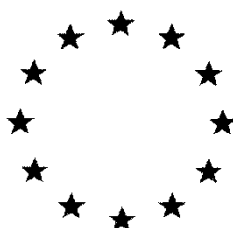


# ***European Commission***



**Draft Renewal Assessment Report prepared according to the Commission  
Regulation (EC) N° 1107/2009**

**Metconazole**

**Volume 3 – B.3 (PPP) – BAS 555 01 F**

Rapporteur Member State : Belgium  
Co-Rapporteur Member State : United Kingdom

### Version History

When	What
January 2004	Initial DAR Draft Assessment Report (DAR) – prepared in the context of the application for the first inclusion of the a.s. in Annex I to Council Directive 91/414/EEC.  Various addenda were issued in August 2004, January and September 2005.
2018-01-31	Draft Renewal Assessment Report (DRAR) – prepared in the context of the application for renewal of approval of the a.s. according to Reg (EU) No EU 844/2012.  <i>Note: The RAR is a stand-alone document containing the evaluations already displayed in the original DAR, as well as the new assessments. The revision of the initial DAR has been done in accordance with SANCO/10180/2013 rev.1 (March 2013), with changes to the original text – resulting from assessment of new studies (or reconsideration of old studies or studies that were not yet previously peer-reviewed) – being highlighted by means of yellow shading. However, for the renewal of the a.s., a new formulation is proposed as representative formulation. Data submitted on the formulation ‘BAS 555 01 F’ were therefore not evaluated in the initial DAR and are presented and evaluated in this document.</i>

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**B.3. DATA ON APPLICATION AND EFFICACY**

BAS 555 01 F is a representative formulation with 90g/L metconazole, which has not been evaluated during the previous Annex I inclusion process.

**B.3.1. FIELD OF USE ENVISAGED**

Please see below efficacy information according to SANCO/2012/11251 (chapter 3).

**B.3.2. EFFECTS ON HARMFUL ORGANISMS**

Please see below efficacy information according to SANCO/2012/11251 (chapter 8).

**B.3.3. DETAILS OF INTENDED USE**

**PPP (product name/code)**    **BAS 555 01 F**  
**active substance**            **Metconazole**

**Formulation type:**        **EC**  
**Conc. of as:**                **90 g/L**

**safener**                        **n.a.**  
**synergist**                    **n.a.**

**Conc. of safener:**        **n.a.**  
**Conc. of synergist:**     **n.a.**

**Applicant:**                    **BASF SE**  
**Zone(s):**                     **northern/central/southern EU**

**professional use**            ☒  
**non professional use**      ☐

**Verified by MS:** j

1	2	3	4	5	6	7	8	10	11	12	13	14
Use- No.	Member state(s)	Crop or  (crop destination / purpose of crop)	F G or I	Pests or Group of pests controlled  (additionally: developmental stages of the pest or pest group)	Application			Application rate			PHI (days)	Remarks:  e.g. safener/synergist per ha  e.g. recommended or mandatory tank mixtures
					Method Kind	Timing / stage of crop & season	Growth of crop & season	Max. number (min. interval between applications) a) per use b) per crop/ season	L product / ha a) max. rate per appl. b) max. total rate per crop/season	kg as/ha a) max. rate per appl. b) max. total rate per crop/season		
	Northern zone	Cereals	F	as specified below	Spraying	30-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	
1	DK, FI	Wheat (winter, spring, durum, spelt)	F	<i>Septoria</i> spp. <i>Puccinia triticina</i> <i>P. striiformis</i> <i>Fusarium</i> spp. <i>E. graminis</i>	Spraying	30-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	
2	DK, FI	Barley (winter, spring)	F	<i>E. graminis</i> <i>R. secalis</i> <i>Puccinia hordei</i>	Spraying	30-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	
3	DK, FI	Rye	F	<i>R. secalis</i> <i>Puccinia triticina</i>	Spraying	30-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	
4	DK, FI	Triticale	F	<i>Septoria</i> spp. <i>Fusarium</i> spp.	Spraying	30-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	

