

# Pulse Disease Guide 2025

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April 2025

## 2024 in review

The 2024 season showed variable severity for pulse diseases across Victoria. Early Ascochyta blight (AB) was observed in lentils, which required fungicides to prevent yield losses. Proactive disease management and minimal spring rainfall meant that disease was of isolated concern across most of Victoria. Low levels of disease were still present in many paddocks, which will contribute to the carryover of disease into the 2025 season.

## 2025 pulse disease management

There is a risk of disease carryover into the 2025 season from infected seed and stubble of crops that had disease during 2024. To minimise the risk of disease during 2025, a proactive integrated disease management strategy will be required. This should include:

- avoiding susceptible varieties where possible
- avoiding planting pulse crops into or adjacent to paddocks where there was disease during 2024
- sowing healthy vigorous seed
- using fungicidal seed dressings where applicable
- implementing a fungicide management plan.

Summer rainfall and the growth of weeds will increase the risk of soil-borne diseases including Root lesion nematodes and Pythium. A PREDICTA<sup>®</sup>B test will identify paddocks at risk from some important soil-borne diseases.

There have been no major disease rating changes for most pulses for 2025.

**Beans:** Chocolate spot was observed at very low disease severity in high rainfall zones of Victoria during 2024. It is important to avoid susceptible varieties where Chocolate spot is common or a high risk. Minimising disease early in the season will reduce the inoculum load later in the season and subsequent yield losses. Reliance on fungicides cannot provide adequate control in a susceptible variety in a high-risk season and/or environment.

**Chickpeas:** Disease was not of major importance during 2024 in chickpeas due to proactive management. Improved resistance to AB is expected in 2027, and early results of breeding lines show significantly less disease management is required. Currently, a moderately susceptible (MS) variety in an average season should require minimal fungicide applications in low rainfall zones. In the medium to high rainfall zones, it is likely multiple fungicide applications will be required to prevent AB. It is important to protect the pods for seed quality should low levels of disease be in a crop and rainfall occurs during podding.

**Lentils:** Ascochyta blight (AB) was severe early in the season where lentils were grown in close rotation, causing seedling death or stem breakages, and fungicides were required to minimise yield losses. Avoiding tight rotations will minimise AB disease risk. Sclerotinia white mould (SWM) was not severe during 2024, with conditions not conducive to the disease. However, it is important to monitor paddocks with a history of SWM as the sclerotia (fruiting bodies/survival structures) can survive many seasons. Botrytis grey mould (BGM) was observed at very low levels due to dry and mild spring conditions.

**Vetch:** BGM and AB are the main causes of yield loss in vetch and were observed in paddocks during 2024. BGM in vetch is caused by the same pathogens that cause BGM in lentil and Chocolate spot in faba bean. Therefore, avoid growing vetch, lentil or faba bean in close rotations or in adjacent paddocks where disease was observed in 2024. The disease management strategy should be matched to the crop's end use (hay, fodder, grain, and manure).

**Field peas:** Low Blackspot disease severity was observed during 2024 and no Bacterial blight. Bacterial blight is still the most significant threat to field pea production. There are no in-crop control options, so where possible avoid susceptible varieties, paddocks prone to frost, residual herbicides, or planting into pea stubble.

**Lupins:** Minimal disease was observed in lupins in 2024. Avoid growing lupins in rotation with other pulses and canola to avoid SWM. Monitor crops for disease to ensure disease severity remains low.

**Seed quality:** The quality of seed and the potential for diseases infecting seed is often neglected. Disease carryover may be through infected seed (BGM) or sclerotia contamination (SWM) in seed lots. Seed infection can not only carry the disease between seasons but reduce plant establishment and seedling vigour. Testing seeds for germination, vigour, and seed-borne diseases before sowing will ensure good plant establishment. Testing can be completed by specialist laboratories (see back page). Seed treatments are effective at suppressing many fungal diseases; however, seed treatments don't combine well with rhizobium used for inoculation. Read labels for compatibilities.

