

JOIN THE REVOLUTION

DISCOVER

REVYSTAR® XE

 **BASF**

We create chemistry

WE PROMISE YOU THE REVYLUTION

At BASF, we have been innovating for decades to solve agriculture's most pressing challenges. We have been working hard to reach solutions faster and address many of the issues.

BASF has a strong track record in successfully developing major innovations in important fungicide classes and is continuously researching new active ingredients to meet future needs of farmers.

With our brand-new solution Revystar® XE based on the new active ingredient Revysol®, we are now ready to introduce a revolutionary change to protect cereals from fungi.



WHY IS REVYSOL® SO UNIQUE?

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 combining an outstanding performance with a favourable regulatory profile and selectivity.

Backbone of cereals fungicides

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

Farmers need a diversity 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 cereals crop protection.

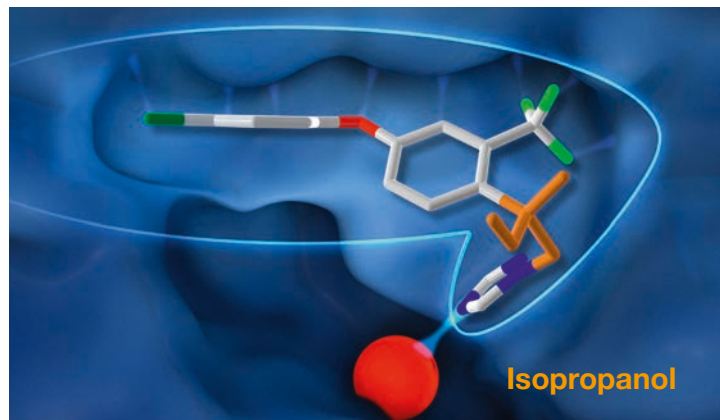
Revysol® is highly effective against key fungal diseases in cereals. It is an innovative and sustainable solution that improves farm operations and reduces weather-related risks while delivering higher and more consistent yields, maximising farm income.

Providing unique features

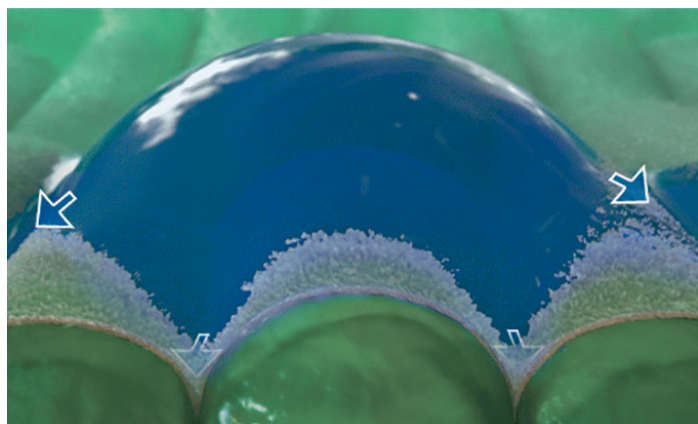
1. Flexi-power

Revysol® is the only molecule within the triazole group where the triazole “head” sits on the “neck” of a flexible Isopropanol unit. This unique chemical constellation allows the molecule to assume different conformations, resembling a “hook”.

Due to its flexible “hook”, Revysol® binds to the target enzyme up to 100 times more powerfully than conventional triazoles, also where target site mutations have developed.



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



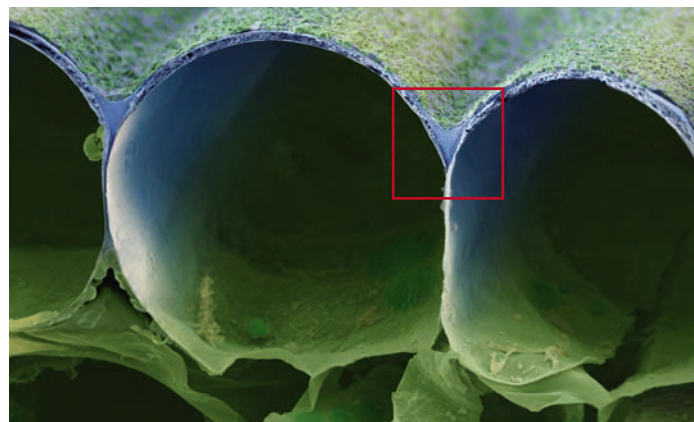
Revysol® very fast uptake leads to immediate and strong curative activity.