1	2	3	4	5	6	7	8	10	11	12	13	14
Use- No.	Member state(s)	Crop or  (crop destination / purpose of crop)	F G or I	Pests or Group of pests controlled  (additionally: developmental stages of the pest or pest group)	Application			Application rate			PHI (days)	Remarks:  e.g. safener/synergist per ha  e.g. recommended or mandatory tank mixtures
					Method / Kind	Timing / stage of crop & season	Growth & Max. number (min. interval between applications) a) per use b) per crop/ season	L product / ha a) max. rate per appl. b) max. total rate per crop/season	kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max		
				<i>Puccinia hordei</i>			b) 2	b) 2.00	b) 0.180			
5	DK, FI	Oats	F	<i>P. coronata</i>	Spraying	30-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	
6	EE, LT, LV	Wheat (winter, spring, durum, spelt)	F	<i>Septoria</i> spp. <i>Puccinia triticea</i> <i>P. striiformis</i> <i>Fusarium</i> spp. <i>E. graminis</i>	Spraying	40-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	
7	EE, LT, LV	Barley (winter, spring)	F	<i>E. graminis</i> <i>R. secalis</i> <i>Puccinia hordei</i>	Spraying	40-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	
8	EE, LT, LV	Rye	F	<i>R. secalis</i> <i>Puccinia triticea</i>	Spraying	40-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	
9	EE, LT, LV	Triticale	F	<i>Septoria</i> spp. <i>Fusarium</i> spp. <i>Puccinia hordei</i>	Spraying	40-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	
10	EE, LT, LV	Oats	F	<i>P. coronata</i>	Spraying	40-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	
	Central zone	Cereals	F	as specified below	Spraying	30-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	110-400	defined by latest appl.	
11	UK	Wheat (winter, spring, durum, spelt)	F	<i>Septoria</i> spp. <i>Puccinia triticea</i> <i>P. striiformis</i> <i>Fusarium</i> spp. <i>E. graminis</i>	Spraying	30-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	110-400	defined by latest appl.	
12	UK	Barley (winter, spring)	F	<i>E. graminis</i> <i>R. secalis</i> <i>Puccinia hordei</i>	Spraying	30-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	110-400	defined by latest appl.	
	Southern zone	Cereals	F	as specified below	Spraying	30-69	a) 2 (14-21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	

1	2	3	4	5	6	7	8	10	11	12	13	14
Use- No.	Member state(s)	Crop or  (crop destination / purpose of crop)	F G or I	Pests or Group of pests controlled  (additionally: developmental stages of the pest or pest group)	Application			Application rate			PHI (days)	Remarks:  e.g. safener/synergist per ha  e.g. recommended or mandatory tank mixtures
					Method / Kind	Timing / stage of crop & season	Growth Max. number (min. interval between applications) a) per use b) per crop/ season	L product / ha a) max. rate per appl. b) max. total rate per crop/season	kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max		
13	FR	Wheat (winter, spring, durum, spelt)	F	<i>Septoria</i> spp. <i>Puccinia triticina</i> <i>P. striiformis</i> <i>Fusarium</i> spp. <i>E. graminis</i>	Spraying	30-69	a) 1 b) 1	a) 1.00 b) 1.00	a) 0.090 b) 0.090	140-400	35	
14	FR	Barley (winter, spring)	F	<i>E. graminis</i> <i>R. secalis</i> <i>Puccinia hordei</i>	Spraying	30-69	a) 1 b) 1	a) 1.00 b) 1.00	a) 0.090 b) 0.090	140-400	35	
15	FR	Rye	F	<i>R. secalis</i> <i>Puccinia triticina</i>	Spraying	30-69	a) 1 b) 1	a) 1.00 b) 1.00	a) 0.090 b) 0.090	140-400	35	
16	FR	Triticale	F	<i>Septoria</i> spp. <i>Fusarium</i> spp. <i>Puccinia hordei</i>	Spraying	30-69	a) 1 b) 1	a) 1.00 b) 1.00	a) 0.090 b) 0.090	140-400	35	
17	FR	Oats	F	<i>P. coronata</i>	Spraying	30-69	a) 1 b) 1	a) 1.00 b) 1.00	a) 0.090 b) 0.090	140-400	35	
18	IT	Wheat (winter, spring, durum, spelt)	F	<i>Septoria</i> spp. <i>Puccinia recondita</i> <i>P. striiformis</i> <i>Fusarium</i> spp. <i>E. graminis</i>	Spraying	30-69	a) 2 (14) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	200-400	35	
19	IT	Spelt	F	<i>Septoria</i> spp. <i>Puccinia recondita</i> <i>P. striiformis</i> <i>Fusarium</i> spp. <i>E. graminis</i>	Spraying	30-69	a) 2 (14) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	200-400	35	
20	IT	Barley (winter, spring)	F	<i>E. graminis</i> <i>R. secalis</i> <i>Puccinia hordei</i>	Spraying	30-69	a) 2 (14) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	200-400	35	
21	PT	Wheat (winter, spring, durum, spelt)	F	<i>Septoria</i> spp. <i>Puccinia triticina</i> <i>P. striiformis</i> <i>Fusarium</i> spp. <i>E. graminis</i> <i>P. tritici-repentis</i>	Spraying	30-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	

