



**Australian Government**  
**Department of Agriculture,**  
**Water and the Environment**  
ABARES

# Australian Crop Report

**Prepared by the Australian Bureau of Agricultural and Resource Economics and Sciences**  
**No. 199**

---

September 2021



© Commonwealth of Australia 2021

### Ownership of intellectual property rights

Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Commonwealth of Australia (referred to as the Commonwealth).

### Creative Commons licence

All material in this publication is licensed under a [Creative Commons Attribution 4.0 International Licence](https://creativecommons.org/licenses/by/4.0/) except content supplied by third parties, logos and the Commonwealth Coat of Arms.

Inquiries about the licence and any use of this document should be emailed to [copyright@awe.gov.au](mailto:copyright@awe.gov.au).



### Cataloguing data

This publication (and any material sourced from it) should be attributed as: ABARES 2021, *Australian Crop Report: September 2021*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, DOI: CC BY 4.0. <https://doi.org/10.25814/92xy-zp85>

ISSN 1447-8358

### Internet

This publication is available at [agriculture.gov.au/abares/research-topics/agricultural-commodities/australian-crop-report](https://agriculture.gov.au/abares/research-topics/agricultural-commodities/australian-crop-report)

Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)

GPO Box 858 Canberra ACT 2601

Telephone 1800 900 090

Web [awe.gov.au](https://awe.gov.au)

The Australian Government acting through the Department of Agriculture, Water and the Environment, represented by the Australian Bureau of Agricultural and Resource Economics and Sciences, has exercised due care and skill in preparing and compiling the information and data in this publication. Notwithstanding, the Department of Agriculture, Water and the Environment, ABARES, its employees and advisers disclaim all liability, including liability for negligence and for any loss, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying on any of the information or data in this publication to the maximum extent permitted by law.

The purpose of this publication is to provide a high level overview of domestic commodities for information only, it is not intended to be relied on as a comprehensive representation of Australia's agricultural sector or used for commercial purposes. The Department of Agriculture, Water and the Environment, ABARES and its employees do not accept responsibility for the accuracy or completeness of the contents and disclaim all liability, including liability for negligence and for any loss, damage, injury, expense or cost incurred by any person directly or indirectly as a result of accessing, using or relying on any of the contents of this publication to the maximum extent permitted by law.

The next issue of *Australian Crop Report* is scheduled to be released on Tuesday 30 November 2021.

### In the next issue:

2021–22 winter crop area and production forecasts updated

2021–22 summer crop area and production forecasts updated

### Acknowledgements

This report was prepared by Amelia Brown, Cameron Van-Lane, Charley Xia, Emily Dahl, Matthew Miller and Peter Collins.

## About the Australian Crop Report

The *Australian Crop Report* contains ABARES forecasts for the area, yield and production of Australia's major winter and summer broadacre crops. Forecasts are made at the Australian state level.

The *Australian Crop Report* is released quarterly in February, June, September and December. The June edition contains ABARES first forecasts of Australian winter crop production at the state level for the next Australian financial year (July to June). It also contains updated estimates of previously released summer crop forecasts. The September edition contains ABARES first forecasts of Australian summer crop production at the state level for the current Australian financial year. It also contains updated estimates of previously released winter crop forecasts. The December and February editions contain updates to both winter and summer crop forecasts for that Australian financial year.

Underpinning the forecasts contained in the *Australian Crop Report* are ABARES assessments of both realised and forecast planting, growing and harvesting conditions in each major production region. This assessment would not be possible without the invaluable participation of a network of expert industry contacts who are confidentially consulted during the preparation of each edition of the *Australian Crop Report*.

# Contents

<b>National overview</b>	<b>1</b>
<b>Climatic and agronomic conditions</b>	<b>5</b>
<b>Crop forecasts by state</b>	<b>11</b>
New South Wales .....	11
Queensland.....	12
Victoria.....	14
South Australia .....	15
Western Australia.....	16
<b>Statistical tables</b>	<b>18</b>

# Tables

Table 1 Winter crop production, Australia, 2011–12 to 2021–22 .....	2
Table 2 Winter crop area, Australia, 2011–12 to 2021–22 .....	3
Table 3 Summer crop area and production, Australia, 2011–12 to 2021–22 .....	4
Table 4 Winter crop forecasts, New South Wales, 2021–22.....	12
Table 5 Summer crop forecasts, New South Wales, 2021–22.....	12
Table 6 Winter crop forecasts, Queensland, 2021–22 .....	13
Table 7 Summer crop forecasts, Queensland, 2021–22 .....	14
Table 8 Winter crop forecasts, Victoria, 2021–22.....	15
Table 9 Winter crop forecasts, South Australia, 2021–22 .....	16
Table 10 Winter crop forecasts, Western Australia, 2021–22 .....	17
Table 11 Winter crop production and area, Australia, 2019–20 to 2021–22.....	18
Table 12 Summer crop production and area, Australia, 2019–20 to 2021–22.....	18
Table 13 Production, major crops, Australian states, 2019–20 to 2021–22.....	19
Table 14 Production, other crops, Australian states, 2019–20 to 2021–22.....	21
Table 15 Supply and disposal of wheat, canola and pulses, Australia, 2014–15 to 2019–20 .....	23
Table 16 Supply and disposal of coarse grains, Australia, 2014–15 to 2019–20.....	24
Table 17 Grain, oilseed and pulse prices, fourth quarter 2019 to second quarter 2021 .....	25

# Maps

Map 1 Australian rainfall percentiles, 1 May 2021 to 31 July 2021.....	5
Map 2 Australian rainfall percentiles, August 2021 .....	6
Map 3 Root zone soil moisture, 29 August 2021 .....	7
Map 4 Chance of exceeding median rainfall September to November 2021 .....	8
Map 5 Rainfall totals that have a 75% chance of occurring, September to October 2021 .....	8
Map 6 Modelled water availability levels that have a 75% chance of occurring by the end of October 2021 .....	9

# National overview

Australian winter crop production in 2021–22 is forecast to be well above average. Area planted to winter crops is estimated to be a record high and average yields are forecast to be above long-term averages in every state, but generally below those achieved in 2020–21.

Growing conditions in June and July were exceptionally favourable with ample soil moisture and average to above average rainfall in most cropping regions. The favourable conditions boosted crop establishment and development. Growing conditions during August were generally less favourable with lower rainfall and warm conditions meaning crops drew down soil moisture levels in most cropping regions, except for northern and central New South Wales.

The growing conditions over winter meant yield prospects at the start of spring were average to above average in most cropping regions. However, crops in some regions in Western Australia, central Queensland and the Mallee regions in Victoria and South Australia will need early spring rainfall to fulfill this potential. Crops in most parts of Western Australia are expected to achieve significantly above average yields, even if spring rainfall is below median.

According to the latest three-month rainfall outlook (September to November), issued by the Bureau of Meteorology on 2 September 2021, spring rainfall is very likely to exceed median in the eastern states and South Australia. Spring rainfall is less likely to exceed median in most cropping regions in Western Australia outside of the Esperance zone.

If there is higher than median rainfall in eastern states and South Australia it may delay harvest and lower grain quality in some regions.

**Winter crop** production is forecast to fall by 2% in 2021–22 to 54.8 million tonnes, which is 32% above the 10-year average to 2020–21. Area planted to winter crops is estimated to be a record high at around 23.2 million hectares. Yields are forecast to fall from last year in most states but still be above long-term averages. Forecast yields are more than 20% above 10-year averages to 2020–21 in New South Wales, Western Australia and Queensland and around 10% higher in Victoria and South Australia.

