

# TOLEDO

FUNGICIDE MAPP 20616

Suspension concentrate containing 430 g/l tebuconazole (39.81%), for the control of foliar diseases in winter and spring crops of wheat (excluding durum), triticale, barley, oats, rye and oilseed rape, cabbage, swedes, carrots, parsnips, horseradish. field beans and turnips.

GROUP 3 FUNGICIDE

PROTECT FROM FROST SHAKE WELL BEFORE USE

#### IMPORTANT INFORMATION:

FOR USE ONLY AS A PROFESSIONAL FUNGICIDE

Crops/situations	Maximum individual dose (I product / ha)	Maximum total dose (I product / ha / crop)	Latest time of application
Barley (spring), oats (spring), wheat (spring)	0.6	0.6	Before end of flowering and 35 days before harvest
Barley (winter), oats (winter), rye, triticale, wheat (winter)	0.6	1.2	Before end of flowering and 35 days before harvest
Oilseed rape (spring), oilseed rape (winter)	0.6	1.2	Before end of flowering or 56 days before harvest
Field bean, swede, turnip	0.6	0.6	35 days before harvest
Cabbage	0.6	0.6	21 days before harvest
Carrot, horseradish, parsnip	0.6	1.2	35 days before harvest

#### Other Specific Restrictions

This product must not be applied via hand-held equipment.

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.

#### SAFETY PRECAUTIONS

#### a) Operator Protection:

Engineering control of operator exposure must be used where reasonably practicable. However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

IF YOU FEEL UNWELL, seek medical advice (show label where possible).

WASH CONCENTRATÉ from skin or eyes immediately. WHEN USING DO NOT EAT, DRINK OR SMOKE. WASH HANDS AND EXPOSED SKIN before eating and drinking and after work.

#### b) Environmental Protection

Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads).

To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies in line with I FRAP requirements.

DO NOT ALLOW DIRECT SPRAY from horizontal boom prayers to fall within 5 m of the top of the bank of a static or flowing water body, unless a Local Environment Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1 m of the top of a ditch which is dry at the time of application. Aim spray away from water.

This product qualifies for inclusion within the Local Environment Risk Assessment for Pesticides (LERAP)

scheme. Before each spraying operation from a horizontal boom sprayer, either a LERAP must be carried out in accordance with CRD's published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for three years.

c) Storage and Disposal

DO NOT RE-USE CONTAINER FOR ANY PURPOSE. KEEP IN ORIGINAL CONTAINER tightly closed in a safe place.

KEEP OUT OF REACH OF CHILDREN. KEEP AWAY FROM FOOD. DRINK AND ANIMAL

FEEDINGSTUFFS.

RINSE CONTAINER THOROUGHLY, by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of safely.

Authorisation Holder and Marketing Company: Albaugh UK Ltd., Hamilton House, Mabledon Place, London WC1H 9BB, United Kingdom Technical Enquiries: 0800 078 9649 www.albaugh.eu



#### DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

TOLEDO is recommended for control of a wide range of diseases on winter and spring sown cereals and oilseed rape also field beans, cabbages, carrots, horseradish, parsnips, swedes and turnips.

For best disease control and yield benefit TOLEDO should be applied at an early stage of disease development, before infection spreads to new crop growth.

#### RESISTANCE MANAGEMENT

TOLEDO contains a triazole fungicide that belongs to the group of De-Methylation Inhibitors (DMI). Repeated applications of DMI products may result or may already have resulted into the occurrence of less sensitive pathogens to DMI fungicides.

Therefore, repeated application of TOLEDO alone should not be used on the same crop against a high risk pathogen such as cereal powdery mildew and Septoria leaf blotch. It is important to use the recommended rate. Tank mixtures or alternation with fungicides having a different mode of action have been shown to protect against the development of resistant forms of disease. When used in tank mixture, the recommended TOLEDO rate should be maintained. The possible development of diseases resistant to TOLEDO cannot be excluded or predicted. Where such resistant strains occur, TOLEDO is unlikely to give satisfactory control.

Resistance to some DMI fungicides has been identified in Septória leaf blotch (*Mýcosphaerella graminicola*) which may seriously affect the performance of some products. For further advice on resistance management in DMI's contact your agronomist or specialist advisor and visit the Fungicide Resistance Action Group (FRAG)-UK website.

