

JOIN THE REVVOLUTION

DISCOVER

REVYSOL®

 **BASF**

We create chemistry

THE REVOLUTION IS HERE

The first isopropanol-azole

Revysol® is an innovative fungicidal active ingredient for crop protection from the triazole group. Unlike conventional azoles in the market, Revysol® is the first isopropanol-azole, a unique chemistry discovered and developed by BASF. Revysol® combines outstanding performance with a favourable regulatory profile and selectivity.

Backbone of cereal fungicides

Triazole fungicides are the backbone of disease control strategies in cereals and essential for resistance management. Each triazole acts slightly differently by inhibiting sterol synthesis, and their activity spectrum varies significantly.

Farmers need a wide range of product solutions for mixing or alternating modes of action. Due to its outstanding performance and unique chemical properties, Revysol® will play a crucial role in crop protection.

Revysol® is highly effective against key fungal diseases in cereals. It is an innovative and sustainable solution that improves farm operations and reduces weather-related risks while delivering higher and more consistent yields, maximising farm income.

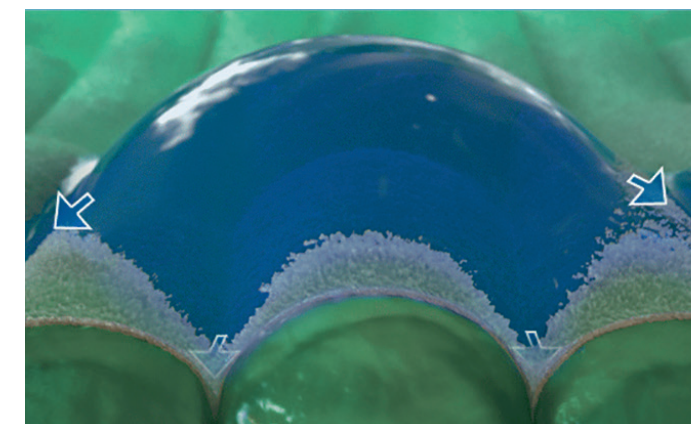
WHY IS REVYSOL® SO UNIQUE?

1. Flexi-power

Revysol® has a unique chemical constellation that allows the molecule to assume different conformations, resembling a 'hook'. This flexible 'hook' enables Revysol® to bind up to 100 times more powerfully to the target enzyme than conventional triazoles, even where target site mutations have developed.



Revysol® folds to the hook conformation binding up to 100 times more powerfully than conventional triazole fungicides.



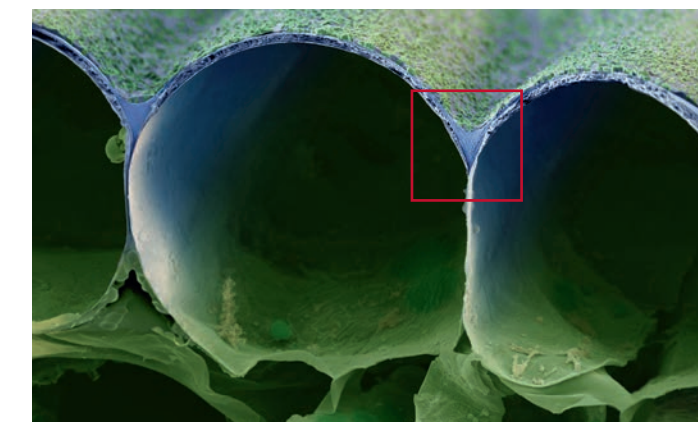
The quick uptake of Revysol® leads to immediate and strong curative activity.

2. Quick uptake

After application, Revysol® is rapidly taken up by the leaf. This explains the powerful and immediate curative effect against numerous economically significant fungal diseases.

3. Inner-leaf protection

Once taken up by the leaf, consistent and durable translocation of Revysol® allows it to be redistributed throughout the entire leaf. In addition to consistent and durable translocation, Revysol® builds inner-leaf reservoirs, ensuring long-lasting efficacy and protection.



Revysol® builds inner-leaf reservoirs leading to long lasting efficacy.