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

After fast uptake, consistent and durable translocation of Revysol® allows the active ingredient to be redistributed through the plant up to the leaf tip, protecting even those parts that were not reached during application. Revysol® builds inner-leaf reservoirs, leading to a long-lasting protection from environmental influences.



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

REVYSTAR® XE

not just a solution,
a full-blown
REVOLUTION.

Revysol®

THE FIRST
ISOPROPANOL-
AZOLE

+

Xemium®

THE BEST
SDHI*

=

Revystar® XE

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

Revystar[®] XE is the new cereal fungicide containing Revysol[®]

Revystar[®] XE is a unique solution containing the first Isopropanol-Azole Revysol[®], and the leading SDHI, Xemium[®].

The combination of these two different modes of action ensures unique resistance management as Revysol[®] is the only triazole controlling shifted strains.

Revystar[®] XE delivers a 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.

Revystar[®] XE is also characterized by its unique mobility as it unites Revysol[®] quick uptake with the unparalleled mobility of Xemium[®] within SDHI's group.

Finally, Revystar[®] XE shows an unprecedented long-lasting protection thanks to its double depot function: Revysol[®] is well protected inside the leaf thanks to the inner-leaf reservoirs, while Xemium[®] forms on-leaf depots, which release the active ingredient gradually.

...WE HAVE LISTENED TO YOUR NEEDS, PRIORITIES AND EXPECTATIONS AND THROUGH SCIENTIFIC RESEARCH AND EXPERTISE HAVE DEVELOPED REVYSTAR[®] XE:

CARE

HIGHER, CONSISTENT YIELD AND INCOME

SIMPLICITY

SIMPLIFIED DECISION-MAKING AND PLANNING

CONFIDENCE

LESS RELIANT ON PERFECT WEATHER CONDITIONS.

“

What results can
I expect by using
REVYSTAR® XE?

”

Revystar® XE brings superior yields and income

Today *Septoria* is the most frequent disease impacting on yield, resulting in the highest loss of farm income in Europe.

Revystar® XE offers best-in-class *Septoria* control, as it contains the first Isopropanol-Azole, providing exceptional binding power, on average 100 times more powerful than conventional azoles.

The strong performance of Revystar® XE leads to healthier crops bringing increased yields and income to farmers.

▶ **Revystar® XE, the best-in-class treatment against *Septoria*, is key to maximising business.**




“ How reliable is
REVYSTAR® XE
in the situation
of resistance? ”

Revystar® XE shows unique reliability in situations of resistance

The development of resistance reduces farmers' tools to control *Septoria*. BASF has tested Revystar® XE on shifted strains of *Septoria* alongside conventional triazoles. The results are conclusive: the efficacy of conventional triazoles has eroded over time while Revystar® XE achieves reliable *Septoria* control and wins the “worst case stress test” even on shifted strains presently found in the field.

Revystar® XE performance 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 a strong performance even in a situation of resistance.

▶ **Revystar® XE delivers consistent *Septoria* control, even in situations of resistance. This allows farmers to maximise and secure their yields and income today and tomorrow.**



“What about
REVYSTAR® XE
control of other
diseases in my
cereal crops?”

Revystar® XE shows an outstanding broad spectrum

By choosing Revystar® XE, farmers not only gain a highly effective protection of *Septoria* but also outstanding control for other relevant diseases that threaten their crops and farm income.

Revystar® XE combines two active ingredients, Revysol® and Xemium®, which are extremely complementary in disease spectrum, leading to a broad range of activity against the most important pathogens in all cereals. This makes Revystar® XE a very multifaceted solution that suits all on-farm field situations, diseases and crops such as wheat and barley.

