BARLEY CROP GUIDE

Aviator® Xpro and Delaro®

Choosing the best fungicide programme for Barley.

Aviator Xpro and Delaro offer the perfect fungicide choice for barley whatever the disease threat you need to control.

Barley is under threat from a number of key diseases in New Zealand: Scald and Ramularia leaf spot are the main ones but leaf rust and net blotch can also pose a serious threat.

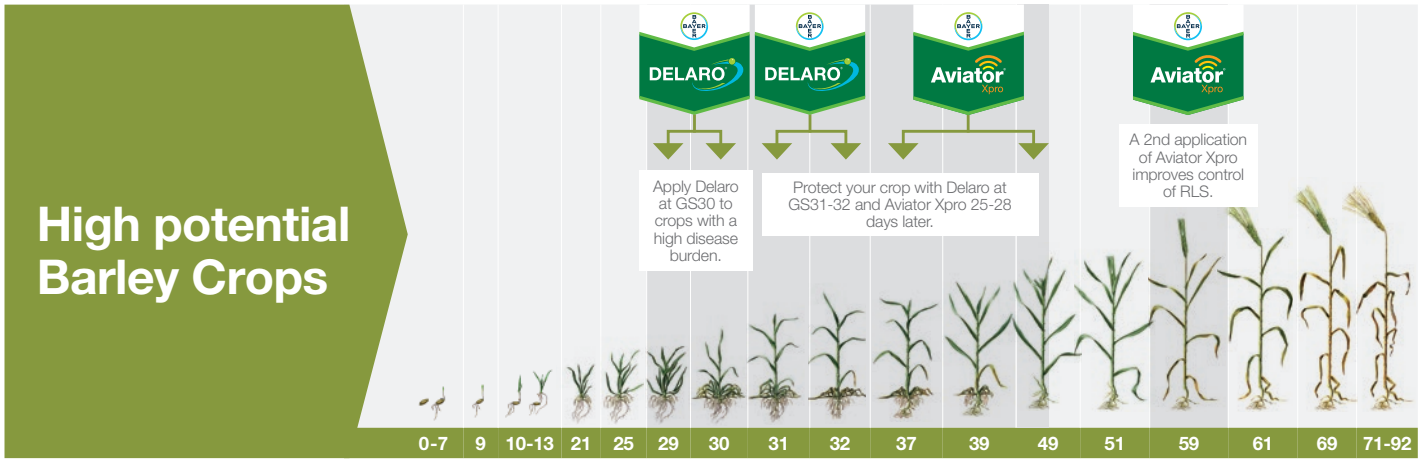
Making the right fungicide choice for high potential crops

When planning your fungicide programme, it is especially important to ensure you retain flexibility to control Ramularia leaf spot (RLS) by applying a SDHI containing fungicide at GS37-45. This is because, unlike scald which can effectively be controlled with both Delaro and Aviator Xpro, the control of Ramularia leaf spot requires the use of Aviator Xpro.

To reduce the risk of resistance developing to SDHI fungicides, a global (FRAC) agreement has been adopted limiting the number of SDHI fungicide applications per crop to just two. This means Aviator Xpro should always be applied at GS37-45.

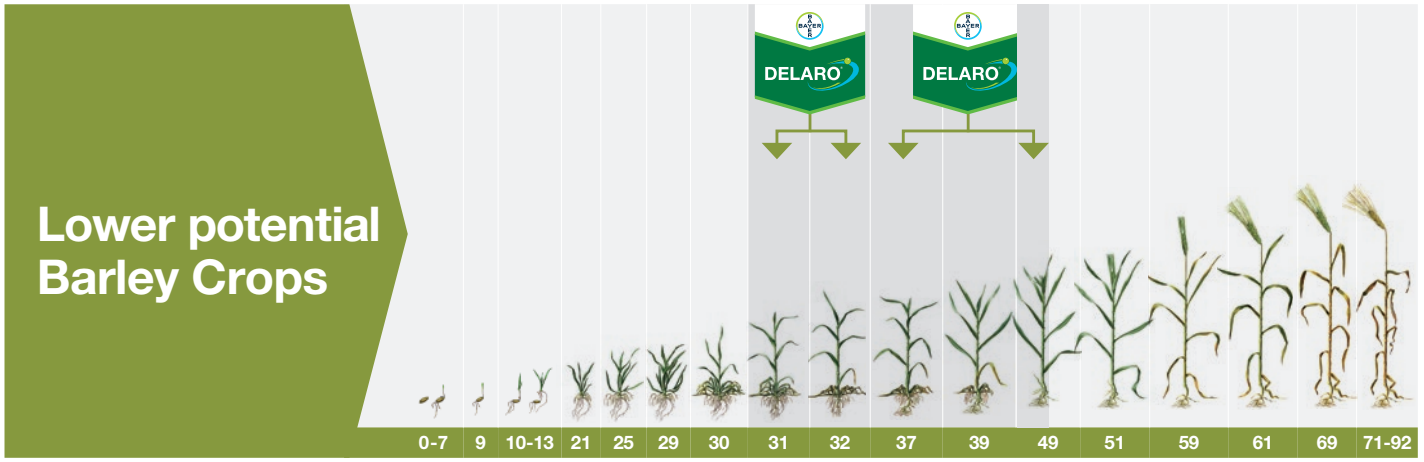
A standard fungicide programme based on Delaro 750 ml/ha at GS31-32 followed by Aviator Xpro 1.0 L/ha at GS37-45 will ensure control of the key diseases, scald and Ramularia leaf spot whilst also ensuring net blotch and leaf rust will not be missed.