INTRODUCING LENTYMA[®] AND REVYSTAR[®] XL

66.7g/l
REVYSOL[®]
THE FIRST
ISOPROPANOL-
AZOLE

+

66.7g/l
XEMIU[®]
THE BEST
SDHI*

=

LENTYMA[®]

100g/l
REVYSOL[®]
THE FIRST
ISOPROPANOL-
AZOLE

+

50g/l
XEMIU[®]
THE BEST
SDHI*

=

REVYSTAR[®] XL

Lentyma[®] and Revystar[®] XL are two new cereal fungicides containing Revysol[®]

Lentyma[®] and Revystar[®] XL contain the first isopropanol-azole, Revysol[®] and the leading SDHI, Xemium[®].

The combination of these two different modes of action supports effective resistance management, with Revysol[®] being the only triazole with the ability to control shifted strains of *septoria*.

Lentyma[®] and Revystar[®] XL deliver powerful performance thanks to the outstanding, intrinsic activity of Xemium[®], combined with the most powerful binding triazole, Revysol[®].

Both active ingredients are extremely complementary, leading to a broad range

of activity against the most important pathogens in cereals.

Lentyma[®] and Revystar[®] XL are also characterised by their unique mobility, combining the quick uptake of Revysol[®] with the unparalleled mobility of Xemium[®].

Finally, Lentyma[®] and Revystar[®] XL show unprecedented, long-lasting protection as a result of their double depot function: Revysol[®] is well protected inside the leaf as a result of its inner-leaf reservoirs, while Xemium[®] forms on leaf depots, which release the active ingredient gradually.

WE HAVE LISTENED TO YOUR CHALLENGES AND REQUIREMENTS. THROUGH EXPERT RESEARCH AND DEVELOPMENT WE HAVE DEVELOPED LENTHYMA[®] AND REVYSTAR[®] XL TO DELIVER:

CARE

HIGHER, CONSISTENT YIELD AND INCOME

SIMPLICITY

SIMPLIFIED DECISION-MAKING AND PLANNING

CONFIDENCE

LESS RELIANCE ON PERFECT WEATHER CONDITIONS

* Source: 2018 MKDBFB ADAS Rosemaund comparing fluxapyroxad, benzovindiflupyr and bixafen (as Thore).

“What results can I expect against *Septoria* with LENTYMA® and REVYSTAR® XL?”

Lentyma® and Revystar® XL deliver excellent *Septoria* control, resulting in higher yields and income

Today, the biggest disease threat to wheat harvests across Europe is *Septoria*.

Lentyma® and Revystar® XL offer ‘best-in-class’ *Septoria* control as they contain the first isopropanol-azole, providing exceptional binding power, on average 100 times more powerful than conventional azoles.

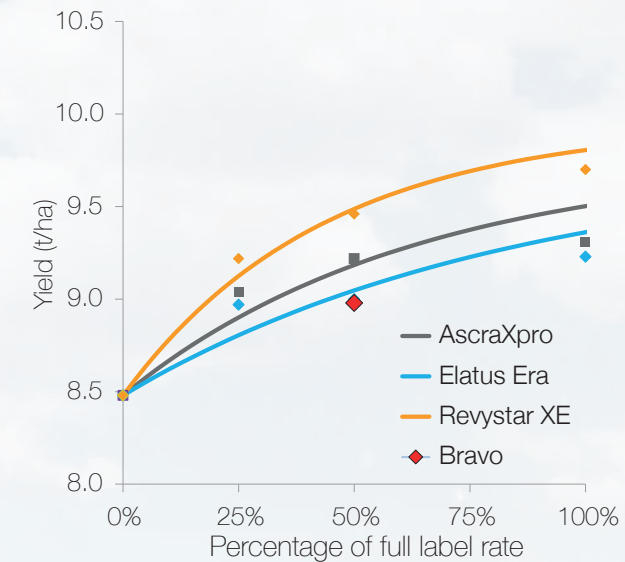
The strong performance of Lentyma® and Revystar® XL leads to healthier crops and higher, more consistent yield and income.