For the major winter crops in 2021–22, **wheat** production is forecast to fall by 2% to 32.6 million tonnes. The average yield is forecast to fall by 3% and area planted is estimated to have increased by 1%. Production of **barley** is forecast to fall by 5% to 12.5 million tonnes. The average yield is forecast to fall by 3% and area planted is estimated to have fallen by 2%. Production of **canola** is forecast to increase by 11% to a record high of over 5 million tonnes. Area planted to canola is estimated to have increased 24% to reach the third highest on record of just over 3 million hectares, boosted by producers responding to favourable world prices and excellent planting conditions in Western Australia and New South Wales. The average yield is forecast to fall by 10% from the record high of last season. The estimate of last season's canola production has also been revised upwards by around 500,000 tonnes. This revision comes as canola exports in New South Wales and Victoria point to higher production than previously estimated.

Among other crops, **chickpea** production in 2021–22 is forecast to increase by 15% to 844,000 tonnes. Production of **oats** is forecast to fall by 5% due to a 9% reduction in area planted.

High mouse numbers in some winter cropping regions mean localised crop losses are possible. The largest mice populations are in southern Queensland and northern and central New South Wales. There are also high populations in central Queensland and the Geraldton zone in Western Australia. Elsewhere in cropping regions, mice populations are reported to be moderate to low.

While some growers in affected regions are likely to incur production losses, these are not expected to lower national production significantly. Early in the season, some growers in New South Wales and Queensland replanted some crops because of mice damage. As the season progressed, growers in affected regions increased monitoring and baiting. If mice populations do increase in spring, harvested crops in affected areas may need to be cleaned of mouse debris and treated. While these measures will add to production costs for affected producers, it is expected production losses will be minimised.

A large increase in mice populations in spring poses a risk to the quality of grain stored on farm. This is especially concerning in parts of New South Wales where on-farm storage is usually greater than in other states. This year represents the second consecutive well above average crop, and is likely to add to the amount of on-farm grain storage. Downstream supply chain participants are building new storage capacity to minimise this risk, and are streamlining screening processes to detect contamination.

If mice numbers increase during spring and summer, this will likely add to production costs of summer crops in northern New South Wales and Queensland.

**Table 1 Winter crop production, Australia, 2011–12 to 2021–22**

Year	Unit	New South Wales	Victoria	Queensland	South Australia	Western Australia	Australia
2011–12	kt	11,952	7,352	2,329	7,371	16,600	45,673
2012–13	kt	11,123	6,886	2,156	6,470	11,244	37,936
2013–14	kt	9,773	6,774	1,516	7,221	16,511	41,881
2014–15	kt	10,445	5,117	1,464	7,439	14,662	39,198
2015–16	kt	11,624	3,568	2,104	6,104	14,206	37,687
2016–17	kt	15,510	9,511	3,159	10,656	17,737	56,675
2017–18	kt	7,743	7,612	1,438	7,022	14,510	38,396
2018–19	kt	3,243	4,603	686	5,487	17,633	31,737
2019–20	kt	3,195	8,334	695	5,533	12,172	30,003
2020–21 s	kt	18,984	9,698	1,670	8,400	16,843	55,699
2021–22 f	kt	16,082	7,721	2,729	7,837	20,289	54,775
% change 2020–21 to 2021–22		-15	-20	63	-7	20	-2

f ABARES forecast. s ABARES estimate.

Notes: Includes barley, canola, chickpeas, faba beans, field peas, lentils, linseed, lupins, oats, safflower, triticale and wheat. Due to a change in scope by the ABS of its agricultural data collections, crop production is shown for establishments with an estimated value of agricultural operations (EVAO) of \$5,000 or more until 2014–15, and an EVAO of \$40,000 or more from 2015–16.

Sources: ABARES; ABS

**Table 2 Winter crop area, Australia, 2011–12 to 2021–22**

Year	Unit	New South Wales	Victoria	Queensland	South Australia	Western Australia	Australia
2011–12	'000 ha	5,969	3,411	1,205	3,838	8,252	22,693
2012–13	'000 ha	5,852	3,457	1,222	3,776	8,097	22,421
2013–14	'000 ha	5,314	3,283	1,105	3,448	8,249	21,419
2014–15	'000 ha	5,491	3,304	995	3,639	8,313	21,760
2015–16	'000 ha	5,375	2,915	1,049	3,152	7,771	20,283
2016–17	'000 ha	6,062	3,231	1,375	3,904	8,531	23,126
2017–18	'000 ha	5,489	3,509	1,302	3,645	7,898	21,861
2018–19	'000 ha	3,990	3,350	725	3,391	8,296	19,771
2019–20	'000 ha	3,789	3,534	748	3,473	8,117	19,678
2020–21 s	'000 ha	6,102	3,366	1,163	3,670	8,310	22,631
2021–22 f	'000 ha	6,138	3,324	1,266	3,667	8,820	23,240
% change 2020–21 to 2021–22		1	–1	9	0	6	3

f ABARES forecast. s ABARES estimate.

Notes: Includes barley, canola, chickpeas, faba beans, field peas, lentils, linseed, lupins, oats, safflower, triticale and wheat. Due to a change in scope by the ABS of its agricultural data collections, crop production is shown for establishments with an estimated value of agricultural operations (EVAO) of \$5,000 or more until 2014–15, and an EVAO of \$40,000 or more from 2015–16. Area based on planted crop that is harvested, fed off or failed.

Sources: ABARES; ABS

Area planted to **summer crops** is forecast to rise by 24% in 2021–22 to almost 1.3 million hectares. Area planted to rice and irrigated cotton is forecast to rise given the high availability of irrigation water. Area planted to grain sorghum and dryland cotton is also forecast to increase given the favourable seasonal outlook for spring. Summer crop production is forecast to rise by 33% to around 4.4 million tonnes.

Area planted to **grain sorghum** in 2021–22 is forecast to increase by 4% to 531,000 hectares. High expected returns and expected favourable seasonal conditions in spring are forecast to increase planted area in New South Wales. Grain sorghum production is forecast to increase by 15% to 1.7 million tonnes.

Area planted to **cotton** is forecast to increase by 67% to 496,000 hectares. Increased water storage levels and a favourable spring rainfall outlook are expected to drive an increase in area planted to irrigated and dryland cotton. Production is forecast to increase by 72% to over 1 million tonnes of lint and around 1.5 million tonnes of seed, mainly because of the expected increase in planted area.

Area planted to **rice** is forecast to rise by 42% to 66,000 hectares in 2021–22 in response to plentiful supplies of irrigation water available to rice producers. Rice production is forecast to increase by 44% to 660,000 tonnes.