**If you see something different, or high levels of disease in any crop,** please send a sample to Agriculture Victoria. If you suspect an exotic pest or disease contact CropSafe or the Emergency Plant Pest Hotline (see back page).

Bean Disease Reactions 2025

| Variety      | Ascochyta blight | Chocolate spot (Botrytis) | Cercospora* | Rust* | Root lesion nematode ( <i>Pratylenchus</i> )* |                   |
|--------------|------------------|---------------------------|-------------|-------|---|-------------------|
|              |                  |                           |             |       | <i>P. neglectus</i>                           | <i>P. thornei</i> |
| Broad bean   |                  |                           |             |       |   |                   |
| Aquadulce*   | MS               | MS                        | S           | MR    | MR  | MS                |
| PBA Kareema* | MR               | MS                        | S           | MRMS  | -   | -                 |
| Faba bean    |                  |                           |             |       |   |                   |
| Farah        | MSp              | S                         | S           | VS    | MR  | MS                |
| PBA Amberley | MR               | MRMS                      | S           | VS    | MR  | MS                |
| PBA Bendoc   | MR(MS)p          | S                         | S           | VS    | MR  | MS                |
| PBA Marne    | MS               | MS                        | S           | MRMS  | MR  | MS                |
| PBA Rana     | MRMSp            | MS                        | S           | VS    | RMRp  | MRMS              |
| PBA Samira   | MRp              | MS                        | S           | S     | MR  | MS                |
| PBA Zahra    | MRMS             | MS                        | S           | S     | MR  | MS                |

Chickpea Disease Reactions 2025

| Variety        | Ascochyta blight<br>(foliar rating) | Root lesion nematode ( <i>Pratylenchus</i> )* |                   |
|----------------|-------------------------------------|---|-------------------|
|                |                                     | <i>P. neglectus</i>                           | <i>P. thornei</i> |
| Desi           |                                     |   |                   |
| CBA Captain    | S                                   | MR  | MS                |
| PBA Maiden     | S                                   | MRMS  | MRMS              |
| PBA Slasher    | S                                   | MRMS  | MRMS              |
| PBA Striker    | S                                   | MRMS  | MRMS              |
| Kabuli         |                                     |   |                   |
| Genesis 090    | MS                                  | MRMS  | MSS               |
| Genesis Kalkee | S                                   | MRMS  | MS                |
| PBA Magnus     | S                                   | MR  | MSS               |
| PBA Monarch    | S                                   | MRMS  | MS                |
| PBA Royal      | MS                                  | MR  | MS                |

Lentil Disease Reactions 2025

| Variety                 | Ascochyta blight<br>(foliar rating) | Botrytis<br>grey mould | Root lesion nematode<br>( <i>Pratylenchus</i> )* |                   |
|-------------------------|-------------------------------------|------------------------|--|-------------------|
|                         |                                     |                        | <i>P. neglectus</i>                              | <i>P. thornei</i> |
| Conventional            |                                     |                        |  |                   |
| PBA Ace*                | MR                                  | MS                     | MR   | MRMS              |
| PBA Blitz*              | MRMS                                | MSp                    | MR   | MRMS              |
| PBA Bolt                | MRMS                                | S                      | MR   | MR                |
| PBA Jumbo 2             | MR                                  | MR                     | MR   | MRMS              |
| Imidazolinone tolerant  |                                     |                        |  |                   |
| ALB Terrier             | MR                                  | MRMS                   | -  | -                 |
| GIA Leader              | MR                                  | MRMS                   | R  | MR                |
| GIA Lightning           | MRMSp                               | MS                     | R  | MR                |
| GIA Thunder             | MRMSp                               | MRMS                   | MR   | R                 |
| PBA Hallmark XT         | MRMS                                | MRMS                   | MR   | MRMS              |
| PBA Highland XT         | MR                                  | MS                     | MR   | MRMS              |
| PBA Hurricane XT        | MRMSp                               | MS                     | MRMS   | MRMS              |
| PBA Kelpie XT           | MRMS                                | MS                     | MRMS   | MRMS              |
| Dual herbicide tolerant |                                     |                        |  |                   |
| GIA Metro               | MR                                  | MRMS                   | MR   | MRMS              |
| GIA Sire                | MRMSp                               | MS                     | MR   | MR                |

All data, except breeder data (#) and historic data (\*) comes from the NVT system. Data not in the current NVT system may be less accurate as these varieties are not screened annually.