▶ **Lentyma® and Revystar® XL, the ‘best-in-class’ treatments against *Septoria*, are key to maximising on-farm profitability.**



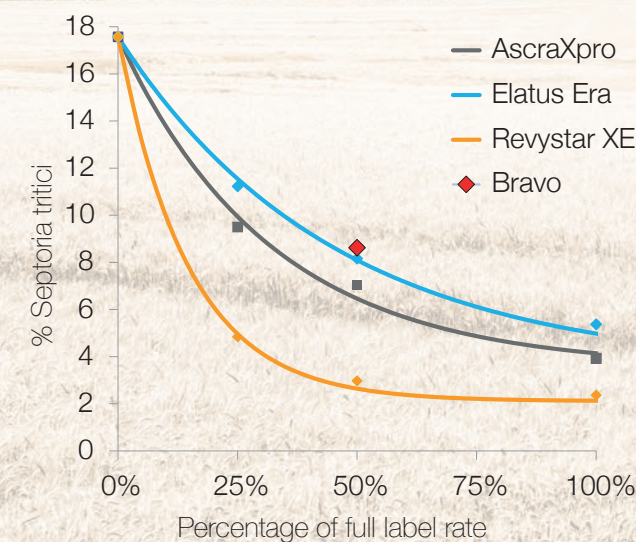
Higher yields

Septoria tritici curative 2017-19 (6 trials)



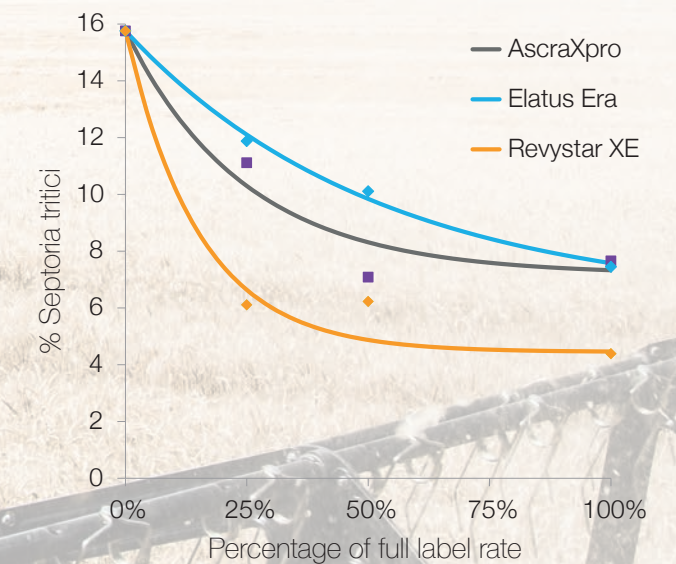
Best-in-class *Septoria* control

Septoria tritici protectant 2017-19 (15 trials)



Best-in-class *Septoria* control

Septoria tritici curative 2017-19 (6 trials)



How reliable are LENTYMA[®] and REVYSTAR[®] XL when it comes to *Septoria* resistance?

Lentyma[®] and Revystar[®] XL show excellent performance against resistant strains* of *Septoria*.

Septoria is becoming increasingly difficult to control due to the development of resistance.