**Table 3 Summer crop area and production, Australia, 2011–12 to 2021–22**

Year	New South Wales		Queensland		Australia	
	'000 ha	kt	'000 ha	kt	'000 ha	kt
2011–12	757	3,064	783	2,379	1,556	5,489
2012–13	711	3,205	686	2,250	1,411	5,506
2013–14	568	2,317	559	1,469	1,139	3,847
2014–15	435	2,044	696	2,134	1,149	4,263
2015–16	412	1,646	624	1,814	1,054	3,547
2016–17	662	2,289	566	1,278	1,247	3,668
2017–18	614	2,205	648	1,648	1,283	3,952
2018–19	492	915	615	1,307	1,130	2,338
2019–20	135	359	260	499	413	985
2020–21 <b>s</b>	445	1,751	582	1,511	1,042	3,341
2021–22 <b>f</b>	637	2,422	636	1,913	1,289	4,436
% change 2020–21 to 2021–22	43	38	9	27	24	33

**f** ABARES forecast. **s** ABARES estimate.

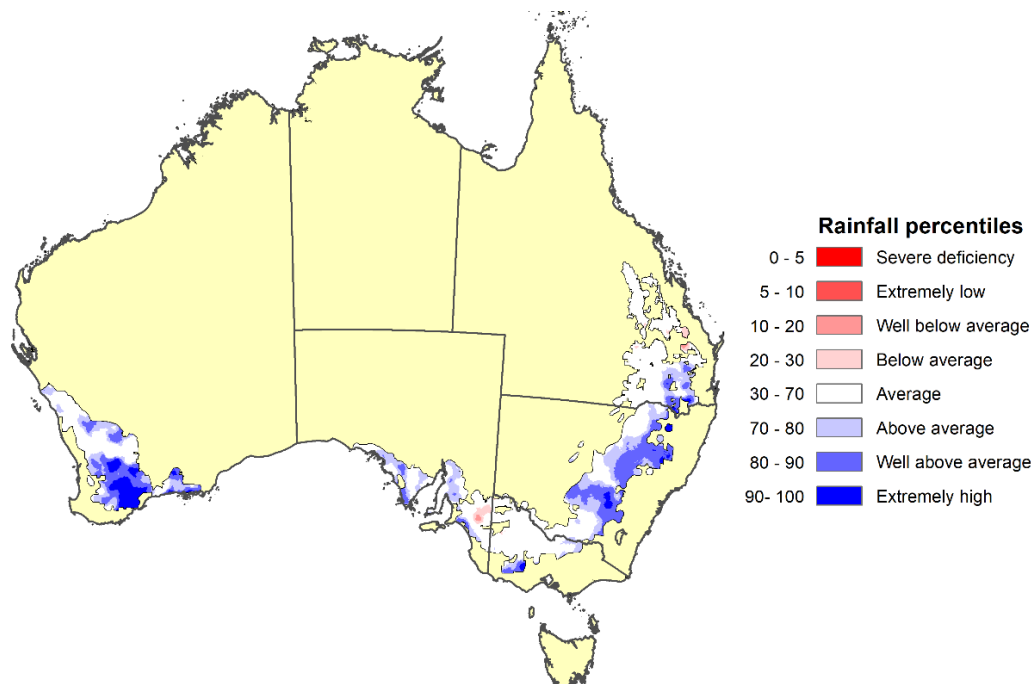
Note: State production includes cottonseed, grain sorghum, corn (maize), mung beans, rice, peanuts, soybeans and sunflowers. Total for Australia also includes navy beans, and small areas and volumes of summer crops in other states. Due to a change in scope by the ABS of its agricultural data collections, crop production is shown for establishments with an estimated value of agricultural operations (EVAO) of \$5,000 or more until 2014–15, and an EVAO of \$40,000 or more from 2015–16. Area based on planted crop that is harvested, fed off or failed.

Sources: ABARES; ABS

# Climatic and agronomic conditions

May to July rainfall was average to above average in most cropping regions in Victoria, Queensland and South Australia. In cropping regions in New South Wales and Western Australia, May to July rainfall ranged from average to extremely high (Map 1).

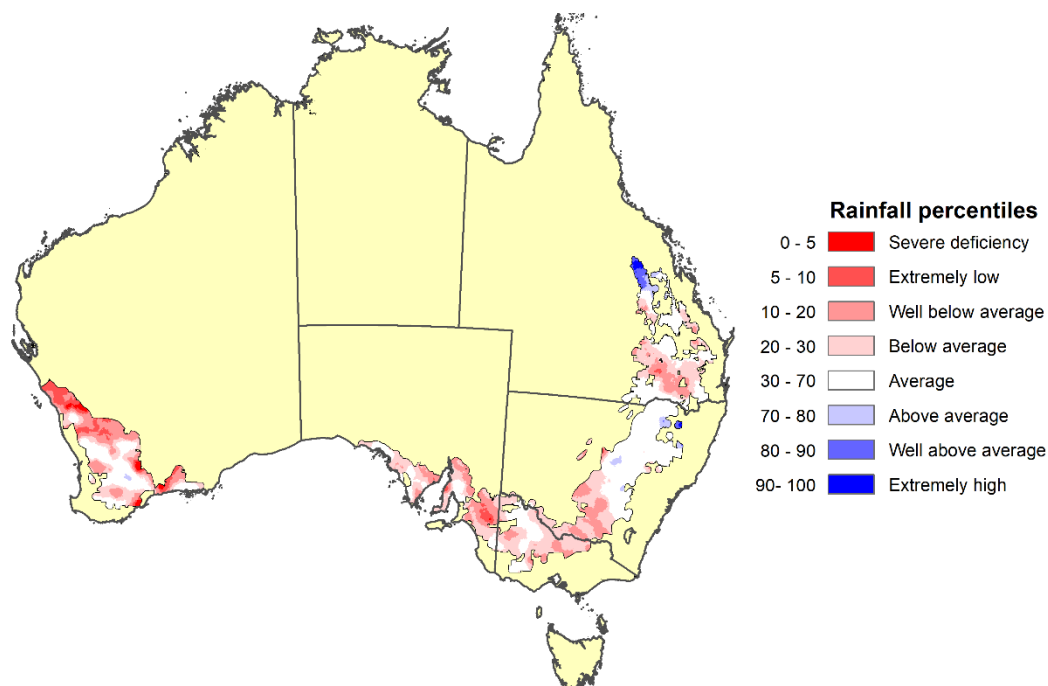
**Map 1 Australian rainfall percentiles, 1 May 2021 to 31 July 2021**



Note: Rainfall percentiles are displayed for cropping regions only.

Source: Bureau of Meteorology

August rainfall was generally below average to average in many cropping regions (Map 2). Average August rainfall boosted soil moisture in some cropping regions in central and northern New South Wales. This moisture will support the final stages of winter crop development and the early planting of summer crops in these regions.

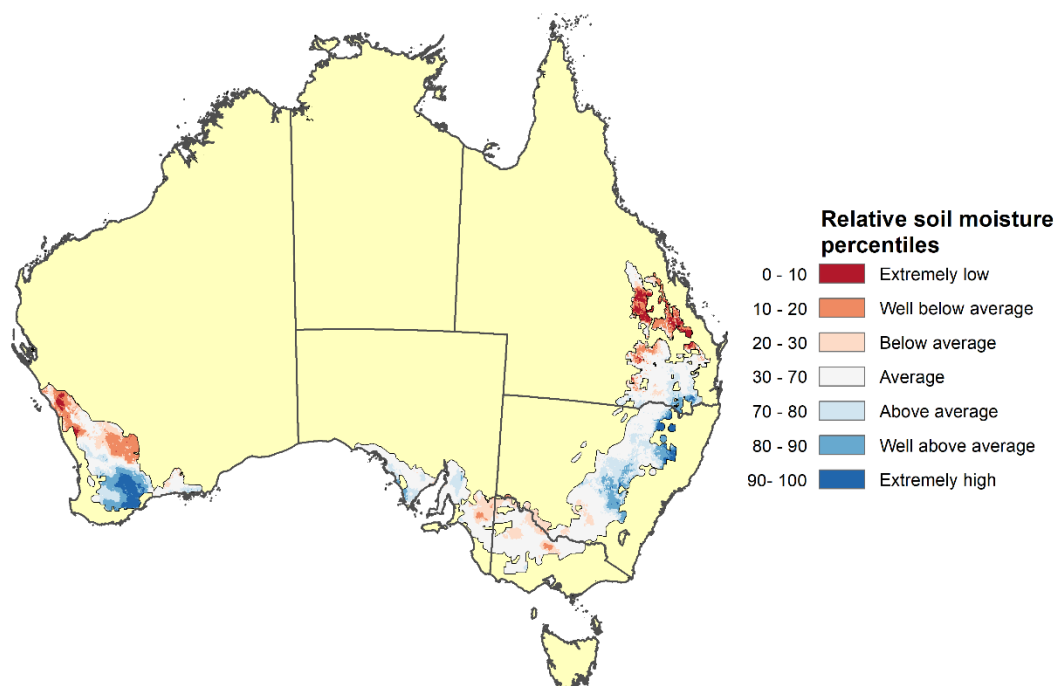
**Map 2 Australian rainfall percentiles, August 2021**

Note: Rainfall percentiles are displayed for cropping regions only.

