A co-formulation of difenoconazole & tebuconazole for Oilseed Rape
# MAGNELLO – Oilseed Rape

<table>
<thead>
<tr>
<th>Active ingredients</th>
<th>difenconazole 100g/L + tebuconazole 250 g/L</th>
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</thead>
<tbody>
<tr>
<td>Formulation type</td>
<td>Emulsifiable concentrate (EC)</td>
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<tr>
<td>Crops</td>
<td>Winter oilseed rape</td>
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<tr>
<td>Maximum individual dose</td>
<td>0.8 L/ha OSR</td>
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<tr>
<td>Maximum number applications</td>
<td>2 in OSR (90 day interval)</td>
</tr>
<tr>
<td>Latest time of application</td>
<td>Winter OSR – Before flowering (GS59)</td>
</tr>
<tr>
<td>Diseases control</td>
<td>OSR - Light leaf spot &amp; Phoma leaf spot plus PGR effects</td>
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<tr>
<td>Pack size</td>
<td>4 x 5 litre</td>
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Phoma leaf spotting and canker
Phoma Epidemiology

- **Ascospore release from crop debris**
  - 16-23 days with rain from August 1st
  - Spore release triggered by rainfall following at least 3 days without rain

- **First Phoma leaf spots**
  - Symptoms appear 2-3 weeks following spore release (110-140 day degrees)
  - Spore release continues into spring

- **Stem canker**
  - Appear 6 months after first leaf spotting (circa 1200 day degrees)
  - Speed of development depends on variety
**Phoma infection**

**External factors**

- **Weather**
- **Proximity to airborne spores**
- **Plant size**

- August and September rainfall is the key factor determining the onset of leaf spotting.
- Crops within 200 m of previous crop are at high risk.
- Stem canker is usually more severe on late-sown or small plants.
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Controlling Phoma

- Spray if 10-20% of plants infected
- Act fast – infection can go from threshold to 100% in less than 10 days
- Small or backward crops and susceptible varieties should be priority for treatment
- Do not compromise Phoma spray timing to fit with herbicide applications

1st application of MAGNELLO 0.4 l/ha when threshold is reached

2nd application of MAGNELLO 0.4 l/ha 4-6 weeks after 1st application if new lesions are identified
Light leaf spot
Controlling Light Leaf Spot

- Where light leaf spot occurs regularly, early control with an autumn spray – usually November – is essential. Otherwise, spray when the first symptoms appear.
- Most fungicides targeted against *Phoma* should also control light leaf spot.
- In spring, at early stem extension (GS33), a fungicide is likely to be worthwhile if 25% or more plants have light leaf spot. Yield is lost if sprays are delayed.
- Use resistant varieties.
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Summary

• Optimum timing of fungicide applications is key to success
• For optimum control of *Phoma* use MAGNELLO 0.4 l/ha followed by MAGNELLO 0.4 l/ha
• Curative activity is essential to minimise infection spread.
• Trials have shown MAGNELLO can give 20% better curative control and reduction in infected stems than other triazole fungicides when applied a week after spore inoculation.
TRIALS DATA
MAGNELLO – Activity of constituents

OSR split rate 0.4 l/ha = 40 DFZ + 100g TCZ

0.4 dose Folicur is rate equivalent to 0.4 l/ha Magnello

0.32 dose Score is rate equivalent to 0.4 l/ha Magnello
MAGNELLO – Phoma Control

Source: ADAS Boxworth 2009
Variety: Catana
LSD 10.08 (25/03), 18.94 (05/05)
MAGNELLO – Phoma Control
ADAS Boxworth 2009

Source: ADAS Boxworth 2009
 Variety: Catana
 LSD 1.15
MAGNELLO – Phoma Control
ADAS Terrington 2009

Source: ADAS Terrington 2009
Variety: Catana
LSD 15.79 (25/03), 13.29 (05/05)
MAGNELLO – Phoma Control
ADAS Terrington 2009

Source: ADAS Terrington 2009
Variety: Catana
LSD 2.81
Difenoconazole – Light Leaf Spot control

Source: ADAS H. Mowthorpe 2006
Applications: 09/11/05 fb 12/12/05
Assessed: 12/05//06
MAGNELLO – OSR PGR effect
FDRA03RC-2009UN (height assessments, average of 3 trials)

2 assessments, beginning of flowering and after flowering

- **CHECK A16171A 350 EC 0.4 l/ha**
- **A16171A 350 EC 0.6 l/ha**
- **A16171A 350 EC 0.8 l/ha**
- **CARAMBA 60 SL 1.5 l/ha**

**CARAMBA 60 SL**: metconazole 90 g/ha

A16171A = MAGNELLO