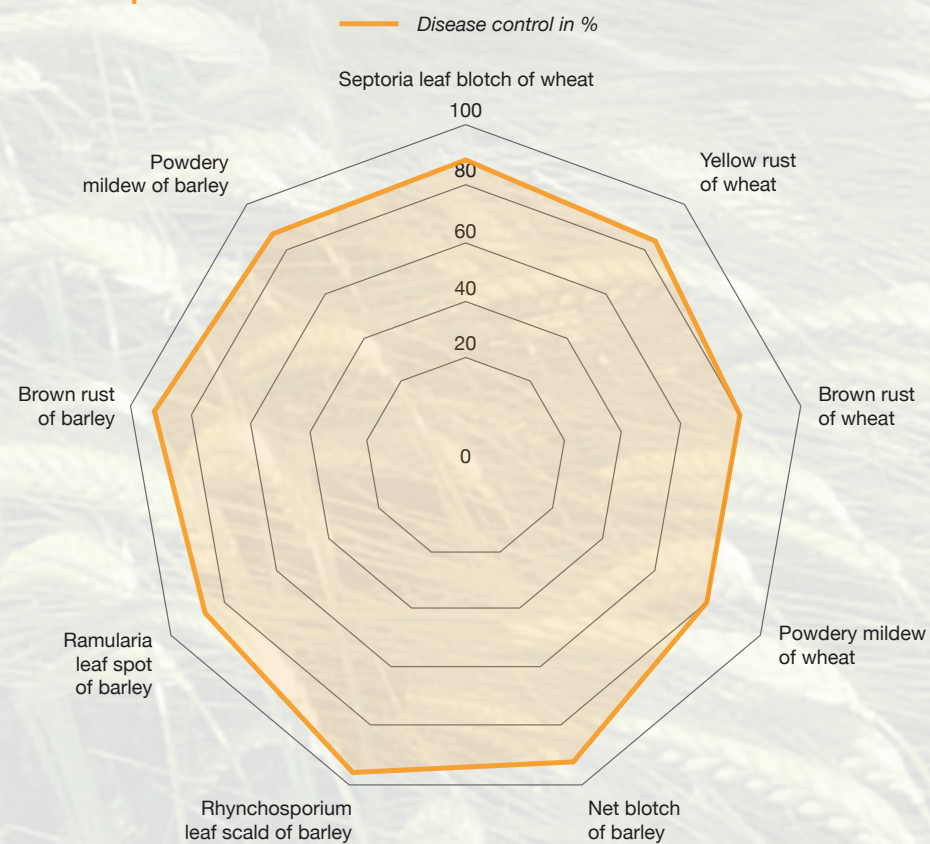
BASF have tested Lentyma[®] and Revystar[®] XL on shifted strains of *Septoria* alongside conventional triazoles. The results are conclusive: the efficacy of conventional triazoles has eroded over time, while Lentyma[®] and Revystar[®] XL achieve reliable *Septoria* control, even on shifted strains.*

The outstanding performance of Lentyma[®] and Revystar[®] XL on shifted strains is achieved thanks to the flexi-power of Revysol[®]. The flexibility of Revysol[®] allows it to adapt to the binding pocket of the fungal enzyme, leading to excellent control even on shifted strains.

Lentyma[®] and Revystar[®] XL deliver consistent *Septoria* control, even on resistant strains*, allowing growers to secure their yields and income, today and tomorrow.

*BASF trials - Efficacy of various DMI compounds against current, highly adapted strains of *Zymoseptoria tritici* in the glasshouse.

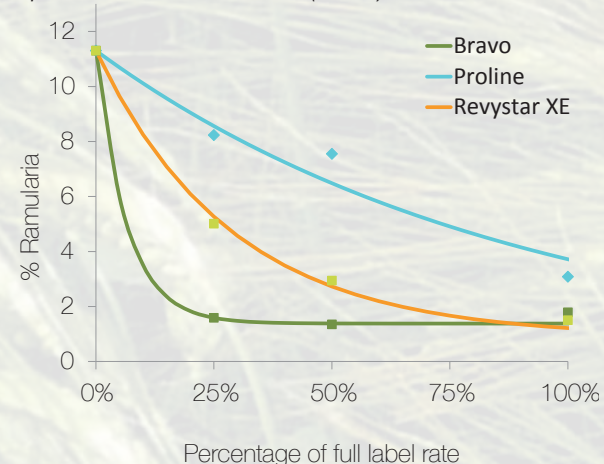
Broad spectrum control



* Source: Revystar[®] XL Bio Dossier (DocID 2018/1016143)

Ramularia control

Septoria tritici curative 2017-19 (6 trials)



What about control of other cereal diseases with LENTYMA[®] and REVYSTAR[®] XL?

Lentyma[®] and Revystar[®] XL offer excellent broad spectrum disease control

Lentyma[®] and Revystar[®] XL contain the complementary active ingredients, Revysol[®] and Xemium[®], leading to a broad range of activity against some of the most important pathogens in wheat and barley.

Lentyma[®] and Revystar[®] XL offer effective solutions to a wide range of cereal diseases.

How can LENTYMA[®] and REVYSTAR[®] XL simplify planning?