\*Indicates historic data for a variety and/or disease that has not been updated in at least 12 months.

p = These ratings are provisional.

(S) means the results had an outlier and need further testing.

R = Resistant; RMR = Resistant to moderately resistant; MR = Moderately resistant; MRMS = Moderately resistant to moderately susceptible; MS = Moderately susceptible; MSS = Moderately susceptible to susceptible; S = Susceptible; SVS = Susceptible to very susceptible; VS = Very susceptible

Field Pea Disease Reactions 2025

| Variety                   | Blackspot*<br>(Ascochyta) | Bacterial<br>blight* | Downy<br>mildew | Powdery<br>mildew | Pea seed-borne mosaic<br>virus (PSbMV)#* | Bean leaf roll virus<br>(field rating)<br>(BLRV)#* | Root lesion nematode ( <i>Pratylenchus</i> )* |                   |
|---------------------------|---------------------------|----------------------|-----------------|-------------------|--|--|---|-------------------|
|                           |                           |                      |                 |                   |  |  | <i>P. neglectus</i>                           | <i>P. thornei</i> |
| Yellow/white grain type   |                           |                      |                 |                   |  |  |   |                   |
| PBA Hayman*               | MS                        | -                    | -               | R                 | -  | -  | -   | -                 |
| PBA Pearl                 | MS                        | MS                   | S               | S                 | S  | R  | MR  | MRMS              |
| Sturt*                    | MS                        | MS                   | S               | S                 | S  | S  | MR  | MR                |
| Kaspa grain type          |                           |                      |                 |                   |  |  |   |                   |
| APB Bondi                 | -                         | -                    | RMR(S)          | RMR               | -  | -  | -   | -                 |
| GIA Kastar                | MS                        | S                    | S               | RMR               | -  | -  | MR  | MS                |
| PBA Butler                | MS                        | MS                   | S               | S                 | S  | S  | RMR   | MRMS              |
| PBA Gunyah                | MS                        | -                    | S               | S                 | S  | S  | RMR   | MRMS              |
| PBA Taylor                | MS                        | S                    | S               | S                 |  |  | RMR   | MRMS              |
| PBA Twilight              | MS                        | S                    | S               | S                 | S  | S  | MR  | MRMS              |
| PBA Wharton               | MS                        | S                    | S               | R(S)              | R  | R  | MR  | MRMS              |
| Australian dun grain type |                           |                      |                 |                   |  |  |   |                   |
| GIA Ourstar               | MS                        | Sp                   | S               | S                 | -  | -  | MRMS  | MSS               |
| PBA Oura                  | MS                        | MS                   | S               | S                 | S  | R  | MR  | MRMS              |
| PBA Percy                 | MS                        | MRMS                 | S               | S                 | S  | S  | RMR   | RMR               |
| Blue pea type             |                           |                      |                 |                   |  |  |   |                   |
| PBA Noosa                 | MS                        | S                    | MS              | S                 | S  | R  | MR  | MRMS              |