Source: Bureau of Meteorology

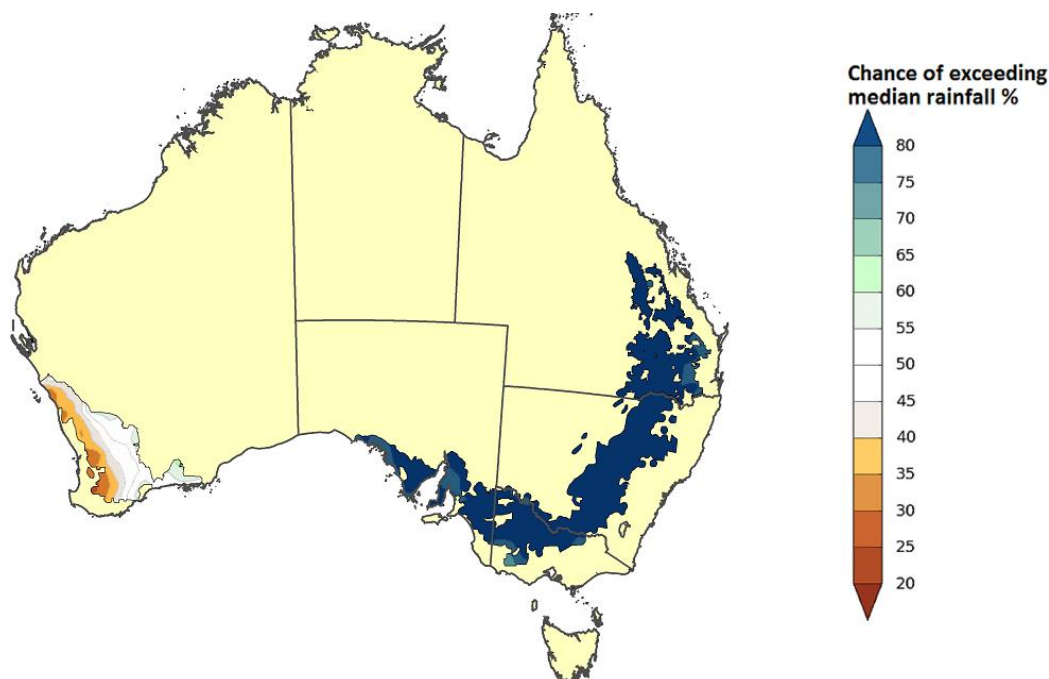
Map 3 shows the relative levels of modelled root zone (0 to ~1 metres) soil moisture for cropping zones across Australia on 29 August 2021. Soil moisture estimates are relative to the historical long-term average (1911 to 2016) and presented in percentiles.

Relative root zone soil moisture on 29 August 2021 was around average to above average for this time of year in most cropping regions. In contrast root zone soil moisture was below average to extremely low for this time of year in northern cropping regions in Queensland and Western Australia and the Mallee in South Australia (Map 3).

**Map 3 Root zone soil moisture, 29 August 2021**

Note: Relative root zone soil moisture is displayed for cropping regions only. The extremely high band indicates where the estimated soil moisture level on 29 August 2021 fell into the wettest 10 per cent of estimated soil moisture levels on that day each year between 1911 and 2016. The extremely low band indicates where the estimated soil moisture levels on 29 August 2021 fell into the driest 10 per cent of estimated soil moisture levels on that day between 1911 and 2016. Source: Bureau of Meteorology.

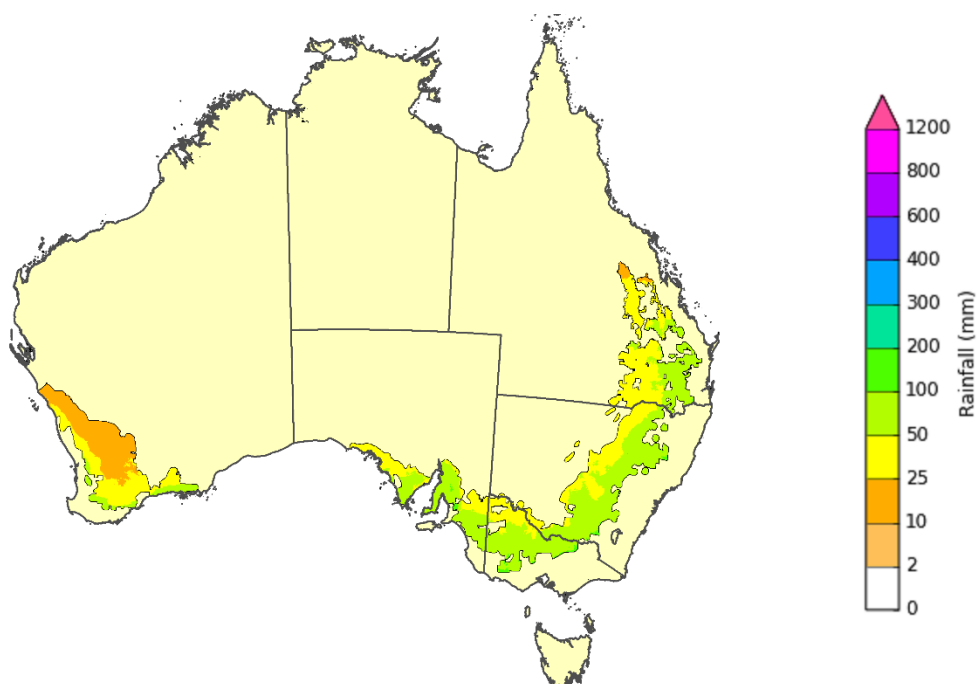
The rainfall outlook presented in Map 4 provides an indication of how favourable conditions for agricultural production are likely to be over spring. The latest three-month rainfall outlook (September to November), issued by the Bureau of Meteorology on 2 September 2021, suggests that spring rainfall is very likely to be above average in most Australian cropping regions in the eastern states and South Australia. However, in Western Australia there are roughly equal chances of higher or lower than average spring rainfall in most central cropping regions and below average spring rainfall is more likely in some western cropping regions in Western Australia. It is likely rainfall will not be evenly distributed in most cropping regions over spring with a lower chance of exceeding average rainfall in September compared to October and November.

**Map 4 Chance of exceeding median rainfall September to November 2021**

Note: Rainfall outlook is displayed for cropping regions only.

Source: Bureau of Meteorology

There is a 75% chance of between 25 and 100 millimetres in most cropping regions in Australia during September and October (Map 5). It is highly likely spring rainfall totals will be enough to maintain average to above average crop yields through to harvest in regions where crops were in a good position at the end of winter.

**Map 5 Rainfall totals that have a 75% chance of occurring, September to October 2021**

Note: Rainfall outlook is displayed for cropping regions only.