Strains of Light Leaf Spot resistant to azole fungicides are known to exist. To avoid development of resistance apply product protectively in response to disease forecasts. Where possible, when Light Leaf Spot is present use a fungicide with an alternative mode of action or mixes containing an alternative mode of action when targeting other diseases such as Sclerotinia at mid-flowering.

#### DISEASES CONTROLLED

Triticale:

Use under curative situations (when disease is already well established and actively moving up the plant) must be avoided.

Wheat: Reduction of Septoria Leaf Spot (Zymoseptoria tritici), Glume Blotch (Stagonospora nodorum), Ear disease complex (incl.

Fusarium spp, Alternaria and Cladosporium), Yellow Rust (Puccinia striiformis) and Brown Rust (Puccinia recondita), Reduction of Septoria Leaf Spot (Zymoseptoria tritici), Yellow Rust (Puccinia striiformis), Brown Rust (Puccinia recondita)

and Fusarium ear disease (Fusarium spp.).

Barley: Yellow Rust (Puccinia striiformis), Brown Rust (Puccinia hordei), moderate control of Leaf Blotch (Rhynchosporium

secalis), and reduction of Net Blotch (Helminthosporium teres).

Rye: Yellow Rust (Puccinia striiformis), Brown Rust (Puccinia recondita), Powdery Mildew (Blumeria graminis), and moderate

control of Leaf Blotch (Rhynchosporium secalis).

Oats: Crown Rust (*Puccinia coronata*).

Swedes & Turnips: Powdery Mildew (Erysiphe cruciferarum)

Oilseed rape: Light Leaf Spot (*Pyrenopeziza brassicae*), Phoma Leaf Spot / Stem Canker (*Leptosphaeria maculans*), Dark Leaf Spot/Pod

Spot (Alternaria brassicae), Sclerotinia Stem Rot (Sclerotinia sclerotiorum), Ringspot (Mycosphaerella brassicicola).

Cabbage: Black spot (Alternaria spp.), Light Leaf Spot (Pyrenopeziza brassicae), Powdery Mildew (Erysiphe cruciferarum), Ringspot

(Mycosphaerella brassicicola).

Field Beans: Chocolate Spot (Botrytis fabae), Bean rust (Uromyces vicia-fabae)

**Carrots:** Blight (*Alternaria dauci*), Powdery Mildew (*Erysiphe heraclei*), Sclerotinia (*Sclerotinia sclerotiorum*)

Horseradish: Black spot (Alternaria spp.)

Parsnips: Powdery mildew (Erysiphe spp.)

#### **ΔΡΡΙΙ** Ι ΔΤΙΩΝ

#### Rate of use

Maximum individual dose: 0.6 litre per hectare on all named crops.

Sprayers should be THOROUGHLY CLEANED before use and filters and jets checked for damage and blockages.

A pressure of 2-3 bar (30-40 psi) is recommended.

Apply as a MEDIUM quality spray (as defined by BCPC).

Boom height and water volume should be adjusted to ensure good coverage of the crop, particularly at later growth stages. In dense crops at later growth stages, higher water volumes should be used as recommended to ensure good penetration to the lower leaves and stem bases. Disease control maybe compromised by reducing water volumes, especially where good spray coverage is difficult to achieve.

#### CROP SPECIFIC INFORMATION

#### **CEREALS**

TOLEDO may be used on all varieties of winter and spring sown wheat (excluding durum wheat), barley, triticale, rye and oats:

Maximum individual dose:

0.6 litre per hectare.

1.2 litres per hectare per crop on winter cereals where a first application is made no earlier than the beginning Maximum total dose:

of stem elongation (BBCH 30). Where a second application is made this must be applied no earlier than early

boot/flag leaf extending stage (BBCH 40).

0.6 litre per hectare per crop on spring cereals. Maximum total dose:

Water Volume Most crops

TOLEDO should be applied in 100-400 l/ha of water, with following recommendations.

100 - 200 litres/hectare

after the first node is detectable up to 250 litres/hectare Dense crops

up to 300 litres/hectare Large crops, varieties highly susceptible to disease

#### Diseases Controlled - Application Timing

Glume Blotch (Stagonospora nodorum)) (Wheat) and reduction of Septoria Leaf Spot (Zymoseptoria tritici) (Wheat, triticale).

To protect the flag leaf and ear from Septoria tritici and Septoria nodorum apply TOLEDO from beginning of stem elongation (BBCH 30) until beginning of flowering (BBCH 61).