Lupin Disease Reactions 2025

| Variety     | Brown<br>leaf spot* | Pleiochaeta<br>root rot* | Cucumber mosaic virus<br>(CMV)(seed transmitted)* | Anthracnose | Sclerotinia<br>Stem Rot | Phomopsis |      |
|-------------|---------------------|--------------------------|---|-------------|-------------------------|-----------|------|
|             |                     |                          |   |             |                         | Stem      | Pod  |
| Narrow leaf |                     |                          |   |             |                         |           |      |
| Gidgee      | -                   | -                        | -   | MR          | Sp                      | MR        | S    |
| Rosemont    | -                   | -                        | -   | MRMS        | Sp                      | MR        | MRMS |
| Coyote      | MSp                 | -                        | MRMS  | MRMS        | Sp                      | S         | MRMS |
| Jenabillup  | MRMS                | MRp                      | MRMS  | MS          | Sp                      | MS        | MR   |
| Jindalee*   | MS                  | MRMSp                    | S   | MRMS        | -                       | RMR       | MR   |
| Lawler      | MSp                 | MRp                      | MRMS  | MR          | Sp                      | MR        | MS   |
| Mandelup    | MS                  | MRMSp                    | MRMS  | MRMS        | Sp                      | MR        | S    |
| PBA Barlock | MS                  | MRMS                     | MR  | RMR         | Sp                      | MR        | MR   |
| PBA Bateman | MS                  | MRp                      | MR  | MRMS        | Sp                      | RMR       | S    |
| PBA Gunyidi | MS                  | MRp                      | MRMS  | MRMS        | Sp                      | RMR       | MRMS |
| PBA Jurien  | MS                  | MR                       | MS  | RMR         | Sp                      | RMR       | MRMS |
| Wonga       | MS                  | MRp                      | MR  | MR          | Sp                      | MR        | MR   |
| Albus lupin |                     |                          |   |             |                         |           |      |
| Luxor*      | MR                  | R                        | Immune  | VS          | -                       | MR        | S    |
| Murringo*   | MR                  | MR                       | Immune  | VS          | -                       | MS        | S    |

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Vetch Disease Reactions#\*

| Variety            | Rust | Ascochyta | Botrytis grey<br>mould |
|--------------------|------|-----------|------------------------|
| Common vetch       |      |           |                        |
| Morava             | R    | MSp       | VSp                    |
| Rasina             | R    | Sp        | Sp                     |
| Studenica          | R    | MRp       | Sp                     |
| Timok              | R    | Sp        | Sp                     |
| Volga              | R    | MRMSp     | Sp                     |
| Purple vetch       |      |           |                        |
| Benetas            | -    | MRMSp     | Sp                     |
| Popany             | R    | MRp       | Sp                     |
| Woolly pod vetches |      |           |                        |
| Capello            | R    | MRp       | Sp                     |
| RM4                | R    | MRp       | Sp                     |

Note: vetch is not included in the NVT, ascochyta and botrytis grey mould ratings are from Agriculture Victoria and the rust ratings are from the breeder.

## Crop protection products

There are often changes to permits for the use of fungicides in pulse crops. See the Australian Pesticides and Veterinary Medicines Authority website ([www.apvma.gov.au](http://www.apvma.gov.au)) for current information on crop protection products.

## Fungicide resistance

Resistance to fungicides is an increasing threat to crops. There are no new detections of fungicide resistance in pulses.

Five strategies can be adopted to slow the development of resistance in pathogen populations and extend the longevity of the limited range of fungicides available:

1. avoid susceptible crop varieties
2. rotate crops
3. use non-chemical methods to reduce disease pressure
4. spray only if necessary and apply strategically
5. rotate and mix fungicides / modes of action.

For more information visit: [afren.com.au](http://afren.com.au)

### Rhizobium test

The PREDICTA® rNod test can measure Group E and F rhizobia and predict if growers need to inoculate field pea, faba bean, lentil and vetch crops. More information can be obtained by contacting Nigel Percy at SARDI, [nigel.percy@sa.gov.au](mailto:nigel.percy@sa.gov.au)

**Blackspot manager** is a tool to predict the risk of blackspot infection in field peas. To subscribe to this free service, text 'blackspot', your name and nearest weather station to 0475 959 932 or email [CropDiseaseTools@dpird.wa.gov.au](mailto:CropDiseaseTools@dpird.wa.gov.au).