UP TO 2 WEEKS LONGER SPRAY WINDOW

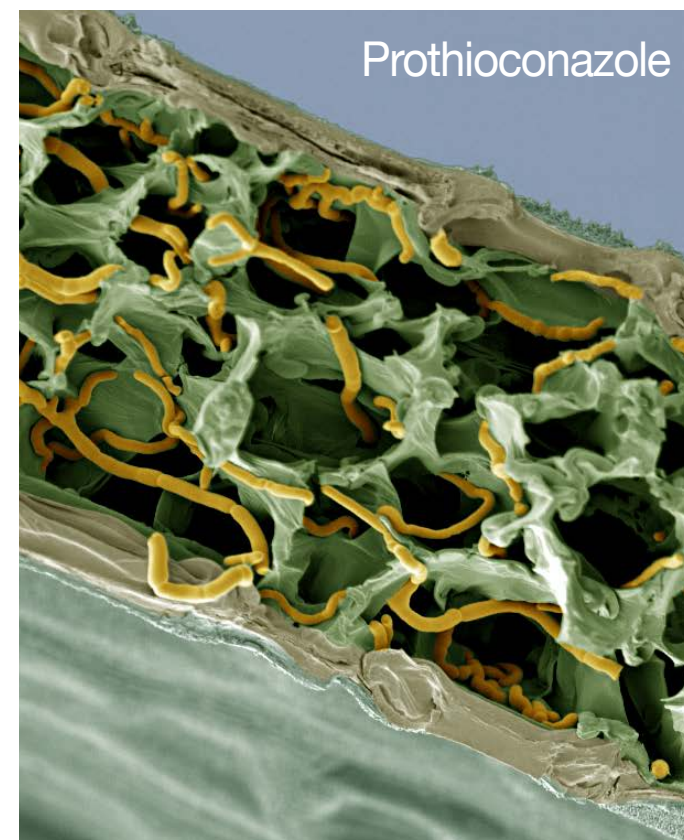
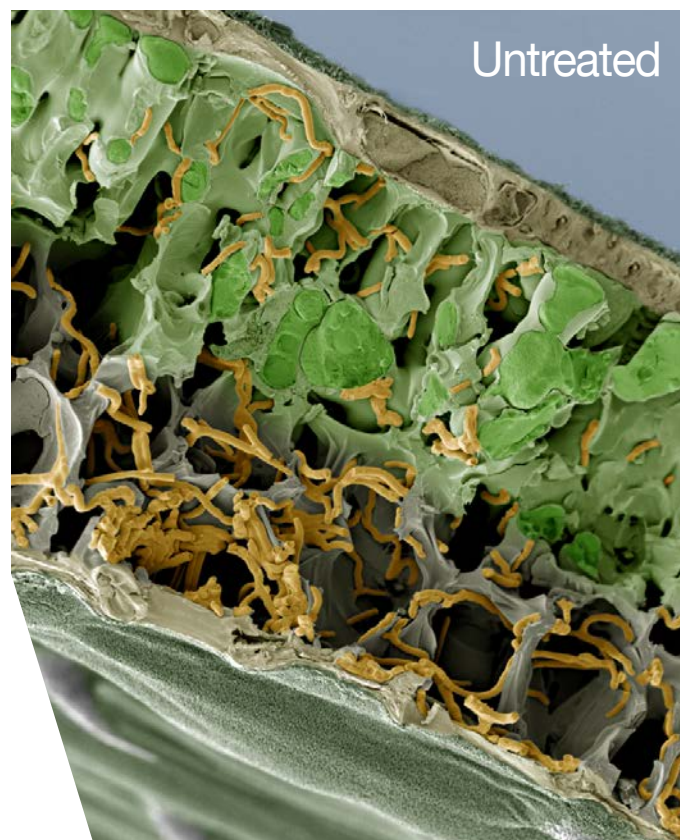
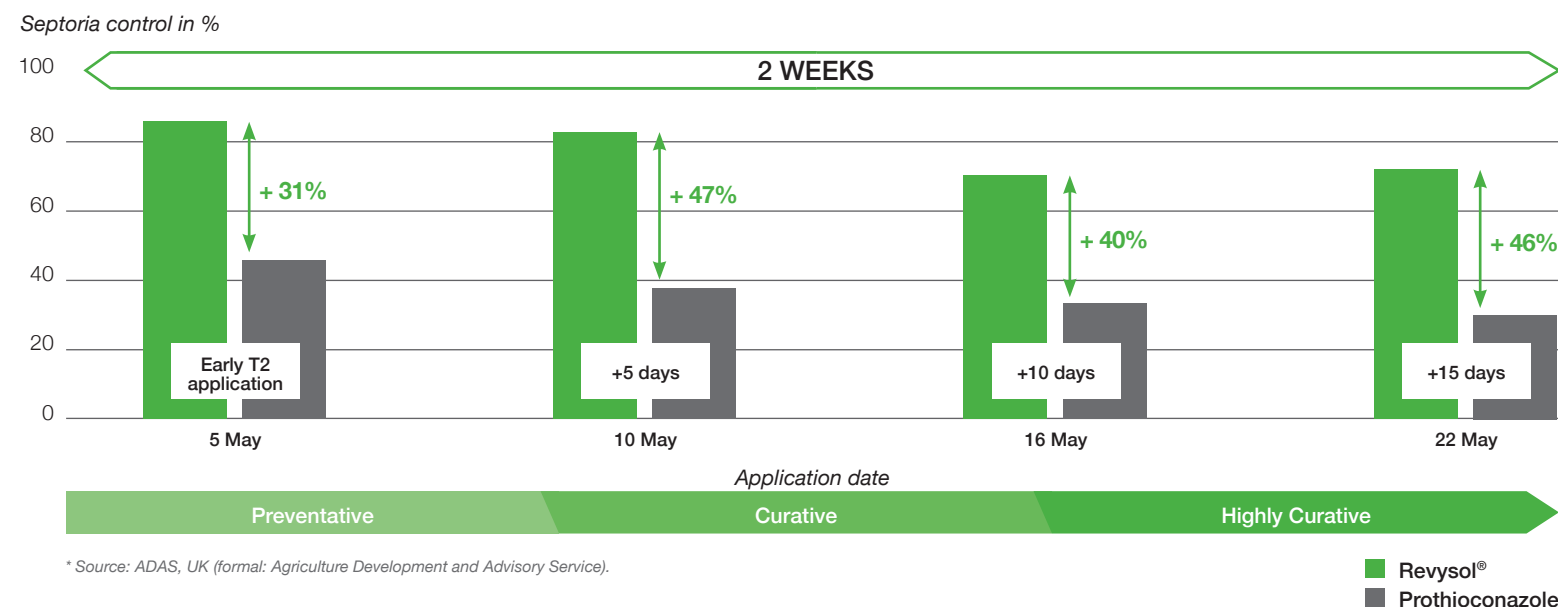
Lentyma[®] and Revystar[®] XL offer excellent curativity, ensuring efficacy across a broader spray window

