LS PROMET

Life Scientific has built a strong reputation developing reverse-engineered products which are always at least as good as proprietary brands.

Over the years, our chemists have gained industry-leading experience in developing novel and effective crop protection formulation technology, and LS PROMET is the first product in our range which uses this experience to bring a new state-of-the art product to the market.

LS PROMET is a unique co-formulation containing two complementary and well-proven triazoles, 100g/L prothioconazole and 48g/Lmetconazole, formulated as an emulsifiable concentrate, approved with PCS number 07148.

For more information including product label, safety data sheet and compatible tank-mixes see the Life Scientific website ie.lifescientific.com or download the App to get product information direct to your phone.

CROP APPROVALS

LS PROMET is approved for control of fusarium, *Septoria tritici* and brown rust in the following cereal crops and can be a useful part of any fungicide strategy at T1, T2 or T3.

CROP	MAX IND. DOSE	MAX NO. TREATMENTS	LATEST TIME OF APPLICATION
Winter and spring wheat, Winter and spring triticale, Durum wheat, Spelt	1L/Ha	1	BBCH 69

DISEASE SPECTRUM

The two active ingredients make an ideal combination to help growers control some key cereal diseases when used as part of a programme. According to AHDB, prothioconazole and metconazole have the following disease ratings in wheat, giving broad-spectrum effective crop protection.

Active ingredient	Eyespot	Mildew	*Septoria tritici*	Yellow rust	Brown rust	Ear blight#
metconazole	-	L	(2)	(4)	4	3
prothioconazole	L	L	2	4	2	3

5 = Highest control level
1 = Lowest control level
L = Label claim of activity where products have not been tested by AHDB
() Based on limited or old data
Ear blight caused by *Fusarium culmorum* or *Fusarium graminearum*. Performance against Microdochium species may differ.

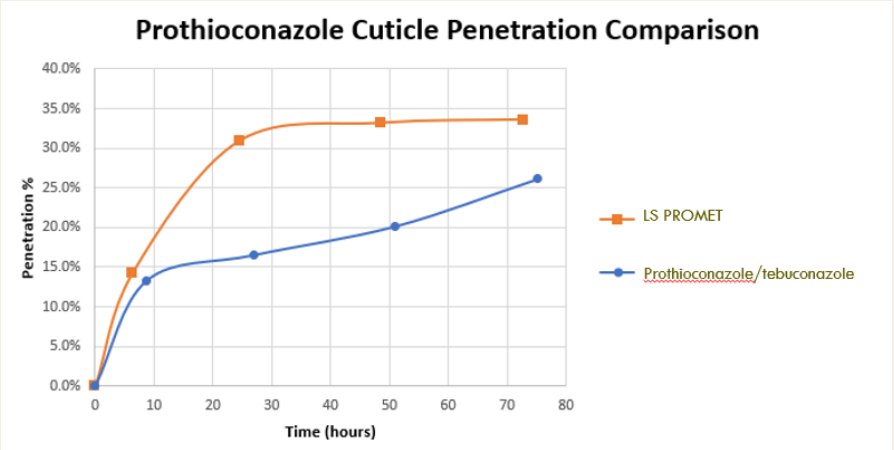
Source: AHDB's Fungicide activity rating for major wheat diseases, reviewed March 2024.

OPTIMISED FORMULATION

LS PROMET was developed by Life Scientific's scientists to optimise the benefits of its two active ingredients – prothioconazole and metconazole.

The formulation gives better penetration into the plant than a tank-mix of straight prothioconazole and metconazole products, or a tested co-formulation of prothioconazole plus tebuconazole.

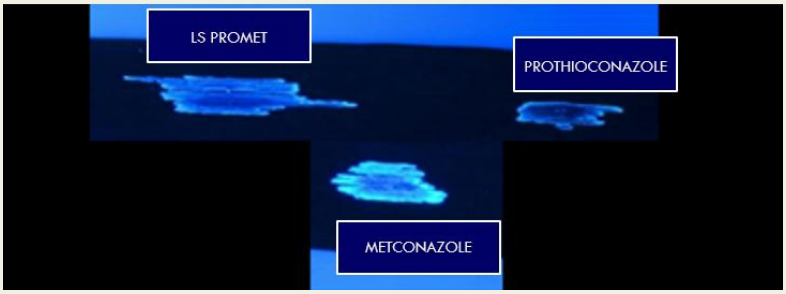
The chart below shows penetration of prothioconazole across the plant cuticle. More of the fungicide entered the plant from the LS PROMET formulation compared with a prothioconazole/tebuconazole co-formulation, allowing the active ingredients to target disease inside the leaf more effectively.