1	2	3	4	5	6	7	8	10	11	12	13	14
Use- No.	Member state(s)	Crop or  (crop destination / purpose of crop)	F G or I	Pests or Group of pests controlled  (additionally: developmental stages of the pest or pest group)	Application			Application rate			PHI (days)	Remarks:  e.g. safener/synergist per ha  e.g. recommended or mandatory tank mixtures
					Method / Kind	Timing / stage of crop & season	Max. number (min. interval between applications) a) per use b) per crop/ season	L product / ha a) max. rate per appl. b) max. total rate per crop/season	kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max		
22	PT	Barley (winter, spring)	F	<i>E. graminis</i> <i>R. secalis</i> <i>Puccinia hordei</i>	Spraying	30-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	
23	PT	Rye	F	<i>R. secalis</i> <i>Puccinia triticina</i>	Spraying	30-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	
24	PT	Triticale	F	<i>Septoria</i> spp. <i>Fusarium</i> spp. <i>Puccinia hordei</i>	Spraying	30-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	
25	PT	Oats	F	<i>P. coronata</i>	Spraying	30-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	140-400	35	
26	ES	Wheat (winter, spring, durum, spelt)	F	<i>Septoria</i> spp. <i>Puccinia recondita</i> <i>P. striiformis</i> <i>Fusarium</i> spp. <i>E. graminis</i> <i>P. tritici-repentis</i>	Spraying	30-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	200-400	35	MR from Italy
27	ES	Barley (winter, spring)	F	<i>E. graminis</i> <i>R. secalis</i> <i>Puccinia hordei</i>	Spraying	30-69	a) 2 (21) b) 2	a) 1.00 b) 2.00	a) 0.090 b) 0.180	200-400	35	MR from Italy
	Central zone	Oilseed rape	F	<i>Leptosphaeria maculans</i> ( <i>Leptosphaeria biglobosa</i> ) <i>Pyrenopeziza brassicae</i> <i>Alternaria brassicae</i> Winter hardiness Plant growth regulation	Spraying	13-20 (autumn) 21-71 (spring)	a) 1 b) 2	a) 0.80 b) 1.60	a) 0.072 b) 0.144	110-400	56	
28	UK/IE	Oilseed rape	F	<i>Alternaria brassicae</i> <i>Pyrenopeziza brassicae</i> <i>Leptosphaeria maculans</i> Plant growth regulation	Spraying	13-20 (autumn) 21-71 (spring)	a) 1 b) 2	a) 0.80 b) 1.60	a) 0.072 b) 0.144	110-400	56	
	Northern zone	Oilseed rape	F	<i>Leptosphaeria maculans</i> <i>Sclerotinia sclerotiorum</i> <i>Alternaria brassicae</i> Plant growth regulation	Spraying	10-20 (autumn) 21-71 (spring)	a) 1 b) 2	a) 0.80 b) 1.60	a) 0.072 b) 0.144	110-440	56	