Applications in curative situations are common in wheat at T2. BASF's disease monitoring confirms that wheat crops are often infected with *Septoria* at T2, even where symptoms are not visible. Regularly, delayed applications can't be avoided, especially with the spraying workloads on large farms, meaning applications in curative conditions are a common occurrence.

Thanks to its fast uptake, Lentyma[®] and Revystar[®] XL deliver immediate strong activity, even in curative situations.

► The excellent curativity of Lentyma[®] and Revystar[®] XL means greater versatility, making it easier to plan and manage workloads.

Revystar[®] XL allows for a longer spray window



Inner-leaf section of a typical wheat leaf inoculated with *Zymoseptoria tritici* (107 spores/ml; 50ml/m²; mixture of typical UK field isolates). Treated 9 days post inoculation with 50% of the field rate of prothioconazole or Revysol. Glasshouse trial by Julie Smith, ADAS. SEM pictures by Smita Kurup and Rebecca De Vos, Rothamsted Research, 18 days after infection.

How do LENTYMA® and REVYSTAR® XL perform under adverse weather conditions?

Lentyma® and Revystar® XL minimise risks from sun, rain and low temperatures

Lentyma® and Revystar® XL are long lasting fungicides whose performance on disease control is not compromised by temperature, UV light and the risk of rain at application.