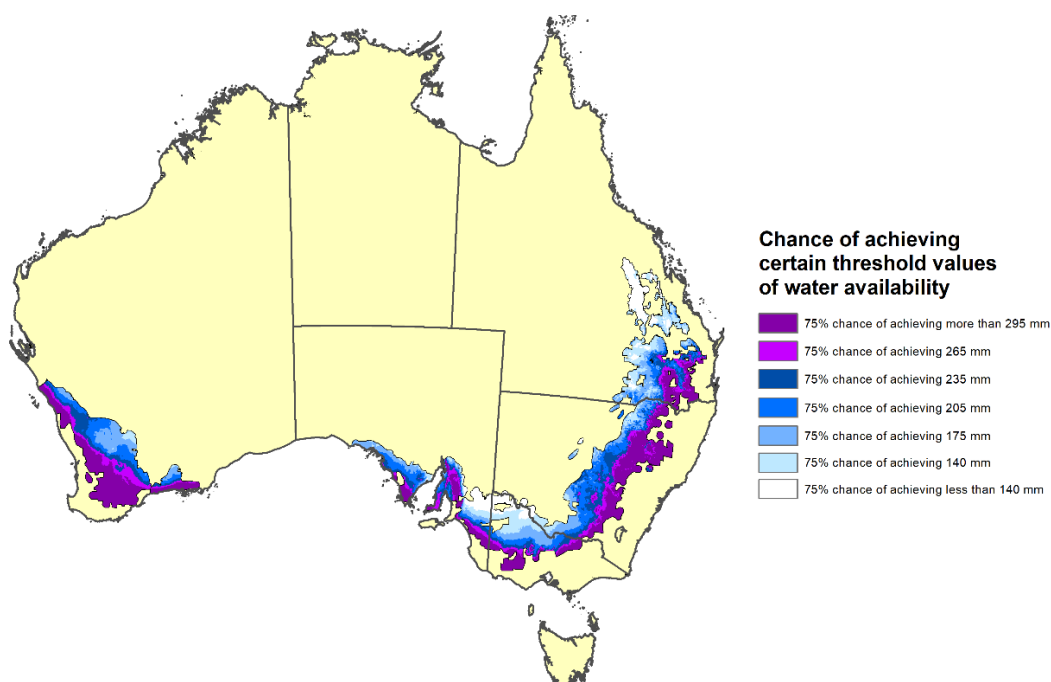
Source: Bureau of Meteorology

However, it is more likely that most cropping regions in Western Australia and northern cropping regions in Queensland will receive less rainfall. There is a 75% chance of rainfall between 10 and 50 millimetres. In the small minority of cropping areas with below average levels of soil moisture at the start of spring, there is a risk that these probable September to October rainfall totals may result in lower yields than currently forecast.

The outlook for maximum and minimum temperatures for September to November 2021 indicates that night-time and daytime temperatures are likely to be around average in spring in most cropping regions. The current temperature outlook for spring will continue to benefit plant growth, particularly benefiting later sown crops. Mild spring temperatures also decrease the probability of a late frost potentially impacting yields at flowering, and heat stress during grain fill.

Potential crop yield is determined by soil moisture at planting and rainfall received during the growing season. Estimates of water availability over a growing season provide an indication of potential crop yield which can be used to inform crop production forecasts. Map 6 shows modelled water availability levels that have a high chance of occurring by the end of October 2021.

**Map 6 Modelled water availability levels that have a 75% chance of occurring by the end of October 2021**



Note: Modelled water availability is displayed for cropping regions only.

Source: ABARES & Bureau of Meteorology

On average, the total water requirement to achieve the national 5-year average wheat yield of 2.0 tonnes/ha is 235 millimetres, based on a conversion rate of 16kg of wheat per millimetre of water and a standard soil evaporation loss factor of 110 millimetres. The total water requirement to achieve 3.0 tonnes/ha, 2.5 tonnes/ha, 1.5 tonnes/ha, 1.0 tonnes/ha and 0.5 tonnes/ha based on this same conversion rate have been estimated to be 295, 265, 205, 175 and 140 millimetres, respectively.

The crop yield associated with a specific level of water availability varies across regions with variations in soil characteristics. The implications for yield of the analysed threshold values of water availability will differ across regions, as responsiveness of crop yield to soil water availability depends on factors such as temperature, humidity, soil nutrition and the timing of rainfall.

ABARES estimated the winter cropping areas likely to achieve 295, 265, 235, 205, 175 and 140 millimetres of water availability. These indicative estimates are based on modelled plant available soil moisture as at 30 April 2021, recorded rainfall totals as at 21 August 2021, and an estimate of rainfall totals with a 75% chance of falling during September and October derived from the Bureau of Meteorology rainfall outlook released on 19 August 2021.

As at 21 August 2021, the analysis presented in Map 6 indicates average or above yield potential across much of New South Wales, southern Victoria, south-eastern Queensland, central and southern South Australia and much of Western Australia. This average or above yield potential is highly dependent on the timing and intensity of rainfall event during the remainder of the growing season, particularly in Western Australia where soils have a lower moisture holding capacity. Across parts of northern Victoria, northern Queensland and eastern South Australia, modelled water availability analysis indicates that below average yield potentials are more likely by the end of October 2021.

# Crop forecasts by state

## New South Wales

Seasonal conditions in New South Wales have been excellent this season with above to very much above average rainfall from March to July in nearly all winter cropping regions. August rainfall was above average in parts of central and northern New South Wales but below average in southern New South Wales.

According to the latest three-month rainfall outlook (September to November), issued by the Bureau of Meteorology on 2 September 2021, spring rainfall is very likely to be above average in all cropping regions in New South Wales. All areas have a greater than 80% chance of exceeding median rainfall.

With average to above average levels of soil moisture at the end of winter, particularly in central and northern cropping regions, the favourable outlook for spring rainfall will likely result in significantly above average yields. However, well above average spring rainfall may delay harvest, and result in a greater proportion of low-protein wheat and an increased likelihood of damaged and downgraded grain.

**Winter crop** production is forecast to fall by 15% in New South Wales in 2021–22 to 16.1 million tonnes. However, forecast production is the second highest on record and 55% above the 10-year average to 2020–21. Yields are expected to be lower than the extraordinary yields achieved in 2020–21 but still be well above average. Area planted to winter crops in New South Wales is estimated to be just over 6.1 million hectares, a marginal increase from the large area planted in 2020–21 and 15% above the 10-year average to 2020–21.

**Wheat** production is forecast to be 11.1 million tonnes in 2021–22, 15% lower than the record high achieved last year but 65% above the 10-year average to 2020–21. The average yield is forecast to fall to 3.0 tonnes per hectare, 46% above the 10-year average to 2020–21. Area planted to wheat is estimated to have decreased by 3% to 3.7 million hectares, reflecting a shift into canola and pulses. Despite being lower than last year, planted area is still 19% above the 10-year average to 2020–21.

**Barley** production is forecast to be 2.7 million tonnes in 2021–22, 18% lower than the record high achieved last year but 49% above the 10-year average to 2020–21. The average yield is forecast to be 2.95 tonnes per hectare, 13% lower than 2020–21 but 39% above the 10-year average to 2020–21. Area planted to barley is estimated to have fallen by 5% to 900,000 hectares but is still 10% above the 10-year average to 2020–21.

**Canola** production is forecast to be just under 1.4 million tonnes in 2021–22, largely unchanged from last year and 44% above the 10-year average to 2020–21. The average yield is forecast to fall to 1.7 tonnes per hectare, 25% above the 10-year average to 2020–21. Area planted to canola is estimated to have increased by 29% to 800,000 hectares in 2021–22, reflecting the timely early season rainfall and expected high returns.



**Table 4 Winter crop forecasts, New South Wales, 2021–22**

Crop	Area '000 ha	Yield t/ha	Production Kt	Area change %	Prod. change %
Wheat	3,700	3.00	11,100	–3	–15
Barley	900	2.95	2,655	–5	–18
Canola	800	1.70	1,360	29	–3

Note: Yields are based on area planted. Area based on planted crop that is harvested, fed off or failed. Percent changes are relative to last year.