1	2	3	4	5	6	7	8	10	11	12	13	14
Use- No.	Member state(s)	Crop or  (crop destination / purpose of crop)	F G or I	Pests or Group of pests controlled  (additionally: developmental stages of the pest or pest group)	Application			Application rate			PHI (days)	Remarks:  e.g. safener/synergist per ha  e.g. recommended or mandatory tank mixtures
					Method / Kind	Timing / Growth stage of crop & season	Max. number (min. interval between applications) a) per use b) per crop/ season	L product / ha a) max. rate per appl. b) max. total rate per crop/season	kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max		
29	DK	Oilseed rape	F	<i>Leptosphaeria maculans</i> <i>Sclerotinia sclerotiorum</i> <i>Alternaria brassicae</i> Plant growth regulation	Spraying	10-20 (autumn) 21-71 (spring)	a) 1 b) 2	a) 0.80 b) 1.60	a) 0.072 b) 0.144	110-440	56	
30	EE	Oilseed rape	F	<i>Leptosphaeria maculans</i> <i>Sclerotinia sclerotiorum</i> <i>Alternaria brassicae</i> Plant growth regulation	Spraying	10-20 (autumn) 21-71 (spring)	a) 1 b) 2	a) 0.80 b) 1.60	a) 0.072 b) 0.144	110-440	56	
31	LT	Oilseed rape	F	<i>Leptosphaeria maculans</i> <i>Sclerotinia sclerotiorum</i> <i>Alternaria brassicae</i> Plant growth regulation	Spraying	10-20 (autumn) 21-71 (spring)	a) 1 b) 2	a) 0.80 b) 1.60	a) 0.072 b) 0.144	110-440	56	
32	FI	Oilseed rape	F	<i>Leptosphaeria maculans</i> <i>Sclerotinia sclerotiorum</i> <i>Alternaria brassicae</i> Plant growth regulation	Spraying	10-20 (autumn) 21-71 (spring)	a) 1 b) 2	a) 0.80 b) 1.60	a) 0.072 b) 0.144	110-440	56	
33	LV	Oilseed rape	F	<i>Leptosphaeria maculans</i> <i>Sclerotinia sclerotiorum</i> <i>Alternaria brassicae</i> Plant growth regulation	Spraying	10-20 (autumn) 21-71 (spring)	a) 1 b) 2	a) 0.80 b) 1.60	a) 0.072 b) 0.144	110-440	56	
	Southern zone	Oilseed rape	F	<i>Leptosphaeria maculans</i> <i>Pyrenopeziza brassicae</i> <i>Sclerotinia sclerotiorum</i> <i>Alternaria brassicae</i> <i>Erysiphe crucifrerarum</i> Plant growth regulation	Spraying	10-20 (autumn) 21-71 (spring)	a) 1 b) 2	a) 0.80 b) 1.60	a) 0.072 b) 0.144	110-440	56	
35	IT	Oilseed rape	F	<i>Leptosphaeria maculans</i> <i>Pyrenopeziza brassicae</i> <i>Sclerotinia sclerotiorum</i> <i>Alternaria brassicae</i> <i>Erysiphe crucifrerarum</i> Plant growth regulation	Spraying	10-20 (autumn) 21-71 (spring)	a) 1 b) 2	a) 0.80 b) 1.60	a) 0.072 b) 0.144	110-440	56	
36	FR	Oilseed rape	F	<i>Leptosphaeria maculans</i> <i>Pyrenopeziza brassicae</i> <i>Sclerotinia sclerotiorum</i>	Spraying	10-20 (autumn) 21-71 (spring)	a) 1 b) 2	a) 0.80 b) 1.60	a) 0.072 b) 0.144	110-440	56	

1	2	3	4	5	6	7	8	10	11	12	13	14
Use- No.	Member state(s)	Crop or  (crop destination / purpose of crop)	F G or I	Pests or Group of pests controlled  (additionally: developmental stages of the pest or pest group)	Application			Application rate			PHI (days)	Remarks:  e.g. safener/synergist per ha  e.g. recommended or mandatory tank mixtures
					Method / Kind	Timing / Growth stage of crop & season	Max. number (min. interval between applications) a) per use b) per crop/ season	L product / ha a) max. rate per appl. b) max. total rate per crop/season	kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max		
				<i>Alternaria brassicae</i> <i>Erysiphe crucifrerarum</i> Plant growth regulation								
37	ES	Oilseed rape	F	<i>Leptosphaeria maculans</i> <i>Pyrenopeziza brassicae</i> <i>Sclerotinia sclerotiorum</i> <i>Alternaria brassicae</i> <i>Erysiphe crucifrerarum</i> Plant growth regulation	Spraying	10-20 (autumn) 21-71 (spring)	a) 1 b) 2	a) 0.80 b) 1.60	a) 0.072 b) 0.144	110-440	56	