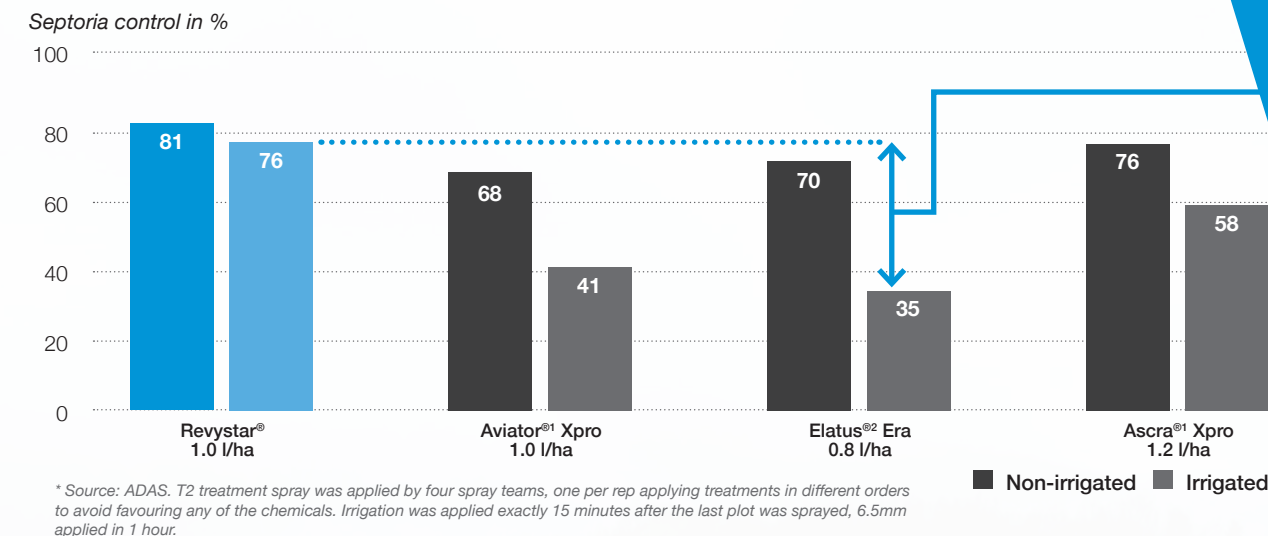
Temperatures below 13°C limit fungicide uptake. The formulation of Lentyma® and Revystar® XL enables fast uptake, leading to superior performance, regardless of the temperatures at application.

When it comes to rainfastness, our field testing shows that Revystar® provides 41% higher efficacy than conventional triazoles under rainy conditions. Whilst with UV radiation, our tests proved that Revystar® is still highly effective and showed 37% less degradation than conventional triazoles.

Lentyma® and Revystar® XL build inner-leaf reservoirs, allowing consistent and durable translocation, protecting Revysol® from external factors such as rain and sun.

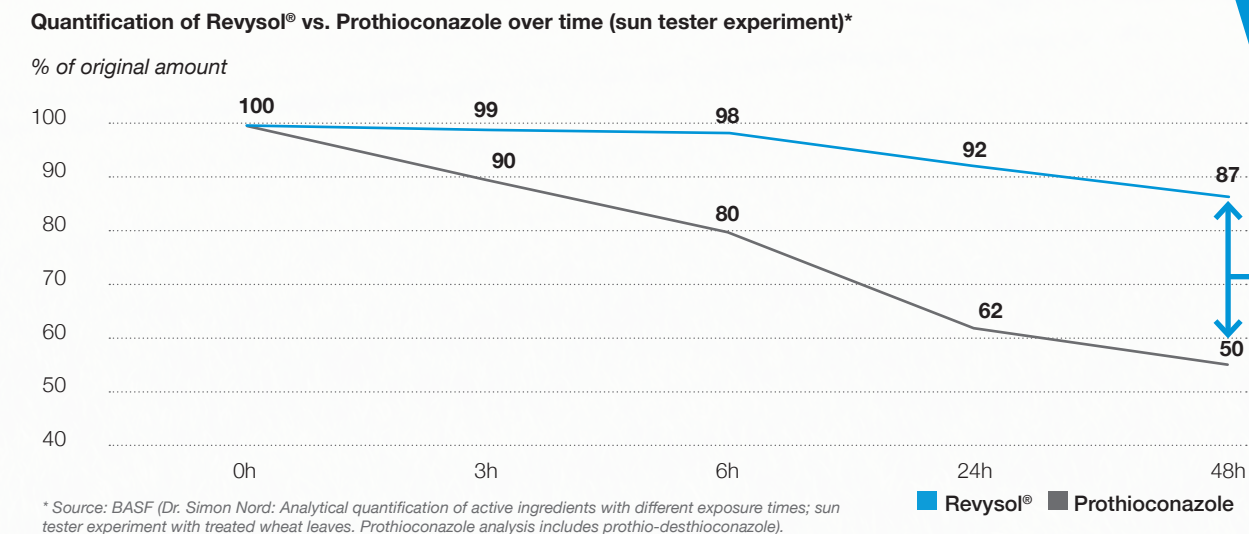
▶ **Lentyma® and Revystar® XL minimise risks from adverse weather conditions.**