Sources: ABARES

Area planted to **summer crops** in New South Wales in 2021–22 is forecast to increase by 43% to around 637,000 hectares, reflecting an increase in the area planted to all major summer crops, most notably cotton. Production is forecast to increase by 38% to around 2.4 million tonnes.

Area planted to **grain sorghum** is forecast to increase by 15% to around 150,000 hectares in 2021–22, reflecting the positive spring outlook. The average yield is forecast to be average at around 3.20 tonnes per hectare. Production is forecast to be around 480,000 tonnes.

Area planted to **cotton** is forecast to increase by 78% in 2021–22 to 344,000 hectares. The forecast increase is driven by increased water storage levels, the favourable spring rainfall outlook and higher cotton prices. Area planted to both irrigated and dryland cotton are expected to increase. The increased availability of water is expected to result in good yields and production is forecast to be around 1 million tonnes of seed and 732,000 tonnes of lint.

Area planted to **rice** is forecast to increase by 44% to around 65,000 hectares in 2021–22 reflecting an increase in the availability of irrigation water in rice growing regions.

**Table 5 Summer crop forecasts, New South Wales, 2021–22**

Crop	Area '000 ha	Yield t/ha	Production Kt	Area change %	Prod. change %
Grain sorghum	150	3.20	480	15	–3
Cotton lint	344	2.13	732	78	90
Cottonseed	344	3.01	1,037	78	90
Rice	65	10.09	656	44	46

Note: Yields are based on area planted, except cotton which is based on area harvested. Area based on planted crop that is harvested, fed off or failed. Percent changes are relative to last year.

Sources: ABARES

## Queensland

Seasonal conditions over winter were very favourable in some key crop growing regions in Queensland. There was above average winter rainfall in southern cropping regions, which followed above average rainfall over summer and autumn. Soil moisture levels at the end of winter were average to above average across much of the Darling Downs, which puts crops in a strong position at the end of winter. However, seasonal conditions over winter were less favourable in Central Queensland and areas near Roma where winter rainfall was around

average. Soil moisture levels were below average at the end of winter in these regions. Early spring rainfall will be important for crops in these regions to achieve average yields.

The Bureau of Meteorology's latest three-month rainfall outlook, issued on 2 September 2021, indicates a greater than 75% chance of above median rainfall across Queensland cropping regions in spring. While the forecast rainfall will boost crops through the critical flowering and grain filling stages, there is a risk that excess rainfall during harvest may cause harvest delays and quality downgrades.

**Winter crop** production in Queensland is forecast to increase by 63% in 2021–22 to 2.7 million tonnes due to an increase in planted area and an expected increase in yields, which are forecast to be above average in southern cropping regions and around average in northern cropping regions. Area planted to winter crops in Queensland is estimated to have increased by 9% to around 1.3 million hectares in 2021–22. This increase was mostly driven by the favourable conditions in southern Queensland and land being available after it was left fallow during the summer cropping season. High wheat and pulse prices also provided an incentive to producers to increase area planted to winter crops.

**Wheat** production is forecast to rise by 60% in 2021–22 to 1.8 million tonnes, driven by an increase in the average yield to above average. The favourable seasonal conditions in southern Queensland are expected to drive the expected increase in the average yield. Area planted to wheat in Queensland is estimated to have remained largely unchanged in 2021–22 at around 750,000 hectares, despite high wheat prices. A late finish to the grain sorghum season in 2020–21, and below average rainfall in Central Queensland, limited the area planted to wheat.

**Barley** production is forecast to increase by 57% in 2021–22 to around 377,000 tonnes, driven by an increase in the average yield to above average. The higher average yield is expected to result from the favourable seasonal conditions in southern Queensland. Area planted to barley is estimated to have declined by 4% to around 130,000 hectares. The decrease is due to plentiful pasture across Australia and an abundant supply of other feed grains.

**Chickpea** production is forecast to increase by 71% in 2021–22 to around 471,000 tonnes, driven mainly by an increase in the average yield to above average. The increase in the average yield is expected because seasonal conditions to date have been very favourable for chickpeas. Area planted to chickpeas is estimated to have increased by 35% in 2021–22 to 310,000 hectares in response to good soil moisture levels in southern Queensland and high international prices.

**Table 6 Winter crop forecasts, Queensland, 2021–22**

Crop	Area '000 ha	Yield t/ha	Production kt	Area change %	Prod. change %
Wheat	750	2.35	1,763	0	60
Barley	130	2.90	377	–4	57
Chickpeas	310	1.52	471	35	71

Note: Yields are based on area planted. Area based on planted crop that is harvested, fed off or failed. Percent changes are relative to last year.

Sources: ABARES

Area planted to **summer crops** in Queensland is forecast to increase by 9% in 2021–22 to 636,000 hectares in response to favourable planting conditions, high water storage levels and the expectation of above average summer rainfall. Production is expected to increase by 27% to around 1.9 million tonnes, driven by the forecast increase in planted area and an expected increase in yields.

Area planted to **grain sorghum** is forecast to remain unchanged at around 380,000 hectares in 2021–22. Area planted to grain sorghum in Central Queensland is expected to remain above average after a successful season in 2020–21 and high prices. However, competition for area from cotton will constrain these increases. Favourable seasonal conditions are expected in spring and are forecast to lay a solid foundation for above average yields. Production is forecast to increase by 24% to just over 1.2 million tonnes.

Area planted to **cotton** is expected to increase by 45% to 152,000 hectares in 2021–22. Full on-farm water storages and a favourable outlook for seasonal conditions in spring are expected to drive increases in irrigated and dryland planting. Yields are expected to increase and cotton production is forecast to rise by 40% to 312,000 tonnes of lint and 441,000 tonnes of seed.

**Table 7 Summer crop forecasts, Queensland, 2021–22**

Crop	Area '000 ha	Yield t/ha	Production kt	Area change %	Prod. Change %
Grain sorghum	380	3.26	1,239	0	24
Cotton lint	152	2.06	312	45	40
Cottonseed	152	2.91	441	45	40

Note: Yields are based on area planted, except cotton which is based on area harvested. Area based on planted crop that is harvested, fed off or failed. Percent changes are relative to last year.

Sources: ABARES

## Victoria

Most cropping regions in Victoria had a late start to the winter cropping season when below average autumn rainfall delayed seeding. Above average rainfall in June and July allowed growers to complete seeding and provided ideal conditions for crop establishment and growth. Lower layer soil moisture levels were above average in early August in most cropping regions, which provided crops with a buffer against below average August rainfall. Crops in most regions were in a strong position at the end of winter.

The latest three-month rainfall outlook (September to November), issued by the Bureau of Meteorology on 2 September 2021, indicates that spring rainfall is very likely to be above median in all cropping regions in Victoria. It is also highly likely that northern cropping regions will receive rainfall in September that is above average.

The favourable outlook for spring rainfall, combined with the solid foundation laid during winter, means yield prospects are average to above average in most cropping regions. Some northern cropping regions will need the timely rainfall expected in early spring. However, well above average spring rainfall may delay harvests and cause waterlogging issues in southern cropping regions. There is a risk that prolonged waterlogging may cause damage to yield prospects in affected regions.

**Winter crop** production in Victoria is forecast to fall by 20% in 2021–22 to 7.7 million tonnes. This follows record high production in 2020–21 with forecast production in 2021–22 still being 11% above the 10-year average to 2020–21. Area planted to winter crops is estimated to be largely unchanged at 3.3 million hectares. A late start to the winter cropping season caused some area to be planted to cereals that would otherwise have been planted to canola in the Mallee and the Northern Plains.

