

Monday, February 8, 2016

Eliminate green bridge to minimise rust risk

An unusually hot December followed by summer storms and large rains across most of the country's cropping regions has created ideal conditions for summer weeds and volunteer crops, generating a 'green bridge' which could carry rust pathogens into the 2016 cropping season.

Growers are being urged to remain vigilant and remove this green bridge as soon as possible – and at least four weeks before sowing – to reduce the risk of rust. The Australian Cereal Rust Control Program (ACRCP) Consultative Committee chairman Dr Daniel Mullan said growers should cultivate, graze or apply herbicides on summer weeds as soon as they can.

"It is critical that growers eradicate the green bridge as rust pathogens rely on green leaf material to survive and pass onto crops in the following season," Dr Mullan said. "Growers must be vigilant and look for rust-susceptible weeds and crop volunteers not only in paddocks, but along fence lines, around sheds and silos. Destroying this green bridge gives a better chance of preventing or delaying an epidemic of rust this year."

Wheat stripe rust was detected in most states last season. There were also several detections of barley stripe rust on barley in the eastern states indicating the likely presence of barley grass stripe rust. Worryingly, a new wheat leaf rust pathotype was discovered for the first time in Western Australia in 2015, which will see the rust resistance ratings of many wheat varieties change.

Dr Mullan said growers need to review updated ratings of varieties before making selections for the 2016 growing season. Rust resistance ratings and individual state variety guides are available on the Rust Bust website.

"Choosing a variety with the highest rust resistance rating available, taking into consideration other agronomic requirements, is a fundamental part of a rust management strategy," he said.

Growers need to implement a four-part rust management strategy throughout the year. This includes:

1. **Pre-season – Make a strategic variety selection:** Growing varieties with adequate resistance to stem rust, stripe rust and leaf rust.
2. **Pre-season – Management:** Remove the green bridge at least four weeks before seeding.
3. **Pre-season – Crop protection:** Use an in-furrow or seed fungicide treatment to protect early crop growth.
4. **All season:** Monitor crops for rust and if needed, apply foliar fungicide for disease control. There are images and descriptions of what to look for on the Rust Bust website.
5. **Communicate:** Rust is a social disease. Maintaining communication with neighbours, community and industry to monitor, report and manage rust is essential.
6. **Submit a sample:** If you find rust – get it checked. The Australian Cereal Rust Survey is free and your sample could help identify new pathotypes or the spread of the disease. Play your part in national rust management.

"Being proactive is the best way to manage rust, which includes eliminating that green bridge and making wise variety selections early," Dr Mullan said. "Growers must keep in mind the potential impact of a rust outbreak in

their crop and the costs they would be faced with in terms of time, fuel, chemicals and reduced yields. Good rust management helps prevent rust disease mutation and avoids putting existing rust-resistance genes at risk.

“There is plenty of help available if growers are not sure how susceptible their varieties are or which is the best approach to take – check with your local agronomist, plant pathologist, your regional cereal disease guide or visit the Rust Bust website.

“It’s really important that growers be vigilant in their observations so we can get on top of any potential rust outbreak quickly. It’s also important they keep sending rust samples in to the ACRCP so we can analyse them and have an early alert system to any pathotype changes.”

Visit the Rust Bust at www.rustbust.com.au or follow us on Twitter @the_rustbust.

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Professor Robert Park
Australian Cereal Rust Control Program
02 9351 8806
robert.park@sydney.edu.au

The Rust Bust campaign is an initiative of The Australian Cereal Rust Control Program (ACRCP) Consultative Committee. The ACRCP, established in 1973, monitors cereal rust pathogens throughout Australia, finds and characterises new sources of rust resistance, and assists Australian cereal breeding groups to incorporate rust resistance in new cultivars. The ACRCP Consultative Committee includes representatives from state pathology and breeding groups and provides a key link between industry and the ACRCP. The ACRCP is funded largely by the grains industry, through the Grains Research & Development Corporation (GRDC).