

Wheats for 2005

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Summary

Variety choice for 2005 will be very similar to 2004 as there are no new varieties that meet the requirements of most growers for AH quality, good rust resistance and CCN resistance.

There are stripe rust resistant options for growers, but variety choice should be made on performance and profitability, hence growing varieties that may require fungicide application for stripe rust control may still be the best option for many growers. Varieties rated as susceptible or very susceptible to stripe rust should be avoided as these are major causes of stripe rust epidemics.

Use of pre-sowing seed dressings, fungicide amended fertiliser or strategic foliar applications of fungicides need to be considered for 2005.

Stripe rust resistant options include Ouyen, GBA-Ruby, Mira and Ventura. Of these, Ouyen is the only AH variety that has CCN resistance.

Wheats which give reasonable stripe rust resistance, but may require one fungicide application include Frame, Goldmark, Kellalac, Rosella and Yitpi. Of these, only Yitpi and Goldmark are AH quality and have CCN resistance.

Variety selection for 2005

Variety selection in 2005 should be based on agronomic performance and potential grain quality and a minimum stripe rust rating of MS-S with a potential fungicide application factored in. Control of the green bridge over summer and autumn and the absence of susceptible to very susceptible varieties will help to delay the onset of an epidemic in 2005 and minimise losses due to stripe rust.

Stripe rust resistant wheat options

Ouyen – has fallen from favour in recent years due to physiological yellowing, small grain, susceptibility to leaf rust and perception of increased frost risk. However, Ouyen offers a good level of resistance to the current races of stripe rust, is of AH quality and is CCN resistant with similar yield to Janz, the only variety to have this combination of traits.

Mira – was released at the same time as Mitre, but was largely overlooked because Mitre was AH quality, while Mira is APW. Similar to Mitre, Mira has small grain. However, Mira has good major gene (Yr27) resistance to the current races of stripe rust and is CCN resistant. Data from the period 1996–2000 indicated that Mira had similar yield potential to Yitpi in the Mallee and Wimmera, however its best yield performance has been in medium to high rainfall areas.

GBA Ruby - has performed well under the stressed conditions of the last two seasons across medium and low rainfall environments. Ruby has the same highly effective major gene stripe rust resistance as Mira, but is ASW quality and lacks CCN resistance.

Ventura – APW with potential for reclassification to AH in Victoria. Ventura is early maturing with excellent rust resistance but is CCN susceptible. Best yield performance was in central and north east Victoria. In the Wimmera and Mallee yield is at best similar to current varieties.

Stripe rust moderately resistant – moderately susceptible wheat options

Frame – similar to Yitpi, but with improved stem rust resistance, but lower yield and APW quality, and slightly poorer stripe rust resistance. Yitpi remains a better option.

Goldmark – AH quality, large grain, resistant to CCN, stem and leaf rust and black point. Goldmark suffers from physiological yellowing and is best suited to medium to high rainfall areas.

Kellalac – Later maturing than most spring wheats, APW quality, CCN resistant, susceptible to leaf rust, suited to medium to high rainfall environments.

Rosella – Winter wheat with soft grain suitable for white salted noodle manufacture. Needs early sowing, suited to medium and high rainfall environments.

Yitpi - AH quality which will attract a \$5/t premium from the 2005 harvest. Well suited to low and medium rainfall environments. Yitpi is susceptible to stem rust which is a concern since it dominates a large part of the Victorian and South Australian wheat production and has the potential to cause a serious epidemic under warm wet conditions in spring. Yitpi can be hard to thresh under cool harvesting conditions. It is both resistant and tolerant to CCN.

Recently released varieties

Drysdale – APW with potential for reclassification to AH in Victoria. Drysdale offers no improvement in stripe rust reaction to current varieties, is susceptible to CCN and has a yield advantage only on the acid soils of central and north-east Victoria.

GBA Sapphire – APW with potential for reclassification to AH in Victoria. Sapphire offers no improvement in stripe rust reaction to current varieties, is susceptible to CCN and is of similar yield to current varieties.

H46 (TMB406F-2) – A new version of H45 with VPM rust resistance which provides resistance to the Western Australian race of stripe rust but not to the VPM virulent race. Reaction to the VPM virulent race is expected to be slightly better than H45. H46 is expected to be similar to H45 in other traits, but does not yet have a grain quality classification. It is susceptible to CCN.

Ventura – APW with potential for reclassification to AH in Victoria. Ventura is early maturing with excellent rust resistance but is CCN susceptible. Best yield performance was in central and north-east Victoria. In the Wimmera and Mallee yield is at best similar to current varieties.

Pugsley – APW in Victoria. Pugsley has VPM rust resistance and an MS reaction to the VPM virulent race of stripe rust to back it up. As such it may provide stripe rust resistance during 2005 depending on which races of stripe rust are predominant. Pugsley is susceptible to CCN and has its best relative yield performance in the medium rainfall environments of the Wimmera, central and north-east Victoria.

EGA Eagle rock (WAWHT2525A)– APW in Victoria, Eagle rock is a metribuzin tolerant wheat, which is also awnless. Yield performance has been mediocre. Expected to be CCN susceptible.

More information:

Updated yield and disease data will be available in the 2005 Victorian Winter Crop Summary, provided by DPI Victoria.