**Wheat** production is forecast to fall by 22% in 2021–22 to almost 3.7 million tonnes, largely reflecting an expected fall in the average yield from last season's near record high.

**Barley** production is forecast to fall by 17 % in 2021–22 to 2.3 million tonnes. This reflects an estimated 2% fall in planted area to 850,000 hectares and an expected 15% fall in average yield from last season's near record high.

**Canola** production is forecast to fall by 18% in 2021–22 to around 900,000 tonnes, largely reflecting a 20% fall in the average yield to around 2 tonnes per hectare. Estimates of canola production in 2020–21 in Victoria were revised up from 950,000 tonnes to 1.1 million tonnes on account of evidence provided by trade data and domestic use.

**Table 8 Winter crop forecasts, Victoria, 2021–22**

Crop	Area	Yield	Production	Area change	Prod. Change
	'000 ha	t/ha	kt	%	%
Wheat	1,520	2.43	3,700	1	-22
Barley	850	2.71	2,300	-2	-17
Canola	460	1.96	900	2	-18

Note: Yields are based on area planted. Area based on planted crop that is harvested, fed off or failed. Percent changes are relative to last year.

Sources: ABARES

## South Australia

June rainfall was average to above average in cropping regions in South Australia, which helped germinate and establish crops that were dry sown earlier and allowed growers to complete their seeding plans. Above average rainfall and temperatures in July accelerated crop growth across the state. Subsoil moisture levels in early August were above average in most cropping regions, which provided crops with a buffer against below average August rainfall. Most crops had average to above average yield prospects at the end of winter. However, crops planted in soil with less water-holding capacity, such as those in the Mallee, will be reliant on timely rainfall during early spring.

According to the Bureau of Meteorology's seasonal outlook, issued on the 2 September 2021, it is highly likely that rainfall during spring will be above median in cropping regions in South Australia. There is also a 65 to 75% probability that September rainfall in northern cropping regions will be above average.

The favourable rainfall outlook for spring is expected to benefit yield prospects. However, there is a risk that above average rainfall in late spring may contribute to harvest delays and lower grain quality.

**Winter crop** production in South Australia is forecast to fall by 7 per cent in 2021–22 to 7.8 million tonnes, which is expected to be driven by lower average yields compared to last season. Area planted is estimated to have remained largely unchanged compared to last season.

**Wheat** production is forecast to fall by 6% in 2021–22 to 4.5 million tonnes, driven by an expected fall in yields. The average yield is forecast to fall by 6% from last season to around 2.2 tonnes per hectare. Area planted is estimated to have remained largely unchanged.

**Barley** production is forecast to decline by 8% in 2021–22 to 2.2 million tonnes. This forecast decline reflects an estimated 1% fall in the planted area to 850,000 hectares and a forecast 7% decline in yields.

**Canola** production is forecast to fall by 1% in 2021–22 to 370,000 tonnes. The area sown to canola is estimated to have increased by 2% in response to favourable canola prices. However, the average yield is forecast to decline by 3% from last year's highs to around 1.6 tonnes per hectare.

**Table 9 Winter crop forecasts, South Australia, 2021–22**

Crop	Area '000 ha	Yield t/ha	Production kt	Area change %	Prod. change %
Wheat	2,075	2.17	4,500	0	–6
Barley	850	2.59	2,200	–1	–8
Canola	230	1.61	370	2	–1

Note: Yields are based on area planted. Area based on planted crop that is harvested, fed off or failed. Percent changes are relative to last year.

Sources: ABARES

## Western Australia

Seasonal conditions in Western Australia have been excellent this winter cropping season. Rainfall was above to very much above average from March to August in most cropping regions. Area planted to winter crops is well above average reflecting timely rainfall and high levels of soil moisture leading into the planting window. The favourable seasonal conditions mean that many crops are expected to achieve significantly above average yields, even if spring rainfall is below median.

According to the latest three-month rainfall outlook (September to November), issued by the Bureau of Meteorology on 2 September 2021, there are roughly equal chances of higher or lower than average spring rainfall in most central cropping regions in Western Australia. Below average spring rainfall is most likely in some western cropping regions.

While seasonal conditions have been excellent and crop prospects at the end of winter are extremely strong, there is a downside risk in some regions. Some regions are excessively wet, which led to waterlogging in low-lying areas in western cropping regions in the Kwinana and Albany zones, and parts of the Esperance zone. This may adversely affect canola production in these regions.

**Winter crop** production in Western Australia is forecast to rise by 20% to a record high 20.3 million tonnes in 2021–22, 33% above the 10-year average to 2020–21. Winter crop yields

are forecast to be above average reflecting the ideal seasonal conditions to date. Area planted to winter crops in Western Australia is estimated to be a record 8.8 million hectares, 8% above the 10-year average to 2020–21.

**Wheat** production is forecast to increase by 21% to 11.5 million tonnes in 2021–22. The average yield is forecast to increase to a record high of 2.35 tonnes per hectare, 25% above the 10-year average to 2020–21. Area planted to wheat is estimated to have increased by 3% in 2021–22 to 4.9 million hectares, 5% above the 10-year average to 2020–21.

**Barley** production is forecast to rise by 11% to a record high of 4.9 million tonnes in 2021–22, 36% above the 10-year average to 2020–21. A record high yield of 3.06 tonnes per hectare is expected. Area planted to barley is estimated to be 1.6 million hectares, largely unchanged from 2020–21. This estimate of planted area is 5% higher than published in the June 2021 edition of the *Australian crop report*. However, the area planted to barley remains 7% below the 5-year average to 2020–21.

**Canola** production is forecast to increase by 45% in 2021–22 to a record high of 2.4 million tonnes. The average yield is forecast to rise to 1.55 tonnes per hectare, 26% above the 10-year average to 2020–21. Area planted to canola is estimated to be a record high of 1.6 million hectares, reflecting high expected margins and excellent conditions during the planting window.

**Lupin** production is forecast to increase by 5% in 2021–22 to 575,000 tonnes, 5% above the 10-year average to 2020–21. The average yield is forecast to increase and be above average at 1.64 tonnes per hectare. Area planted to lupins is estimated to be 350,000 hectares, 8% lower than the 10-year average to 2020–21. This reflects lower expected returns compared to other crops.

**Table 10 Winter crop forecasts, Western Australia, 2021–22**

Crop	Area '000 ha	Yield t/ha	Production kt	Area change %	Prod. change %
Wheat	4,900	2.35	11,500	3	21
Barley	1,600	3.06	4,900	0	11
Canola	1,550	1.55	2,400	35	45
Lupins	350	1.64	575	0	5

Note: Yields are based on area planted. Area based on planted crop that is harvested, fed off or failed. Percent changes are relative to last year.

Sources: ABARES

# Statistical tables

**Table 11 Winter crop production and area, Australia, 2019–20 to 2021–22**

Crop	Area			Production		
	2019–20	2020–21 s	2021–22 f	2019–20	2020–21 s	2021–22 f
	'000 ha	'000 ha	'000 ha	kt	kt	kt
Wheat	9,863	12,885	12,960	14,480	33,337	32,633
Barley	5,041	4,422	4,340	10,127	13,093	12,477
Canola	2,034	2,448	3,043	2,299	4,524	5,037
Chickpeas	309	508	633	235	733	844
Faba beans	215	269	249	313	510	442
Field peas	248	209	197	210	294	250
Lentils	412	368	390	526	634	639
Lupins	665	496	497	591	774	749
Oats	816	948	862	1,143	1,665	1,588
Triticale	73	72	64	77	131	114

f ABARES forecast. s ABARES estimate.

