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2021 Western Australian Crop Sowing Guide

**Authors:**  
B Shackley, B Paynter, J Bucat, G Troup,  
M Seymour and A Blake (DPIRD)

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**Tel:** +61 (0)8 9368 3333

**Email:** [enquiries@dpiird.wa.gov.au](mailto:enquiries@dpiird.wa.gov.au)

**Website:** [agric.wa.gov.au](http://agric.wa.gov.au)

**DPIRD contact details:**

Ms Brenda Shackley  
Research Scientist  
10 Dore St  
KATANNING WA 6317

**Phone:**  
(08) 9821 3243

**Email:**  
[brenda.shackley@dpiird.wa.gov.au](mailto:brenda.shackley@dpiird.wa.gov.au)

**Cover:** Lupins sown into wheat stubble at Eradu  
**Photo:** Peter Maloney (DPIRD)

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This guide can be downloaded to your computer or tablet at:  
[www.agric.wa.gov.au](http://www.agric.wa.gov.au)

**Remember to update it each October.**

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**Plant Breeder's Rights**

The majority of the varieties mentioned in this guide are protected by Plant Breeder's Rights where the variety name is followed by the symbol (b), however this symbol has been omitted in this bulletin.

Plant Breeder's Rights are exclusive commercial rights for a registered variety. In most instances the breeder will license these rights to a selected seed company (the licensee). Any unauthorised commercial propagation or any sale, conditioning, import, export or stocking of propagation material of these varieties is an infringement under the *Plant Breeder's Rights Act 1994*.

Exceptions to Plant Breeder's Rights under Section 17, are the rights of farmers to save seed for sowing future commercial crops. However, harvested material derived from farm saved seed remains subject to the End Point Royalty (EPR) applicable to that variety. Where EPRs apply, growers will be required to enter into arrangements with the breeder or licensee whereby royalties are paid on delivery of the grain. Some varieties may have a Seed Royalty (SR) paid on purchase of seed rather than an EPR. Further details can be found at [www.varietycentral.com.au](http://www.varietycentral.com.au). Royalties collected are used to support ongoing research and the breeding of new and improved varieties.

## INTERPRETING RESISTANCE CLASSIFICATIONS

Below is an explanation of the resistance ratings used in this guide for foliar diseases, nematodes and crown rot and how they should be interpreted. These classifications are only a guide and yield losses will depend on environmental and seasonal conditions. Regional and national differences in disease resistance may also occur for different pathotypes.

### Cereal resistance classifications (foliar diseases)

- R Resistant:** the disease will not multiply or cause any damage.
- MR Moderately resistant:** the disease may be visible and will multiply slightly, but will not cause significant yield loss.
- MS Moderately susceptible:** the disease may cause yield losses up to 15% or more in very severe cases.
- S Susceptible:** the disease can be severe and yield losses of 15 to 50% can occur.
- VS Very susceptible:** the variety should not be grown in areas where a disease is likely to be a problem. Yield losses higher than 50% are possible and the build-up of inoculum will create problems for other growers.

### Pulse resistance classifications (foliar diseases)

No pulse varieties are immune to disease and fungicide application may therefore be required under severe disease pressure.

- R Resistant:** no symptoms visible, no fungicides are required.
- MR Moderately resistant:** the disease may be visible but will not cause significant plant damage or loss. However, under high disease pressure or highly favourable environmental conditions fungicide applications may be required e.g. to prevent seed staining.
- MS Moderately susceptible:** disease symptoms are moderate to severe and will cause significant yield and seed quality loss (but not complete crop loss) in conducive seasons in the absence of fungicides.
- S Susceptible:** the disease is severe and in conducive conditions will cause significant yield and seed quality loss, including complete crop loss in the absence of fungicides.
- VS Very susceptible:** growing very susceptible varieties in areas where a disease is likely to be present is very high risk. Without control significant yield and seed quality losses, including complete crop loss, can be expected and the increase in inoculum may create problems for other growers.

### Nematode resistance classifications

**PLEASE NOTE:** resistance ratings for the pulses, such as root lesion nematodes *P. neglectus* and *P. thornei* have been tested in the eastern states and, as such, should be used as a guide only in WA.

- R Resistant:** nematode numbers will decrease when resistant varieties are grown.
- MR Moderately resistant:** nematode numbers will decrease slightly when moderately resistant varieties are grown.
- MS Moderately susceptible:** nematode numbers will increase slightly when moderately susceptible varieties are grown.
- S Susceptible:** nematode numbers will increase when susceptible varieties are grown.
- VS Very susceptible:** a large increase in nematode numbers can occur when very susceptible varieties are grown.

### Colour range



# INTRODUCTION

**Welcome to the 2021 edition of the Crop Sowing Guide for WA, which introduces 16 new variety releases: three wheat, one barley (plus four previous releases that are currently under malt evaluation), ten canola, a chickpea and a vetch.**

This edition of the Crop Sowing Guide for WA has been compiled by officers in the Department of Primary Industries and Regional Development. It provides information to support variety decisions for each of the major crops for the upcoming season. The pulse section also includes an 'Agronomy guide' to support the management of these high-value crops.

Not sure whether pulses are for your system? Yields and break-even yields for pulses are outlined in the 'Picking a Pulse' section (page 135) along with first-hand experiences with a range of pulse varieties. Please also consult your agronomist for more specific pulse information for your local area.

With the introduction of tariffs on barley imports into China in 2020 it is likely that, in the short-term, pricing will change for feed and malt grades and that this will influence the type and area of barley varieties sown. To help with barley decisions, market feedback from GIWA can be found on page 52 of this guide. Before making a barley choice, it will be important to consider market demand, pricing signals, location of segregation sites and the risks associated with delivering malt-grade barley.

**Frost** can have a devastating effect on crop yield and variety choice and sowing time remain the most reliable way of reducing yield losses. The relative maturity of wheat varieties are provided in the wheat section of this guide to help match sowing opportunities with the best variety. While all wheat and barley varieties are susceptible to frost, their risk profiles can differ during flowering. Frost performance values for individual varieties can be found on the NVT website. Strategies for managing frost are available on the GRDC and DPIRD websites.

Additional information to support crop variety decisions are listed in each section. Advisers can provide locally-relevant information and growers are encouraged to use this publication as a guide to support discussions with consultants, agronomists and marketing agents.

It is important for growers and consultants to review disease resistance ratings in autumn 2021 to confirm variety resistance ratings. The latest NVT data will be available early in 2021 via the NVT website and the Long Term MET Yield Reporter tool.