

DISEASE CONTROL IN BARLEY

NIAB advocates a three-spray winter barley fungicide programme, with T1 applications designed to keep the crop clean until the more critical T2 timing. Products vary in their efficacy on various diseases in winter barley. But, with a good range of available actives, it is possible to use effective SDHIs, strobilurins and azoles in balanced mixtures and sequences.

Rhynchosporium remains a major yield robber in barley, but **net blotch** is becoming more of a concern; fewer seed treatments are available with creeping levels of fungicide resistance to a number of available modes of action.

Ramularia has a strong track record of developing resistance to fungicides and growers are currently reliant on azoles. Mefentrifluconazole, found in Revystar XE, is a key active against ramularia with prothioconazole also having some efficacy. Their use in a mix with a strobilurin

or SDHI will help to manage other foliar diseases, indirectly reducing the potential for late-season ramularia to make its way into the crop.

A debate remains around the addition of folpet to barley fungicide programmes. Although trial results are inconsistent, using it at T1 and T2 may be merited if the season is perceived to be high risk for disease.

In NIAB Agronomy Membership trials, yield response to fungicides in spring barley has been more inconsistent than in winter crops. The later the crop is sown, the shorter the growing season and the less disease pressure it will experience. But while disease risks in spring barley are lower; with grain prices and establishment costs high, managing disease in a targeted way is still important. Diseases affecting this crop are the same as winter barley and most products are also approved in spring barley.

Efficacy star ratings (out of 5 stars) using data from AHDB Fungicide Performance trials and NIAB membership trials together with active ingredient assumptions

Product	Rhynchosporium	Net blotch	Ramularia	Brown rust	Mildew
a.i. prothioconazole	★★	★★★	(★★)	★★	★★★
a.i. folpet	★		★★		★
Comet 200	★★	★★		★★★★	
Siltra XPro	★★★	★★★	(★★)	★★★	★★★
Ascra XPro	★★★★/★	★★★★	(★★★★)	★★★	★★★
Elatus Era	★★★	★★★	(★★)	★★★	★★★
Revystar XE	★★★★	★★★	★★★★	★★★	★★

The efficacy of prothioconazole against ramularia will vary due to the prevalence of fungicide resistance

Net blotch (Pyrenophora teres)



Rhynchosporium commune



Ramularia collo-cygni

