

Establishment pest risks 2025

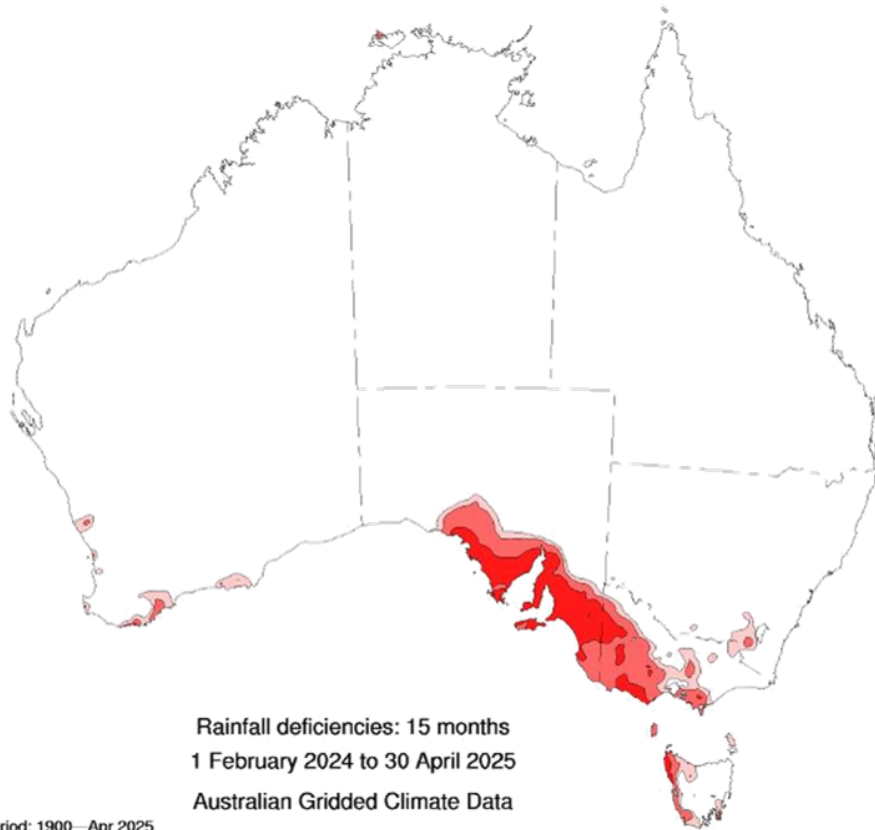
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OFFICIAL

2025 Season



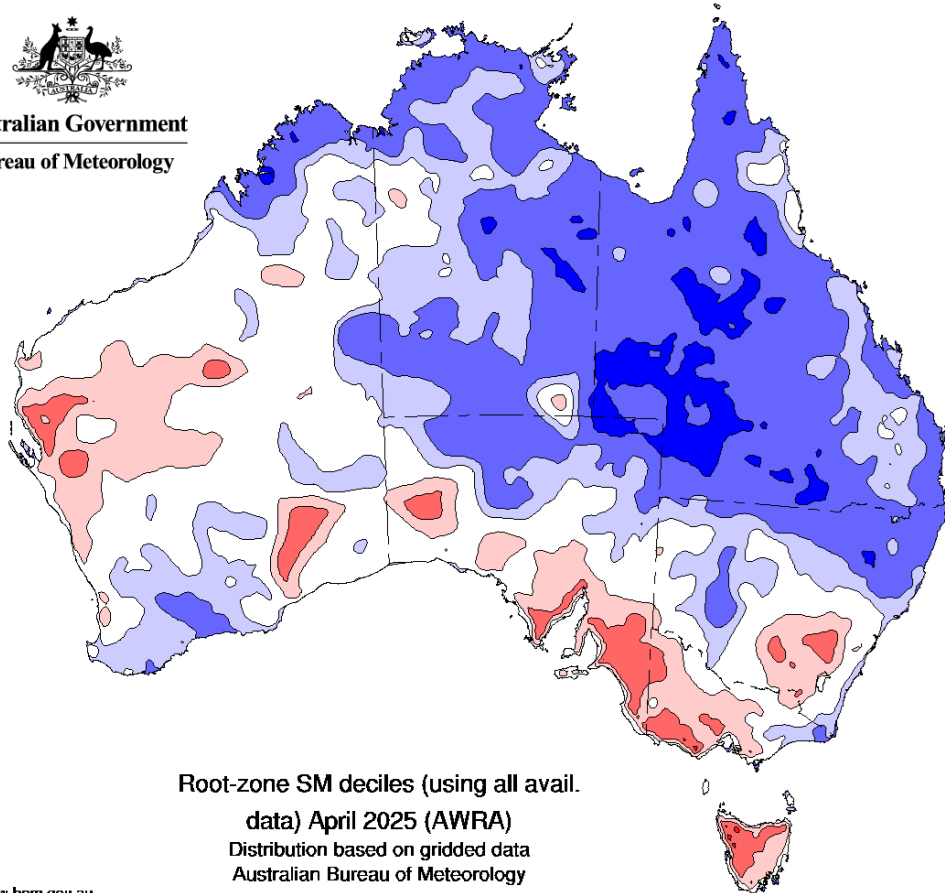
Base period: 1900—Apr 2025

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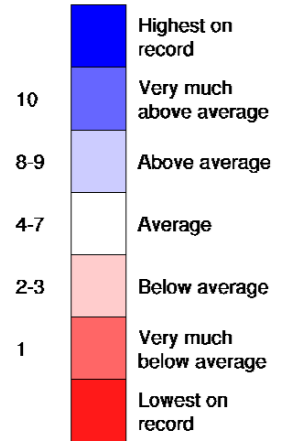
2025 Season



Australian Government
Bureau of Meteorology



Soil moisture decile ranges



Root-zone SM deciles (using all avail.
data) April 2025 (AWRA)
Distribution based on gridded data
Australian Bureau of Meteorology

<http://www.bom.gov.au>



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Drought and pests?

Drought and heat reduce most pests...

Prophylactic Insecticide applications can be reduced

Stressed plants **CAN** be more prone to insect attack

- Plant already reduced in growth, pest increase damage
- Plant not capable of efficient defence against insects
- Stressed plant more palatable (Amino acids)



Drought and risk of establishment pests?

- Resident pests

- Adult / larval populations over-summering
Earwigs, Weevils
- Eggs over-summering (diapause)
RLEM, Lucerne Fleas

- Migratory pests

- Moths, Locusts,
- Aphids

- Natural enemies



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Resident pests

Adult / larvae populations over-summering
Earwigs, Weevils

- Extreme drought reduces survival
- Absence of green bridge
- Populations expected LOWER



Resident pests



Eggs over-summering (diapause)
RLEM, Lucerne Fleas

- Diapause protects against extreme conditions
- Rain required for eggs to emerge
- Same population levels....
Paddock history: Redlegged earth mite severity risk calculator
- **But with rain they might all appear at the same time**
RLEM Egg Hatch Tool



Migratory pests: Moths, Locusts,

- Population build up elsewhere (with rains)
- Migration occurs if food runs out / harvesting
- Temperatures already going down....
- Summer crops harvested....

- Risk low but could be some surprises (Helicoverpa, Armyworms, **Keep eyes open!**)



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Migratory pests: Aphids, DBM

- Very little green bridge
- Populations low....
 - But start to appear on weeds
 - Nearby irrigated cropping areas
- Risk very low



Natural Enemies

- Very little green bridge
- Little alternative food (prey / hosts)
- Lack of knowledge
 - Canola Allies project
 - SAGIT PhD project