Repeated application (winter cereals only) may be necessary where there is a high risk of Septoria Leaf Blotch- see "Resistance management". TOLEDO should be applied when the disease is active, but before it is visible on the upper leaves.

Applications made once foliar symptoms of Septoria are already present on the upper leaves will be less effective since these symptoms only develop several weeks after initial crop infection has taken place.

Yellow Rust (Puccinia striiformis) and Brown Rust (Puccinia recondita) (Wheat, triticale, barley and rye)

Apply TOLEDO at the first signs of disease.

Applications made to established infections are likely to be less effective. On winter cereals only a second application may be made 2-3 weeks later, but not before flag leaf extending stage (BBCH 41), if reinfection occurs.

# Ear Disease Complex (Wheat)

TOLEDO applied soon after ear emergence can give a good reduction of Fusarium ear blight and a reduction of sooty moulds (Alternaria and Cladosporium) and can result in cleaner, brighter ears.

TOLEDO applied between early flowering - end of flowering (BBCH 61-69) gives a good control of Fusarium ear blight, Apply TOLEDO when conditions for Fusarium infection are favourable.

# Fusarium Ear Disease (Triticale)

TOLEDO applied soon after ear emergence can give a good reduction of Fusarium ear blight. TOLEDO applied between early flowering - end of flowering (BBCH 61-69) gives a good control of Fusarium ear blight. Apply TOLEDO when conditions for Fusarium infection are favourable.

#### Powdery Mildew (Erysiphe graminis) (Rye)

TOLEDO should be applied at first signs of disease.

When treating established mildew or particularly disease susceptible varieties, improved control can be achieved by adding a half dose fenpropimorph formulation in tank mixture. See recommendations made under 'Resistance Management' and 'Compatibility'.

On winter cereals only, when disease pressure remains high application may be repeated from flag leaf extending stage (BBCH 41), if necessary - see "Resistance management".

#### Leaf blotch (Rhynchosporium secalis) (Barley, rye)

Apply TOLEDO at the very first signs of disease in spring/early summer, but not before beginning of stem elongation (BBCH 30).

On winter cereals only for a moderate control of moderate to severe infections a second application may be necessary 2-3 weeks later but not before flag leaf extending stage (BBCH 41). On disease susceptible varieties in high risk situations tank mixing TOLEDO with other products may improve control. See recommendations made under 'Resistance Management'. Contact Rotam Europe Limited for further details.

#### Net blotch (Pvrenophora teres) (Barley)

Apply TOLEDO at the very first signs of disease in spring/early summer.

On winter cereals only a second application 2-3 weeks later (but not before flag leaf extending stage (BBCH 41)) will give most effective reduction when conditions remain favourable for disease development. See recommendations made under 'Resistance Management'. When disease develops after flag leaf emergence a single application of TOLEDO will generally provide some protection.

#### Crown Rust (Puccinia coronata) (Oats)

Apply TOLEDO on first appearance of crown rust.

#### **FACTORS AFFECTING CROP SAFETY**

Occasionally, after the application of TOLEDO, some transient leaf speckling on wheat or leaf reddening/scorch on oats may occur, but these symptoms have not been shown to adversely affect yield responses accruing from the benefits of disease control.

#### OILSEED RAPE

TOLEDO may be used on all varieties of winter or spring sown oilseed rape.

Maximum individual dose: 0.6 litre per hectare. Maximum total dose: 1.2 litres per hectare. TOLEDO should be applied in 100-400 l/ ha of water, using the higher volume in dense crops. TOLEDO may be applied from start of side shoot formation BBCH 20 (for autumn applications) or start of stem elongation BBCH 30 (for spring applications) up to and including full flowering (BBCH 69) or not less than 56 days before harvest.

#### Diseases Controlled

# Phoma Leaf Spot/Stem Canker (Leptosphaeria maculans)

Leaf spot can be found from October onwards and best control of stem canker may be expected from an autumn application (BBCH 20-29) applied at first signs of disease, followed by an application from early spring (BBCH 39-65).

TOLEDO programmes applied against light leaf spot will also give a good reduction of leaf spot/ stem canker.

# Light Leaf Spot (Pyrenopeziza brassicae)

Light leaf spot can be found in early spring / summer. Apply TOLEDO as from onset of stem extension (BBCH 30) at 0.6 L/ha.