Revystar® shows reliable performance under rainy conditions



+41%
HIGHER EFFICACY
UNDER RAINY
CONDITIONS

Revystar® shows reliable performance under high UV radiation



+37%
LESS DEGRADATION
DUE TO SUNLIGHT

Lentyma® HOW TO APPLY THE PRODUCT?

Active ingredients:	66.7g/l Revysol®, 66.7g/l Xemium®
Formulation	EC (Emulsifiable Concentrate)
Application rate	1.5 l/ha at 100-300 l water/ha; max. 2 applications per season
Crops	Winter wheat, spring wheat, durum wheat, spelt wheat, winter barley, spring barley, triticale and rye.
Application window	BBCH 30 - 69
Activity spectrum	Systemic fungicide with very broad-spectrum activity against all major cereal diseases, i.e. <i>Septoria</i> , rust species, powdery mildew, Ramularia, Rhynchosporium and net blotch
Special feature	High-performing formulation featuring very quick uptake of active ingredients for strong curative action with long-lasting performance thanks to the double depot function. Appropriate ratio of Revysol to Xemium for disease challenges early in the season.

Revystar® XL HOW TO APPLY THE PRODUCT?

Active ingredients:	100g/l Revysol®, 50g/l Xemium®
Formulation	EC (Emulsifiable Concentrate)
Application rate	1.5 l/ha at 100-300 l water/ha; max. 2 applications per season
Crops	Winter wheat, spring wheat, durum wheat, spelt wheat, winter barley, spring barley, triticale, rye and oats.
Application window	BBCH 30 - 69
Activity spectrum	Systemic fungicide with very broad-spectrum activity against all major cereal diseases, i.e. <i>Septoria</i> , rust species, powdery mildew, Ramularia, Rhynchosporium and net blotch
Special feature	High-performing formulation featuring very quick uptake of active ingredients for strong curative action with long-lasting performance thanks to the double depot function. High Revysol® content for maximum <i>Septoria</i> activity even with SDHI resistance

THE REVYLUTION IS HERE

CARE

Higher, consistent yield and income.

SIMPLICITY

Simplified decision-making
and planning.

CONFIDENCE

Less reliance on perfect
weather conditions.

Disclaimer

Lentyma[®], Revystar[®] XL, Revysol[®] and Xemium[®] are registered trade marks of BASF. All other products are those of other manufacturers where proprietary rights may exist. Lentyma[®] and Revystar[®] XL contain Revysol[®] and Xemium[®]. Revysol[®] contains mefentrifluconazole. Xemium[®] contains fluxapyroxad. Ascra contains bixafen, fluopyram and prothioconazole. Aviator contains bixafen and prothioconazole. Elatus Era contains benzovindiflupyr and prothioconazole.

Use plant protection products safely. Always read the label and product information before use. For further information, including warning phrases and symbols, refer to www.agricentre.basf.ie. PAY ATTENTION TO THE RISK INDICATIONS AND FOLLOW THE SAFETY PRECAUTIONS ON THE LABEL. Triple rinse containers and invert to dry at time of use.

© BASF 2019 | All rights reserved.

www.agricentre.basf.ie/revysol

 **BASF**

We create chemistry