► **Revystar® XE is the broad response to major diseases threatening farmers' fields.**

“ How can
REVYSTAR® XE
help me to
simplify my farm
management
decisions? ”

JUST **1** PRODUCT
SUITS ALL MY FIELDS
CONDITIONS

The versatility of Revystar® XE simplifies decision-making

Facing all the different field conditions involved in managing a large farm means decision-making is a complicated and time-consuming task.

The broad spectrum, adaptable dose rates and flexible application timing make Revystar® XE a highly versatile solution. Thanks to this versatility, farmers now only need one product to cover all their field conditions.

▶ **Revystar® XE simplifies decision-making, significantly improving farm management.**



UP TO **2** WEEKS
LONGER SPRAY
WINDOW

“ How can
REVYSTAR® XE
help me to
simplify the
planning of
my on-farm
operations? ”


The broader spray window
of Revystar® XE simplifies
work-flow management

Applications in curative situations are common at T2 timing. BASF's disease-monitoring confirms the frequent presence of *Septoria* at T2 timing even where symptoms are not visible. On top of that, spraying on a large farm takes time and that eventually leads to curative conditions.

Thanks to its fast uptake, Revystar® XE delivers immediate and strong activity even in curative situations.

The broader spraying window of Revystar® XE means peak workloads can be reduced and planning of on-farm operations can be simplified.





“ How can REVYSTAR® XE help me to increase the efficiency of product applications? ”

Revystar® XE allows more efficient application

Applications at low water volumes allow farmers to work at a higher speed and increase work rates.

This means they can treat more hectares in less time and use valuable resources more efficiently (water, fuel, time, machinery...).

Water volume reduction limits the droplets that arrive on the leaf, and for conventional products that means reduced performance.

In contrast, the formulation and mobility of Revystar® XE mean you can achieve high performance even at reduced water volumes.

Using Revystar® XE at 100 l/ha water volume saves farmers up to 2.5 days, increasing efficiency by 35% while saving resources and money.

► **Revystar® XE application at low water volumes saves time in the field and therefore money.**



How does REVYSTAR® XE perform under cold temperatures?



Revystar® XE is less temperature dependent

The performance of conventional triazoles is strongly dependent on temperature. Tests have proven that low temperatures, below 13°C, limit fungicide uptake.

The formulation of Revystar® XE allows a fast uptake of the active ingredient in the leaf, leading to a superior performance, regardless of the temperatures at application.

The possibility of applying Revystar® XE at low temperatures, means farmers have a potential of 6 additional hours of spraying time per day without compromising efficacy.

- ▶ **With Revystar® XE, farmers have a wider application window because low temperatures no longer limit spraying time and product performance.**





“ How long-lasting
is REVYSTAR[®] XE
under adverse
weather
conditions? ”

Revystar[®] XE is protected from sun and rain

Rain showers can wash down fungicidal deposits, reducing the long-lasting protection of fungicides. Our field testing shows that Revystar[®] XE provides 41% longer efficacy than conventional triazole and keeps its reliable performance even under rainy conditions.

Also, sunlight can reduce the long-lasting protection of fungicides. When exposed to UV radiation, our tests proved that Revystar[®] XE is still highly effective and showed 37% less degradation than conventional triazoles.

This high protection is because after a fast uptake, Revystar[®] XE builds inner-leaf reservoirs, allowing a consistent and durable translocation and protecting the active ingredient from external factors.

▶ **Revystar[®] XE reduces the risk that rain or UV light compromise the disease control.**

Revystar[®] XE

HOW TO APPLY THE PRODUCT?

Active ingredients:	100 g/l Revysol [®] , 47.5 g/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, <i>Ramularia</i> , <i>Rhynchosporium</i> 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

REVYSTAR® XE IS THE NEW REVYLUTION

CARE

Higher, consistent yield and income.

SIMPLICITY

Simplified decision-making
and planning.

CONFIDENCE

Less reliant on perfect
weather conditions.

Disclaimer

Revystar® XE and Revysol® are registered trade marks of BASF. Revystar® XE contains Revysol® and Xemium®. Revysol® contains mefentrifluconazole. Xemium® contains fluxapyroxad. Always read the label and product information before use. For further product information including warning phrases and symbols, you can refer to agricentre.basf.co.uk

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 **BASF**

We create chemistry