

Crediton Monitor Farm

Meeting 14 : Fungicide Strategies

2 March 2017

The Red Lion, Shobrooke

Speaker: Dr Paul Gosling, AHDB

For more information, visit:
cereals.ahdb.org.uk/crediton



James Lee, Crediton Monitor Farmer

Meeting summary – key messages

1. Key issues for economic use of fungicides – timeliness, variety choice and rates
2. Well-chosen varieties, established well will allow more flexible timing of fungicide application for effective control and may allow reduced rates or programmes.
3. Prudent use and mix of fungicides will prolong efficacy of current ‘chemistry toolbox

Use these links for more information on disease management:

- Fungicide performance [website](#)
- Disease monitoring [website](#)
- Fungicide resistance action group [website](#)
- Wheat disease management [guidance](#)
- Barley disease management [information](#)
- Oilseed rape disease management [information](#)



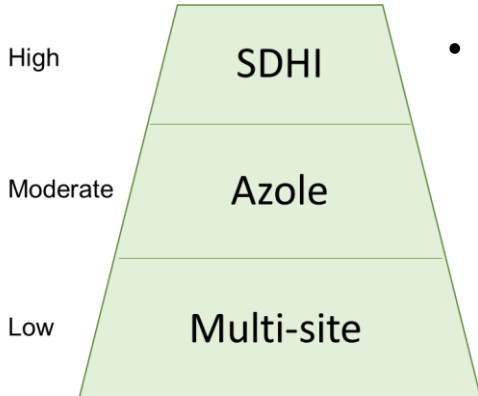
Fungicide strategies

What do we know – septoria?

- Azole sensitivity continues to decline, but still come useful activity when used protectantly
- Mutations to SDHIs now widespread – most have low to moderate resistance factors
- Cross resistance to key SDHI mutations appears to be strong
- SHDI mutations with high resistance factors are possible – so far rare
- Robust programmes will still provide good control in 2017

Robust septoria control and low selection: build mixtures from the foundation up

Resistance risk



- Minimum SDHI dose and number of treatments for effective control
- Limit number of azole treatments
- Robust azole doses at T1/T2 when mixing with SDHIs
- Maximise use of multi-sites throughout spray programme (*current advice from Bayer on Aviator is only include at T1 where in protective situation*)

Maximum permitted 2 applications of products containing SHDI

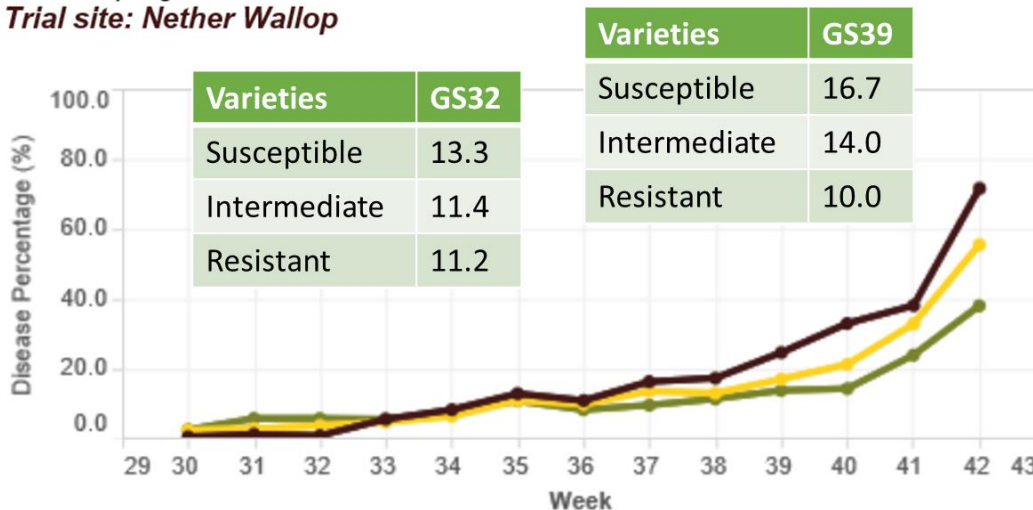
Fungicide resistance: what do we know – net blotch?

- Sensitivity to azoles remains high
- Sensitivity to strobis is variable – lower than in the past (F129L mutation)
- SDHI resistance a real concern, though not yet widespread, combine with azoles for efficacy and anti-resistance

