Residues (ppm)			Currently	
Commodity	Method/ Total Application Rate (g a.i./100 kg seed)		LAFT	HAFT	Experimental Processing Factor	Established MRL (ppm)	Recommended MRL (ppm)
Wheat	Seed treatment / 164	103 – 150	<loq< td=""><td><loq< td=""><td rowspan="4">No quantifiable residues were observed at exaggerated rates.</td><td rowspan="2">Nama</td><td rowspan="2">0.2 ppm for</td></loq<></td></loq<>	<loq< td=""><td rowspan="4">No quantifiable residues were observed at exaggerated rates.</td><td rowspan="2">Nama</td><td rowspan="2">0.2 ppm for</td></loq<>	No quantifiable residues were observed at exaggerated rates.	Nama	0.2 ppm for
Barley	Seed treatment / 82 - 164	94 – 150	<loq< td=""><td><loq< td=""></loq<></td></loq<>	<loq< td=""></loq<>			
Field corn	Seed treatment / 92 - 185	83 – 98	<loq< td=""><td><loq< td=""><td>Crop Group 15 (Cereal grains)</td></loq<></td></loq<>	<loq< td=""><td>Crop Group 15 (Cereal grains)</td></loq<>		Crop Group 15 (Cereal grains)	
Sweet corn	Seed treatment / 92 - 185	78 – 177	<loq< td=""><td><loq< td=""><td></td><td></td></loq<></td></loq<>	<loq< td=""><td></td><td></td></loq<>			

# Table 1Summary of Field Trial and Processing Data Used to Support Maximum<br/>Residue Limits (MRLs)

DAP = days after planting; LAFT = Lowest Average Field Trial; HAFT = Highest Average Field Trial; LOQ = limit of quantitation

Following the review of all available data, MRLs as proposed in Table 1 are recommended to cover residues of carbathiin. Residues in these crop commodities at the proposed MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

#### **Environmental Assessment**

The rates for the actives carbathiin and metalaxyl on the end-use product label are within the registered rates for the same crops on currently registered products. As such, no increased environmental exposure or risk is anticipated.

The rates for ipconazole on legumes are higher than the currently registered rates for cereals, corn and canola, so a risk assessment was conducted. The increase in rate for ipconazole as a seed treatment poses negligible risk to birds, mammals, freshwater fish and amphibians. Mitigating label statements recommending burial of treated seed and cleanup of spilled treated seed are required.

### Value Assessment

A total of 18 efficacy trials conducted in Canada and the US were submitted to support four claims. The submitted value data was sufficient to support the claims at the rate. The remaining claims were supported based on data reviewed under concurrent application and extrapolated from currently registered products.

Seed treatments protect cereal crops when they are young and more sensitive to soil pathogens at a relatively low application rate. These products are an important component of an IPM program.

#### Conclusion

Following review of the application, the PMRA approved the registration of Rancona V RTU FS Fungicide for use on cereal grains.

## References

PMRA	
Document	
<b>Number</b> 2557579	<b>Reference</b> 2015, Product Identity and Composition, Description of Materials, Method Used to
2331319	Produce the Product, Description of the Formulation Process and Discussion of the Formation of Impurities in Rancona V RTU FL Fungicide, DACO: 3.2.1,3.2.2,3.2.3
2557580	2015, CBI Reference: Product Identity and Composition, Description of Materials,
	Method Used to Produce the Product, Description of the Formulation Process and Discussion of the Formation of Impurities in Rancona V RTU FL Fungicide, DACO: 3.2.1,3.2.2,3.2.3 CBI
2557581	2015, Certified Limits of Rancona® V RTU FS Fungicide, DACO: 3.3.1
2557582	2015, CBI Reference: Certified Limits of Rancona® V RTU FS Fungicide, DACO:
	3.3.1 CBI
2557583	2012, Enforcement Analytical Method for the Formulated Product, Rancona V RTU FL UBI 6994-00, DACO: 3.4.1
2557584	2012, Validation of an Analytical Method for the Determination of Ipconazole, Metalaxyl and Carboxin in Rancona V RTU FL, UBI 6994-00, DACO: 3.4.1
2557585	2015, Impurities of Toxicological Concern, DACO: 3.4.2
2557587	2012, The Physical and Chemical Characteristics of Rancona V RTU FL (UBI 6994-
0555500	00), DACO: 3.5.1,3.5.2,3.5.3,3.5.6,3.5.7,3.5.9
2557588	2014, The Storage Stability and Corrosion Characteristics of [CBI Removed] in 2.5 Gallon HDPE Jugs Over 1 Year, DACO: 3.5.10,3.5.14
2557589	2014, The Storage Stability and Corrosion Characteristics of [CBI Removed] in 250 Gallon IBC Containers Over 1 Year, DACO: 3.5.10,3.5.14
2557590	2014, The Storage Stability and Corrosion Characteristics of [CBI Removed] in Stainless Steel Drums Over 1 Year, DACO: 3.5.10,3.5.14
2557591	2012, Flammability of Rancona V RTU FL Fungicide, DACO: 3.5.11
2557592	2012, Explodability of Rancona V RTU FL Fungicide, DACO: 3.5.12
2557593	2012, Miscibility of Rancona V RTU FL Fungicide, DACO: 3.5.13
2557594	2012, Dielectric Breakdown Voltage of Rancona V RTU FL Fungicide, DACO: 3.5.15
2557595	2015, Formulation Type, DACO: 3.5.4
2557596	2015, Container Material and Description, DACO: 3.5.5
2557597	2012, Oxidizing or Reducing Action of Rancona V RTU FL Fungicide, DACO: 3.5.8
2557598	2013. Rancona V RTU FL (UBI 6994-00) - Acute Oral Toxicity Up And Down Procedure In Rats. Laboratory Study Number 35419; DACO 4.6.1.
2557599	2013. Rancona V RTU FL (UBI 6994-00) - Acute dermal toxicity study in rats. Laboratory Study Number 35420; DACO 4.6.2.
2557600	2013. Rancona V RTU FL (UBI 6994-00) - Acute Inhalation Toxicity Study in Rats. Laboratory Study Number 35421; DACO 4.6.3.
2557601	2013. Rancona V RTU FL (UBI 6994-00) - Primary Eye Irritation Study in Rabbits. Laboratory Study Number 35422; DACO 4.6.4.