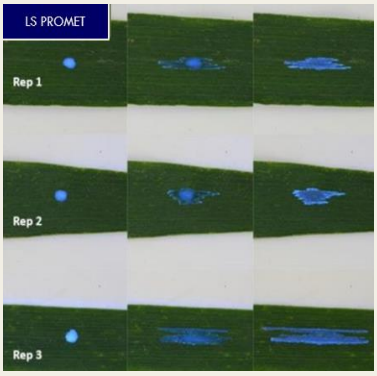


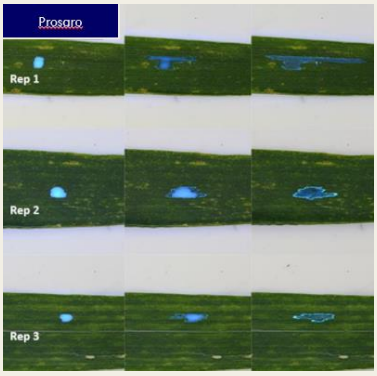
Source: Clariant

ACTIVITY ON THE LEAF

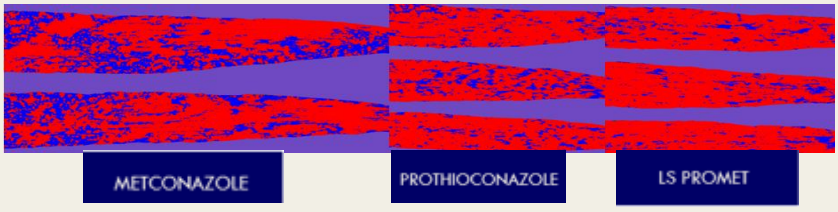
- Work conducted at Silsoe Applications Unit, internationally recognised for testing application of pesticides.
- Investigated performance of LS PROMET when sprayed on wheat plants.
- Looked at coverage, spreading and leaf retention.
- Compared with straight prothioconazole, metconazole and a prothioconazole/tebuconazole co-formulation (Prosaro).
- Droplets of LS PROMET had a greater spread on the leaf than the straight products or Prosaro.







- LS PROMET gave better coverage of the wheat leaf than the straight products.



- Improved spreading and coverage allow better protection of the leaf surface and maximum chance to target disease inside the plant.

DISEASE CONTROL

The following diseases and susceptibilities are stated on the LS PROMET label:

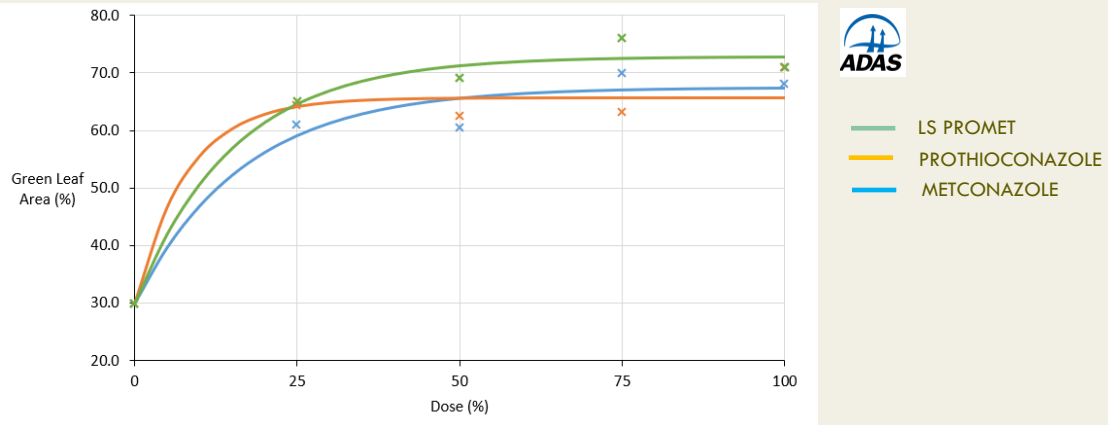
DISEASE CONTROLLED	SUSCEPTIBILITY
Fusarium spp.	Moderately susceptible
Septoria tritici	Moderately susceptible
Brown rust	Susceptible

Reduction of septoria
For reduction of septoria, apply as soon as the disease is seen in the crop but before disease is well established. Application may be made any time from crop BBCH 30 to BBCH 69. To protect the yield-producing upper leaves spray from BBCH 37-BBCH 65 as part of a planned programme.

Control of brown rust
For optimum control of brown rust, apply as soon as the disease is seen in the crop but before disease is well established. Application may be made any time from crop BBCH 30 to BBCH 69.

A trial was conducted in the UK in 2023 by ADAS to investigate control of brown rust with doses ranging from 25% to 100% of the label dose (1L/Ha), applied as a single application at GS 31.

When assessed after 11 days, LS PROMET had significantly more green leaf area and less brown rust than straight prothioconazole or metconazole, especially when applied at 0.75L/Ha and above, showing that the combination of the active ingredients in the optimised formulation gave improved disease control in the trial.



Source: ADAS