# Dark Leaf/Pod Spot (Alternaria spp)

Treatment with 0.6 I/ha TOLEDO should begin at the onset of disease i.e. when black pinhead spots first appear on the pods. Apply TOLEDO around full flowering (BBCH 65).

#### Sclerotinia Stem Rot

0.6 I/ha TOLEDO applied at early to full flowering (BBCH 61-65) will give some reduction of Sclerotinia stem rot.

#### Ringspot (Mycosphaerella brassicicola)

Spring/summer application of TOLEDO made for light leaf control may also give some reduction of this disease.

#### FIFI D RFANS

Maximum individual dose: 0.6 litre per hectare. Maximum total dose: 0.6 litres per hectare per crop from BBCH 41-79.

TOLEDO should be applied in 100-400 l/ha of water, using the higher volume in dense crops.

TOLEDO must not be applied less than 35 days before harvest.

#### Diseases Controlled - Application Timing

Chocolate Spot (Botrytis fabae) and Bean Rust (Uromyces fabae)

TOLEDO should be applied at first signs of disease as from the early flower stage (BBCH 61).

#### **CABBAGES**

Maximum individual dose: 0.6 litre per hectare. Maximum total dose: 0.6 litres per hectare per crop at BBCH 41 and above.

TOLEDO should be applied in 200-600 l/ha of water, using the higher volume in dense crops.

TOLEDO must not be applied less than 21 days before harvest. Consult processor before using TOLEDO.

# **Diseases Controlled - Application Timing**

Black spot (Alternaria spp), Light Leaf Spot (Pyrenopeziza brassicae), Powdery Mildew (Erysiphe cruciferarum) & Ringspot (Mycosphaerella brassicicola).

Best results will be obtained when spraying begins at first signs of disease, but TOLEDO should not be applied before the beginning of cabbage heart formation (BBCH 41).

#### CARROTS, PARSNIPS AND HORSERADISH

Maximum individual dose: 0.6 litre per hectare. Maximum total dose: 1.2 litres per hectare per crop at BBCH 40 and above.

Apply in 200-600 litres of water/ha.

Good cover of the foliage is vital; use the higher volume in dense or well grown crops.

TOLEDO must not be applied less than 35 days before harvest.

# Diseases Controlled - Application Timing

# Alternaria spp (Carrots and horseradish)

To reduce Alternaria infection on the leaves begin a programme of TOLEDO sprays with an application in early/mid-August, or when first signs of disease appear on the foliage always after crop stage BBCH 40. Up to 1 further application may be made at 3-week interval.

# Powdery Mildew (Carrots, parsnips)

TOLEDO gives a useful reduction of powdery mildew if applied when the disease is first seen in the crop, but applied after crop stage BBCH 40. A follow-up application may be made if necessary, after 14-21 days.

# Sclerotinia (Carrots)

A programme of TOLEDO sprays applied against Alternaria spp can also provide a useful reduction in Sclerotinia infection.

#### SWEDES AND TURNIPS

Maximum individual dose: 0.6 litre per hectare. Maximum total dose: 0.6 litres per hectare per crop at BBCH 40 and above.

TOLEDO should be applied in 200-600 I/ha of water, using the higher volume in dense crops.

TOLEDO must not be applied less than 35 days before harvest. Consult processor before using TOLEDO.

# TOLEDO®

FUNGICIDE

MAPP 20616

PROTECT FROM FROST. SHAKE WELL BEFORE USE.

GROUP 3 FUNGICIDE

Suspension concentrate containing 430 g/l tebuconazole (39.81%), for the control of foliar diseases in winter and spring crops of wheat (excluding durum), triticale, barley, oats, rye and oilseed rape, cabbage, swedes, carrots, parsnips, horseradish, field beans and turnips.

# WARNING

H361d: SUSPECTED OF DAMAGING THE UNBORN CHILD.
H410: VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P281: Use personal protective equipment as required.

P308+P313: IF exposed or concerned: Get medical advice/attention.

P391: Collect spillage.

P405: Store locked up.

P501: Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be

disposed of as non-hazardous waste.

EUH 401: To avoid risks to human health and the environment, comply with the instructions for use.

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

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Emergency Information: CARECHEM: +44 1235 239 670 (24 hour)

Net Content: **5L**e

ALBAUGH your alternative

UFI: R830-U00T-1000-YMMC

Batch number and manufacturing date: see pack