### Pulse pathology (Agriculture Victoria)

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Private Bag 260 Horsham, Vic 3401

### Seed testing laboratories

Crop Health Services, Agriculture Victoria, Tel. (03) 9032 7515  
[CHS.reception@agriculture.vic.gov.au](mailto:CHS.reception@agriculture.vic.gov.au)

### CropSafe

[Crop.safe@agriculture.vic.gov.au](mailto:Crop.safe@agriculture.vic.gov.au)

Ph: 03 5450 8301

Private Bag 260 Horsham, Vic 3401

**Exotic plant pest hotline:** 1800 084 881

**Acknowledgements:** Most disease ratings for pulse crops are provided by GRDC under the National Variety Trial program. Other ratings come from Agriculture Victoria or the breeding programs and are noted. This guide was prepared with assistance from Hari Dadu, and Luise Fanning (Agriculture Victoria, Horsham). **Last updated** 9 April 2025.

**Contact/Services available from DEECA Field Crops Pathology,** Grains Innovation Park, 110 Natimuk Rd, Horsham 3400. Tel 03 5450 8301, or the DEECA Customer Service Centre 136 186

**Accessibility:** If you would like to receive this publication in an alternative format, please telephone the Customer Service Centre 136 186, via the National Relay Service on 133 677 [www.relayservice.com.au](http://www.relayservice.com.au). This document is also available at [www.agriculture.vic.gov.au](http://www.agriculture.vic.gov.au)

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Published by the Department of Energy, Environment and Climate Action, April 2025 Spring Street Melbourne Victoria 3000 Telephone 136 186

### Further Information

Detailed information on each of the pulse diseases can be obtained from:

[Agriculture Victoria AgNotes](http://AgricultureVictoriaAgNotes)

[Field Crop Disease Victoria](http://FieldCropDiseaseVictoria.extensionAUS.com.au) ([extensionAUS.com.au](http://extensionAUS.com.au))

[Pulse Australia](http://PulseAustralia)

[Victorian Crop Sowing Guide](http://VictorianCropSowingGuide)

[Australian Fungicide Resistance Extension Network](http://AustralianFungicideResistanceExtensionNetwork)

[www.grdc.com.au/ManagingFrostRisk](http://www.grdc.com.au/ManagingFrostRisk)

### Interpreting Resistance Classifications

Below is an explanation of the resistance ratings used in this guide for foliar diseases, and how they should be interpreted.

- R** Resistant - No symptoms visible. No fungicides are required.
- RMR** Resistant to Moderately Resistant - The disease may be visible but will not cause significant plant damage or loss. However, under extreme disease pressure or highly favourable environments conditions fungicide applications may be required e.g. to prevent seed staining.
- 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 environments conditions fungicide applications may be required e.g. to prevent seed staining.
- MRMS** Moderately Resistant to Moderately Susceptible - The disease symptoms are moderate and may cause some yield and/or seed quality losses in conducive conditions. Fungicide applications, if applicable, may be required to prevent yield loss and seed staining.
- MS** Moderately Susceptible - Disease symptoms are moderate to severe and will cause significant yield and seed quality loss in the absence of fungicides in conducive seasons, but not complete crop loss.
- S** Susceptible - The disease is severe and will cause significant yield and seed quality loss, including complete crop loss in the absence of fungicides, in conducive conditions.
- VS** Very Susceptible - Growing this variety in areas where a disease is likely to be present is very high risk. Significant yield and seed quality losses, including complete crop loss can be expected without control and the increase in inoculum may create problems for other growers.

Below is an explanation of the resistance ratings used in this guide for **nematodes**, and how they should be interpreted.

- R** Resistant, nematode numbers will decrease when this variety is grown.
- MR** Moderately Resistant, nematode numbers will slightly decrease when this variety is grown.
- MS** Moderately Susceptible, nematode numbers will slightly increase when this variety is grown.
- S** Susceptible, nematode numbers will increase greatly in the presence of this variety.
- VS** Very Susceptible, a large increase in nematode numbers can occur when this variety is grown and this will cause problems to a following intolerant crop.

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