

For Publication, Thursday, 3 December, 2015

SDHI Resistant *Septoria* Found in the Field

Teagasc researchers have identified new strains of *Zymoseptoria tritici*, the cause of septoria tritici blotch on wheat, with reduced sensitivity to the SDHI group of fungicides. The most insensitive of these strains have been found at a low frequency at Teagasc Oak Park, Carlow following routine sampling at the end of the 2015 season.

In laboratory tests these strains survived up to 100 times the concentration of SDHI fungicides compared to the most insensitive strains found in previous years. Subsequent analysis of these isolates confirmed the presence of the mutation C-H152R in the SDHI target site. An additional as yet unidentified strain showing reduced sensitivity, although not as extreme as those found at Oak Park, was also identified in a crop in the north east of the country. These strains have not previously been found in field populations and therefore their fitness (e.g. their ability to survive the winter) remains unknown.

John Spink, Head of the Teagasc Crops Science Department said: “Further research is on-going to examine the potential impact of these strains on disease control, while intensive nationwide monitoring is planned for early spring.”

Given the low frequency at which these strains have so far been found, it is expected that good septoria tritici blotch control will still be possible with SDHI fungicides in the coming season. However, any increase in their frequency will threaten the future efficacy of this very valuable group of fungicides. It is therefore vital that all farmers use good anti-resistance practices. Recent research at Teagasc Oak Park has shown that it is the number of times a group of fungicides is used and the use of effective mix partners that are most critical to slow the development of resistance.

Teagasc plant pathologist, Steven Kildea said: “Despite recent declines in the efficacy of azole fungicides they are still an integral part of fungicide programmes for both disease control and as an anti-resistance partner. Therefore, for the coming

season; SDHIs should only be used in mixture with a robust rate of azole and a multisite fungicide, and should never be applied more than twice during the season.”

Ends

**Issued on behalf
of Teagasc by:**

**Eric Donald, Head of Public
Relations
Tel: 059 9183408, 086 8381112
Email: eric.donald@teagasc.ie**

Date: 03 December, 2015