Disease resistance varieties mean more flexibility of fungicide timing

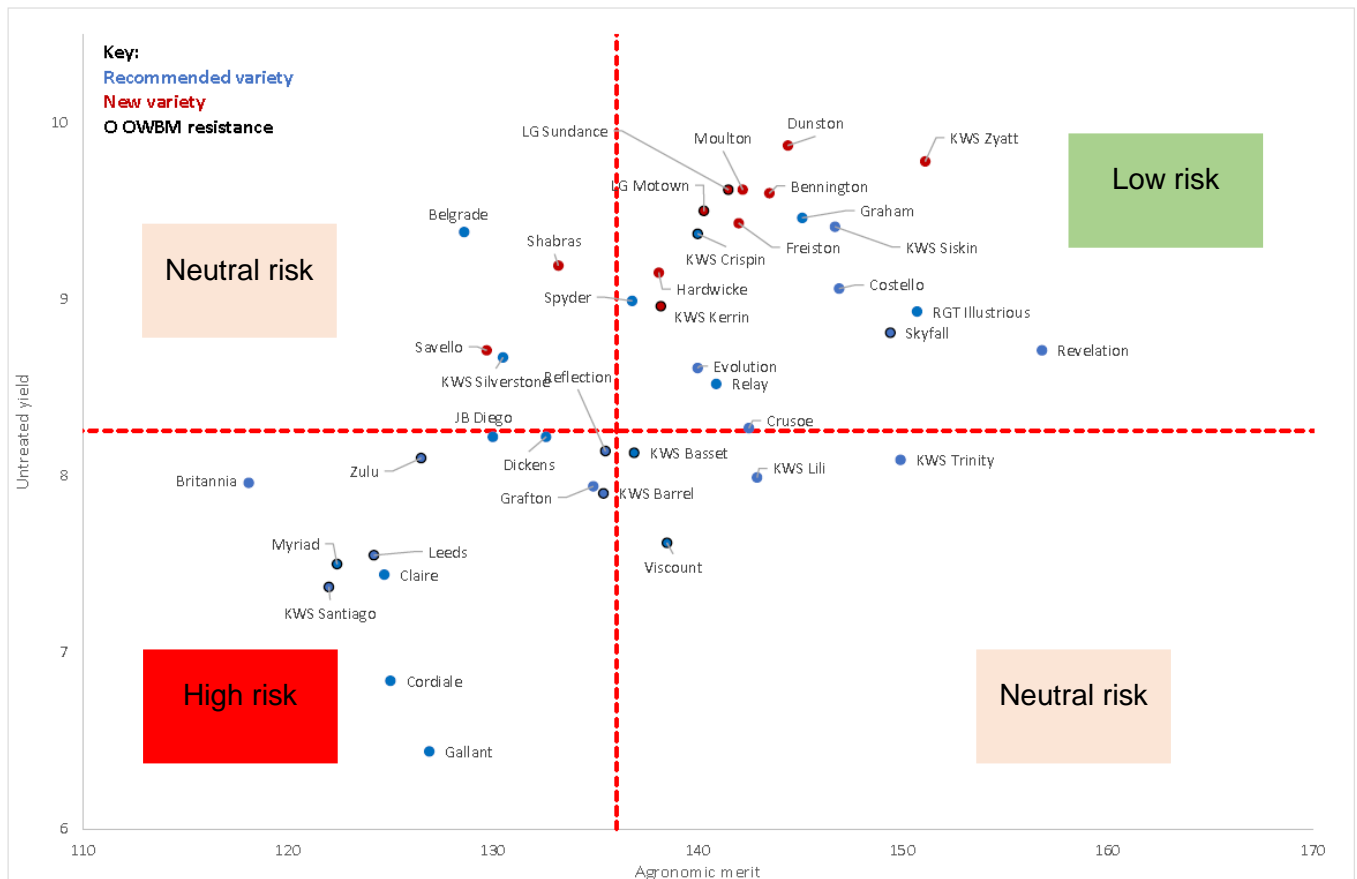
Septoria tritici in Winter wheat

Disease progress
Trial site: Nether Wallop



Wheat variety relative risk

- Relative risk reveals complete agronomic package
- Identify varieties that stand the best chance of performing relatively well in an extreme year
- Agronomic merit rating is calculated for each variety, which takes account of all key diseases and the relative importance of each disease
- Provides a single measure for underpinning genetic resistance of a variety



- Susceptible varieties respond well to fungicides and a high cost, 2 SDHI programme is justified, in high disease pressure situations (though not in low disease situations)
- Resistant varieties respond less to fungicides and a low to medium programme is appropriate for high disease situations (but a cheap programme is appropriate in low disease situations)
- As wheat price rises, spend more on fungicides for susceptible varieties, but not for resistant varieties

Use the links below to access more information:

- [AHDB Recommended Lists](#)
- What is “relative risk” [press release](#)
- What makes a good variety? Trade-offs for better agronomics: [video](#) presented at the Agronomists Conference 2015

Arable Business Group - Benchmarking

The Crediton Monitor Farm benchmarking Group is continuing
If you wish to join, please contact David Pett, Regional Officer

Mobile: 07813 45453, email: David.pett@ahdb.org.uk



Crediton Monitor Farm Programme

The Monitor Farm programme at Crediton has now concluded but continues elsewhere across the South West. For more information, please contact your AHDB Cereals & Oilseeds Knowledge Exchange Manager:

Philip Dolbear

philip.dolbear@ahdb.org.uk 07964 255614

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