- 2557602 2013. Rancona V RTU FL (UBI 6994-00) Primary Skin Irritation Study in Rabbits. Laboratory Study Number 35423; DACO 4.6.5
- 2557603 2013. Rancona V RTU FL (UBI 6994-00) Local Lymph Node Assay (LLNA) in Mice. Laboratory Study Number 35424; DACO 4.6.6
- 2557487 2015, Summary of Occupational Risk Assessments for the Seed Treatment Use of Rancona V RTU FS Fungicide and Rancona V 100 Pro FS Fungicide on Cereal Grains (wheat, barley, oats, rye and triticale) in Canada, DACO: 5.1
- 2557489 2009, Rancona 20/50 ME (UBI 6932) In Vitro Dermal Absorption Study Using Human Skin, DACO: 5.14
- 2557490 2009, Ipconazole (Rancona 450 FS) In Vitro Dermal Absorption Study Using Human Skin and Rat Skin, DACO: 5.14
- 2557492 2015, Use Description and Exposure Scenarios for the Seed Treatment Use of Rancona V RTU FS Fungicide and Rancona V 100 Pro FS Fungicide on Cereal Grains (wheat, barley, oats, rye and triticale) in Canada, DACO: 5.2
- 2557494 2015, Mixer/Loader/Applicator Passive Dosimetry Study in Support of Commercial Seed Treatment of Cereal Grains (wheat, barley, oats, rye and triticale) with Rancona V RTU FS Fungicide and Rancona V 100 Pro FS Fungicide in Canada, DACO: 5.4
- 2557496 2015, Mixer/Loader/Applicator Passive Dosimetry Study in Support of On-Farm Seed Treatment of Cereal Grains (wheat, barley, oats, rye and triticale) with Rancona V RTU FS Fungicide and Rancona V 100 Pro FS Fungicide in Canada, DACO: 5.4
- 2557498 2015, Seed Planter Agricultural Re-entry/Non-Dietary Exposure Data in Support of the Planting of Cereal Grains (wheat, barley, oats, rye and triticale) with Rancona V RTU FS Fungicide and Rancona V 100 Pro FS Fungicide in Canada, DACO: 5.6
- 2652841 2016, A laboratory study to determine the level of free dust obtained from cereal and legume seed following an application of Vitaflo 280 Fungicide, Rancona V RTU FS Fungicide and Rancona V 100 Pro FS Fungicide to support Canadian registration submission, DACO: 5.15
- 2653465 2016, A laboratory study to determine the level of free dust obtained from cereal seed following an application of Dividend Star and Rancona V RTU FS Fungicide to support a Canadian registration submission, DACO: 5.15
- 2557572 2015, Efficacy and Seed Safety of Rancona V RTU FS Fungicide Seed Treatment Applied to Cereal Grains Wheat, Barley, Oats, Rye & Triticale, DACO: 10.1,10.2.1,10.2.2,10.2.3,10.2.4,10.3,10.4,10.5
- 2557574 2015, Excel File Seed Safety Tables for Efficacy and Seed Safety of Rancona V RTU FS Fungicide Seed Treatment Applied to Cereal Grains Wheat, Barley, Oats, Rye & Triticale, DACO: 10.3
- 1772278 2009, Fluquinconazole and Prochloraz: Determination of operator exposure during cereal seed treatment with Jockey fungicide in Germany, United Kingdom and France, DACO: 5.4
- 1398186 2007, Dermal and Inhalation Exposure to Handlers of a Liquid Seed Treatment Fungicide During On-Farm Treatment of Cereal Grain, DACO: 5.4
- 2313627 2013, Determination of Dermal and Inhalation Exposure to Operators During Loading and Sowing Seed Treated with Austral Plus Net Using Conventional or Pneumatic Sowing Machines, DACO: 5.3,5.4
- 1108518 1999, On Farm Exposure Operator Study with DIVIDEND 36 FS Seed Treatment on Wheat., DACO: 5.4

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