

Early rust detection sparks warning for SA growers

GROWERS across South Australia are being urged to be vigilant when it comes to rust following early detection of the disease in wheat crops on the Eyre Peninsula and the Lower North.

Stripe rust has been observed in the past week in Mace and Wyalkatchem wheat on the Eyre Peninsula, which SARDI cereal pathologist Dr Hugh Wallwork said was very unusual for the region so early in the season and before sightings elsewhere.

“The disease has also been observed near Dublin, north of Adelaide, but without a hot-spot, so there must either be a hotspot elsewhere nearby or there is a chance that this infection has come from the EP, in which case the disease would be all over the state,” Dr Wallwork said.

Mace is particularly susceptible to stripe rust, with a susceptible to very susceptible (SVS) rating, and is widely grown across SA.

A disease that has rarely been seen in SA for a number of years, but which has been spotted this year is wheat leaf rust. Unlike stripe rust, leaf rust is not as active in cold conditions, but its activity is expected to increase when the weather warms. Growers must be on the lookout for leaf rust where varieties rated moderately susceptible (MS) or lower are grown.

Dr Wallwork recommends growers monitor for symptoms of rusts, focusing on the differences between the two diseases.

“There has been a few instances where growers are mistaking the two rusts. Stripe rust never forms in single pustules, but instead always occurs in a whole stripe, so if there’s only single pustules, then the symptoms are indicating leaf rust,” he said.

“The complication is that while Mace is not as susceptible to leaf rust, the disease has been seen in Mace, so it’s not just a matter of any rust on Mace wheat being stripe rust.”

Due to the different levels of activity of the two diseases, control strategies are not the same. Where leaf rust is not highly active, growers are advised to wait until the weather warms up before spraying fungicide.

However because stripe rust is still aggressive in the cold weather, growers need to be cautious where varieties are rated moderately susceptible (MS) or lower and be prepared to spray when stripe rust is observed.

“The most effective solution would be to apply a protective spray before rust is present. However where crops have not reached flag leaf emergence then another spray could be required later so an early spray could be less economical.

“In this situation it may be best to delay spraying until rust is observed in the crop or in nearby crops, providing that the grower can cover the area required quickly when needed. It is not recommended delaying spraying once stripe rust is seen as the rust can develop rapidly and spread spores to other crops.”

New South Wales Department of Primary Industries rust pathologist Dr William Cuddy said the Australian Cereal Rust Survey at the University of Sydney Plant Breeding Institute had received samples of barley leaf rust from Western Australia, scabrum rust from Queensland, wheat leaf rust from northern NSW and SA, stripe rust from NSW and SA, oat crown rust from SA, oat crown rust from around Yass, NSW, and barley leaf rust from Junee and Wagga Wagga, NSW.

“Last year was a quiet year for the survey, though Professor Robert Park did detect new pathotypes of barley leaf rust and wheat leaf rust. This year it will come down to whether there will be a dry spring to limit rust development, which varies across the country as to what is expected. The main thing is if people notice rust they should send us a sample,” Dr Cuddy said.

“Growers need to plan their disease management strategy for the season. Because leaf rust started before the weather cooled down, it is likely to take off hard when it warms up in spring.”

Chairman of the Australian Cereal Rust Control Program consultative committee Dr Dan Mullan says rust is a “social” disease, and the committee is raising awareness of growers’ responsibilities in disease prevention and control through the Rust Bust campaign.

“Everyone has to be socially aware of rust. The impact one field can have on another in the event of an epidemic can be quite large, so being prepared for rust is quite important from a broader industry perspective,” Dr Mullan said.

“There is considerable investment into breeding and improving rust protection for Australian crops, but it’s important that this knowledge is extended to the farming community as well, which is where the Rust Bust comes in.”

Visit the Rust Bust at www.rustbust.com.au

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The Australian Cereal Rust Control Program (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 is funded largely by the grains industry, through the Grains Research & Development Corporation (GRDC).