By incorporating Delaro, a non-SDHI fungicide at GS31-32, for high potential barley crops, this programme retains the flexibility to apply a second SDHI fungicide at GS59, while still following the FRAC resistance guidelines. Bayer NZ trials have established that a second application of Aviator Xpro at GS59 has improved the control of Ramularia leaf spot. Likewise, an additional application of Delaro at GS30 has improved scald control in crops coming out of winter with a high disease burden.



Making the right fungicide choice for lower potential crops

Some spring planted barley crops have a limited yield potential due to a later planting date or because they aren't irrigated. In these situations, Ramularia leaf spot may have limited impact due to the shorter time available for grain fill. For these crops it may be appropriate to apply two applications of Delaro for a more cost-effective approach.



Common Diseases in Barley

Scald

A constant threat

Infecting both autumn and spring planted varieties, scald is a common disease in barley in New Zealand and one we are all familiar with.

Scald survives from one crop to the next on crop debris and thrives under cool moist conditions. During the winter, scald can be found at low levels in many barley crops but in the spring, if left untreated, it can rapidly develop and lead to severe yield losses.

The key to controlling scald is to apply a preventive fungicide such as Delaro at GS31-32 as the crop canopy starts to develop.

Ramularia Leaf Spot

The unseen challenge

The incidence of Ramularia leaf spot has increased significantly during recent years to the point whereby New Zealand has one of the highest incidences of this disease in the world.

Ramularia leaf spot is a seed-borne disease but one that cannot be controlled by available seed treatments. Therefore it is prudent to assume all barley seed is infected.

When infected seed is planted, Ramularia leaf spot develops unseen within the plant until ear emergence when the upper leaves of the crop develop extensive leaf speckling. If an appropriate fungicide has not been applied, extensive leaf loss can rapidly develop.

Keeping leaves green and free from disease is important for yield production for both autumn and spring barley.

Net Blotch

Be vigilant

Net blotch is widespread in New Zealand but its occurrence is sporadic. While most often seen in second year barleys, it will infect first year barley crops so remain vigilant when inspecting your crops. Whether it is the normal “net” form we generally see, or the more uncommon “spot” form illustrated above, net blotch will severely reduce yields if not controlled.

Leaf Rust

A serious threat

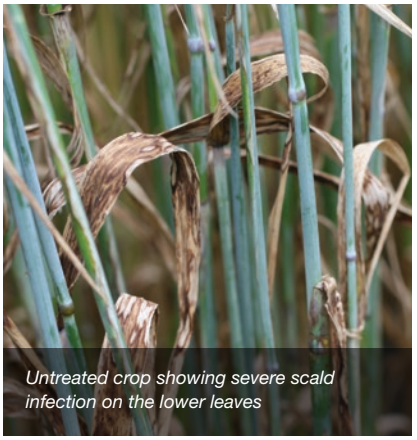
Leaf rust in barley isn’t the most common disease you will encounter, but it does have a serious impact if not controlled. The photo above, which was taken at the FAR Chertsey site in December 2016, illustrates the potential for leaf rust to significantly reduce green leaf area.

Aviator Xpro enhances crop greening and long-lasting leaf retention, creating impressive yield responses.

Aviator Xpro and Delaro in action

A programme of Delaro followed by Aviator Xpro resulted in excellent disease control and impressive crop greening

Untreated crop showing Ramularia leaf spot on the upper leaves



Untreated crop showing severe scald infection on the lower leaves

Aviator Xpro Benefits

- Excellent control of all barley diseases (especially Ramularia leaf spot), coupled with strong crop-greening effects ensures barley crops can realise their full yield potential
- Straightforward recommendations ensures Aviator Xpro is simple and convenient to use
- Formulated in the correct ratio to minimise resistance risk

Delaro Benefits

- Delaro is the ideal barley fungicide for use at GS31-32 ensuring excellent disease control at a cost-effective price
- Straightforward recommendations ensures Delaro is simple and convenient to use
- Formulated in the correct ratio to minimise resistance risk and offering a different mode of action, Delaro is the perfect partner to Aviator Xpro

Both Delaro and Aviator Xpro combine fungicides with different modes of action in a ratio that provides a strong anti-resistant defence. Co-formulated fungicides are commonly used around the world and no wonder - they offer excellent disease control, reduced risk of mistakes and reduced costs, all conveniently packaged in a single can.

AVIATOR XPRO AND DELARO: USE AT A GLANCE FOR BARLEY

	AVIATOR XPRO	DELARO
DISEASE	A range of diseases (see table below)	
RATE	1.0 L/ha	750 ml/ha
APPLICATION TIMING	Apply at the first sign of disease. Re-apply 3-4 weeks later if required	
APPLICATION METHOD	By tractor mounted hydraulic boom sprayer or using aerial application	
APPLICATION RATE	Ground: 120 L/ha Aerial: 50 L/ha	Ground: 200 L/ha Aerial: 50 L/ha
RAINFASTNESS	Rainfast immediately when applied to a dry crop	Rainfast 1 hour after application when applied to a dry crop
WITHHOLDING PERIOD	GS45 (grain) or 42 days (forage)	56 days (grain) or 42 days (forage)
COMPATIBLE	Compatible with a wide range of commonly used fungicides and insecticides	
PACK SIZE	10 litres	10 litres
CERTIFIED HANDLER	Not required	Required
SUMMARY OF DISEASES CONTROLLED:		
	Scald	Scald
	Ramularia leaf spot	Ramularia leaf spot
	Leaf rust	Leaf rust
	Net blotch	Net blotch

Territory Sales Managers

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Insist on Barley fungicides from Bayer.

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