**B.3.4. APPLICATION RATE AND CONCENTRATION OF THE ACTIVE SUBSTANCE**

Please see table above in the efficacy information according to SANCO/2012/11251.

**B.3.5. METHOD OF APPLICATION**

Please see below efficacy information according to SANCO/2012/11251.

**B.3.6. NUMBER AND TIMING OF APPLICATIONS AND DURATION OF PROTECTION**

Please see below B.3.8 for general information and for detailed information GAP table above of the efficacy information given according to SANCO/2012/11251.

BAS 555 01 F can provide control for up to six weeks after application when applied before the start of disease attack.

**B.3.7. NECESSARY WAITING PERIODS OR OTHER PRECAUTIONS TO AVOID PHYTOTOXIC EFFECTS ON SUCCEEDING CROPS**

Minimum waiting periods or other precautions between last application and sowing or planting succeeding crops:  
Not required

Limitations on choice of succeeding crops: No

Metconazole has been applied since many years with several different formulations across a wide range of crops without any reports of phytotoxic effects on succeeding crops. Due to the broad range of crops in which the product has been used, most rotational crop possibilities have been appeared in practice. Therefore no negative impact on succeeding crops is to be expected. Consequently, there is no necessity for restrictions in the choice of following crops, even in the event of crop failure on a field which has been treated with BAS 555 01 F.

**B.3.8. PROPOSED INSTRUCTIONS FOR USE**

BAS 555 01 F is a fungicide with protectant and curative properties for disease control in winter and spring wheat, winter and spring barley, oats, rye and triticale and with protectant properties for disease control but also plant growth regulation in oilseed rape. Details are shown in the efficacy information according to SANCO/2012/11251 (chapter 8).

Time of applicationCereals

Apply BAS 555 01 F at the start of disease attack. A maximum of two applications can be made, starting from beginning of stem elongation (BBCH 30) until end of flowering (latest application at BBCH 69). The described application window can be more limited in specific countries or for specific uses. The recommended spray interval is 21 days depending on disease pressure and the general spray program strategy.

Oilseed Rape

Best results are achieved by an application of BAS 555 01 F before the start of foliar disease attack or at very early signs of infection. Once disease is established in the crop, BAS 555 01 F can stop or reduce the development of the disease. Application can be made in autumn at BBCH 13-20. Alternatively, or in addition, a spring application is possible up to beginning of fruit development (BBCH 71). The described application window can be more limited in specific countries or for specific uses.

### Number and rate of application

#### Cereals

Apply maximum 2 times per season up to 1.0 L BAS 555 01 F in 110 – 400 L of water per ha.

#### Oilseed Rape

Apply one time in autumn + one time in spring or maximum 2 times in spring up to 0.8 L BAS 555 01 F in 110 – 440 L of water per ha.

On the specific country labels additional detailed guidance for the use of the product e.g. with regard to filling and application, tank cleaning and field use are given considering the local requirements. These instructions will be covered by the dRRs to be submitted for the re-registration of the plant protection product BAS 555 01 F following the renewal of approval for the active substance metconazole.

### **B.3.9. EFFECTIVENESS**

Metconazole is a systemic fungicide, which is used worldwide in cereals and oilseed rape for the control of a broad range of important pathogens. Metconazole is active against different fungal stages on and in the plant. When applied protectively, metconazole inhibits further development of germinated fungal spores. Due to its ability to enter into the leaf and its further translocation as well as its high intrinsic activity, it can also control fungal stages that have already become established in deeper tissue layers. Metconazole is thus suitable for preventative and curative treatments.

