

No room for Septoria complacency

Resistance keeps up pressure on yields

UK and Europe cereal growers have once again felt the sting of Septoria resistance, but New Zealand has the opportunity to learn from their bitter experience.

That's according to Andy Bailey, Global Fungicide Expert and ADAMA UK Technical Specialist.

Andy visited New Zealand as a guest of ADAMA NZ in 2017 and again in 2018 to share the Northern Hemisphere's experience with industry influencers, distributors and growers in key areas including Mid Canterbury.

Speaking recently about results from the UK and Europe 2019 wheat harvest, Andy says there had been; "a load" of Septoria (speckled leaf blotch) about.

"Control programmes have just run out of steam in some situations. So, we've seen a lot of Septoria on upper leaves."

An advocate of ADAMA's multi-site Phoenix® Fungicide (Phoenix), to help fight resistance in Septoria, Andy says he has had a consistent message for growers looking to protect both their yields and existing chemistry. And that holds equally true for New Zealand.

"If you don't have a multi-site in a programme, it's very, very obvious, because the Septoria just marches up the leaf layers.



Andy Bailey, ADAMA UK Technical Specialist for Fungicides.

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"Phoenix should always be the first thing in the tank for Septoria."

Andy says in the UK this year a drier start to the season led some growers there to be more than a little complacent about the potential Septoria threat.

He says a wetter second half of the season quickly brought them back down to earth.

He says a protectant approach and the assumption that Septoria is always present will always beat a curative approach hands-down.

"It's a worsening situation here. I could say alarming. I think though, generally, if you do everything right, you can still control Septoria.

But that means you have to

keep ahead of the disease and get the timing right.

"The key timing for me for the use of Phoenix in wheat fungicide programmes is the T1 application.

"It's a contact protectant and we need to put that in early in a programme, so we're on the front foot.

"Keeping leaf 3 clean is essential for maintaining full yield potential as the crop reaches maturity. And we also have to be mindful that the current single-site chemistry is under a lot of pressure through insensitivity and resistance to Septoria."

Andy warns that the new and emerging chemistry in the UK and Europe is also single-site.

"So, it's still going to be

open to resistance."

"Fungi are incredible at mutating.

"Ultimately, if you're using single-site acting fungicides, resistance will develop and it will develop over a period of time depending on things including disease pressure, and how many times the fungicides are sprayed.

"There's certainly a very strong argument for using multi-site chemistry going forward from an efficacy and resistance management point of view."

Phoenix (Phthalimide – Group M4) has folpet as its active ingredient, which works against Septoria at a cellular level using a multi-site action.

This inhibits spore germination and cell division, and reduces energy production in the mitochondria.

There is currently no known resistance to folpet anywhere in the world. It has the additional benefit of not inhibiting DMI uptake, ensuring their speed of action and their efficacy.

Phoenix also came to the rescue of barley growers impacted by Ramularia.

The 2018 New Zealand label approval for Ramularia control threw a very welcome lifeline to growers who at the time had been reeling from yield losses of up to 30 per cent.

Andy, who has described Ramularia as "chemistry breaking", says the "massive" disease has put growers on notice.

Caused by the fungus *Ramularia collo-cygni*, the acceleration of its resistance initially put the industry on the back foot.

This despite recent experience with Septoria.

"We've had DMI chemistry for many, many years and DMIs worked against Ramularia. Suddenly now, for whatever reason, we reached a tipping point and control has gone really quickly.

On top of this strobilurin control of Ramularia lasted hardly any time, so control options are limited."

As with Septoria, Andy cautions that application timing is critical for optimal Ramularia control.

If only one spray of Phoenix is being applied for Ramularia control, then T2 is the optimum timing for it.

This ensures that leaves 2 and 3 are protected. For best results though, and because we are still learning about the disease cycle, Andy advocates a programmed approach.

We're actually achieving even higher levels of Ramularia control when using Phoenix at T1 and at T2."

ADAMA's recommendation is to partner Phoenix with Bolide® or other triazole chemistry as an excellent solution for Septoria and Ramularia control.

Bolide is an all-rounder DMI fungicide, featuring an innovative combination of epoxiconazole and prochloraz. It is taken up via the stem and foliage and translocated upwards and outwards, providing some protection for new growth.

Andy says industry specialists, scientists, plant breeders and agronomists globally will be continuing to monitor resistance closely as they are aware that it is a problem that is definitely not going away.

Like Andy, ADAMA NZ warns against a "silver bullet" mentality that relies on the hope of new chemistry or cereal breeders with new varieties delivering solutions.

Daren Mabey, ADAMA NZ Commercial Manager, continues to urge wheat and barley growers to be proactive in fighting resistance.

Next to extreme weather, he says it is the biggest threat to yields and the industry itself.

"Growers here need to act to protect the remaining efficacy in existing and even future single-site chemistry.

"It's absolutely an imperative."

For more information on how to futureproof your resistance management strategy with ADAMA products, contact your local technical advisor or visit www.adama.com



Septoria infected wheat.

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