Metconazole belongs to the triazole group of fungicides and the primary mode of action is the blocking of ergosterol biosynthesis through inhibition of cytochrome P450 sterol 14 $\alpha$ -demethylase (CYP51). The depletion of ergosterol and accumulation of non-functional 14 $\alpha$ -methyl sterols results in inhibition of growth and cell membrane disruption. Because of the mode of action triazoles belong to the demethylation inhibitors (DMI).

Due to the excellent suppression of Fusarium Head Blight and a resulting reduced contamination of cereal grain by mycotoxins, metconazole containing products are frequently used for ear treatment in wheat during flowering stage (BBCH 61-69) in the case of a likely attack with *Fusarium* spp.

In addition to the use as a fungicide, metconazole is used for plant growth regulation in oilseed rape.

Metconazole containing products has also been registered in many EU countries with different formulations based on detailed national assessments of the efficacy package in compliance with Regulation (EC) No 545/2011 and according to the Uniform Principles (Regulation (EC) No 546/2011), with which Member States authorities were satisfied.

### **B.3.10. INFORMATION ON THE DEVELOPMENT OF RESISTANCE**

Different mechanisms are associated with changes in DMI-sensitivity. It is assumed that these resistance mechanisms may be combined in an additive manner. Mutations of a single gene result in a low degree of resistance and resistance levels may increase by additional mutations of other genes. This results in a quantitative (directional) type of resistance and changes in the sensitivity of a population are gradual.

A current summary of the situation for some of the main indications where DMIs are used can be found in the FRAC SBI Working Group report (FRAC 2015). In summary, it can be said that some pathogens have shown a shift towards lower sensitivity in the period since their introduction, but that in most cases the situation has now stabilised (FRAC 2015). For the intensive cereal growing regions of Northern Europe, the sensitivity situation of *Septoria tritici* towards DMIs was widely discussed in recent years. Since the early 2000s, a shift in *Septoria tritici* to a reduced sensitivity towards different DMIs has been determined in microtitre assays with isolates taken from the most important cereal-growing regions in Europe (FRAC 2015). Isolates belonging to different CYP51-haplotypes showed variation in their sensitivity response to different DMIs, which means, correlation of sensitivity between various DMIs can be low or even negative. Sensitivity changes observed in microtitre plates do not always correlate with DMI efficacy observed in the field, since other factors such as application timing, weather conditions and disease pressure may influence fungicide efficacy. Despite sensitivity changes measured in microtiter plates,

some DMIs (including metconazole) at registered dose rates have shown reliable field performance against *Septoria tritici* throughout the past decade, whereas the efficacy of some other DMIs has significantly decreased.

There exist several reports in the past on other fungal pathogens that complete cross resistance within DMI fungicides is not always be present (Leroux et al. 2000, 2006, Kendall et al. 1986, Steva et al. 1990). The present recommendation of the FRAC SBI Working Group, however, is to consider all DMIs as one product group in which in general cross resistance exists. Within the SBI-group, there is no cross resistance between morpholines (e.g. fenpropimorph) and DMI fungicides. There is no cross resistance or a correlation of the sensitivity to DMI fungicides and other modes of action.

Sensitivities of *Septoria tritici* and *Leptosphaeria* spp. to metconazole are monitored on a regular basis. In case of field failure which cannot be explained by other agronomic parameters, the sensitivity of the target pathogens of this Resistance Risk Analysis to metconazole will be analysed.

Regulatory authorities will be informed at an early stage about all cases of field failure known to be due to resistance. Changes in sensitivity will be communicated in the FRAC working groups and may result in modifications to the recommended resistant management strategies.

#### **B.3.11. ADVERSE EFFECTS ON TREATED CROPS**

Metconazole has been applied in all EU member states since many years with several different formulations across a wide range of crops without reports of phytotoxic effects on target or succeeding crops. Consequently no negative impact is expected on treated crops.

#### **B.3.12. OBSERVATIONS ON OTHER UNDESIRABLE OR UNINTENDED SIDE-EFFECTS**

There is no evidence of any undesirable or unintended side-effect.

#### **B.3.13. REFERENCES RELIED ON**

None, except document M-CP, section 3.