Notes: Crop year refers to crops planted during the 12 months to 31 March. Slight discrepancies may appear between tables as a result of including the Northern Territory and Australian Capital Territory in Australian totals. Area based on planted crop that is harvested, fed off or failed.

Sources: ABARES; ABS; Pulse Australia

**Table 12 Summer crop production and area, Australia, 2019–20 to 2021–22**

Crop	Area			Production		
	2019–20	2020–21 s	2021–22 f	2019–20	2020–21 s	2021–22 f
	'000 ha	'000 ha	'000 ha	kt	kt	kt
Grain sorghum	204	511	531	398	1,496	1,723
Cottonseed a	69	297	496	162	860	1,478
Cotton lint a	69	297	496	114	608	1,044
Rice	5	46	66	50	458	660
Corn (maize)	38	51	60	268	356	418
Soybeans	10	24	24	17	44	40
Sunflower	9	18	18	11	27	23

a Cotton area is estimated harvested area. f ABARES forecast. s ABARES estimate.

Notes: Crop year refers to crops planted during the 12 months to 31 March. Slight discrepancies may appear between tables as a result of including the Northern Territory and Australian Capital Territory in Australian totals. Area based on planted crop that is harvested, fed off or failed.

Sources: ABARES; ABS; Cotton Australia.

Table 13 Production, major crops, Australian states, 2019–20 to 2021–22

Winter crops	New South Wales		Victoria		Queensland		South Australia		Western Australia		Tasmania	
	Area '000 ha	Prod. kt	Area '000 ha	Prod. kt	Area '000 ha	Prod. kt	Area '000 ha	Prod. kt	Area '000 ha	Prod. kt	Area '000 ha	Prod. kt
<b>Wheat</b>												
2021–22 f	3,700	11,100	1,520	3,700	750	1,763	2,075	4,500	4,900	11,500	15	70
2020–21 s	3,800	13,110	1,500	4,768	750	1,103	2,075	4,800	4,750	9,500	10	56
2019–20	2,132	1,772	1,429	3,714	441	418	1,721	2,689	4,133	5,842	7	44
Five-year average to 2020–21	2,871	6,251	1,447	3,821	575	842	1,954	4,140	4,397	8,533	8	47
<b>Barley</b>												
2021–22 f	900	2,655	850	2,300	130	377	850	2,200	1,600	4,900	10	45
2020–21 s	950	3,230	870	2,784	135	240	860	2,400	1,600	4,400	7	39
2019–20	885	916	1,102	3,117	80	80	1,061	1,995	1,907	3,996	5	23
Five-year average to 2020–21	865	1,838	931	2,486	114	215	930	2,175	1,726	4,218	6	28
<b>Canola</b>												
2021–22 f	800	1,360	460	900	2	4	230	370	1,550	2,400	1	3
2020–21 s	620	1,395	450	1,100	2	1	225	375	1,150	1,650	1	3
2019–20	327	206	405	731	1	1	153	241	1,148	1,117	1	2
Five-year average to 2020–21	600	801	428	782	1	1	200	315	1,262	1,577	1	3
<b>Oats</b>												
2021–22 f	280	378	128	255	35	45	69	110	350	800	0	0
2020–21 s	320	496	135	365	15	8	85	140	390	650	3	6
2019–20	264	183	108	197	50	25	92	92	299	643	2	3
Five-year average to 2020–21	322	306	127	282	39	22	87	129	343	743	3	5

continued ...



**Table 13 Production, major crops, Australian states, 2019–20 to 2021–22 (continued)**

Summer crops	New South Wales		Victoria		Queensland		South Australia		Western Australia		Tasmania	
	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.
	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt
<b>Grain sorghum</b>												
2021–22 <b>f</b>	150	480	0	2	380	1,239	0	0	1	3	0	0
2020–21 <b>s</b>	130	494	0	0	380	1,000	0	0	1	2	0	0
2019–20	44	79	0	4	159	313	0	0	0	2	0	0
Five-year average to 2020–21	110	292	1	2	307	764	0	0	1	3	0	0
<b>Cottonseed <b>a</b></b>												
2021–22 <b>f</b>	344	1,037	0	0	152	441	0	0	0	0	0	0
2020–21 <b>s</b>	193	545	0	0	105	315	0	0	0	0	0	0
2019–20	55	118	0	0	15	44	0	0	0	0	0	0
Five-year average to 2020–21	244	595	0	0	122	298	0	0	0	0	0	0
<b>Rice</b>												
2021–22 <b>f</b>	65	656	0	0	1	5	0	0	0	0	0	0
2020–21 <b>s</b>	45	450	0	0	1	8	0	0	0	0	0	0
2019–20	4	46	0	0	1	4	0	0	0	0	0	0
Five-year average to 2020–21	40	398	0	0	1	5	0	0	0	0	0	0

**a** Cotton area is estimated harvested area. **f** ABARES forecast. **f** ABARES forecast. **s** ABARES estimate.

Note: Zero is used to denote nil or less than 500 tonnes or 500 hectares. Area based on planted crop that is harvested, fed off or failed.

Sources: ABARES; ABS

Table 14 Production, other crops, Australian states, 2019–20 to 2021–22

Winter crops	New South Wales		Victoria		Queensland		South Australia		Western Australia		Tasmania	
	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.
	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt
<b>Chickpeas</b>												
2021–22 f	280	316	30	40	310	471	8	11	5	6	0	0
2020–21 s	220	374	45	68	230	275	8	11	5	5	0	0
2019–20	66	24	38	26	171	162	21	18	13	5	0	0
Five-year average to 2020–21	255	324	42	45	325	434	22	24	8	8	0	0
<b>Field peas</b>												
2021–22 f	37	45	40	55	0	0	85	90	35	60	0	0
2020–21 s	34	61	55	83	0	0	85	105	35	45	0	0
2019–20	28	18	69	58	0	0	106	90	46	44	0	0
Five-year average to 2020–21	46	46	68	75	0	0	93	112	34	46	0	0
<b>Lentils</b>												
2021–22 f	7	8	170	280	1	1	200	330	12	20	0	0
2020–21 s	7	10	180	306	0	0	170	300	11	18	0	0
2019–20	5	3	225	268	0	0	161	234	21	21	0	0
Five-year average to 2020–21	5	5	187	233	0	0	172	298	11	12	0	0
<b>Lupins</b>												
2021–22 f	68	88	38	39	1	1	40	45	350	575	0	0
2020–21 s	68	130	38	44	0	0	40	50	350	550	0	0
2019–20	43	24	43	39	0	0	45	41	533	485	0	2
Five-year average to 2020–21	63	58	42	44	0	0	53	62	431	617	0	1

continued ...

Table 14 Production, other crops, Australian states, 2019–20 to 2021–22 (continued)

Summer crops	New South Wales		Victoria		Queensland		South Australia		Western Australia		Tasmania	
	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.
	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt	'000 ha	kt
<b>Corn (maize)</b>												
2021–22 f	20	180	6	58	31	149	0	0	3	27	0	4
2020–21 s	18	176	4	41	25	110	0	0	3	25	0	4
2019–20	10	95	5	54	17	58	0	0	5	56	1	5
Five-year average to 2020–21	18	162	6	58	26	103	0	0	3	28	0	3
<b>Soybeans</b>												
2021–22 f	17	28	1	1	7	11	0	0	0	0	0	0
2020–21 s	16	31	1	1	8	12	0	0	0	0	0	0
2019–20	6	8	0	0	4	9	0	0	0	0	0	0
Five-year average to 2020–21	13	17	1	1	6	9	0	0	0	0	0	0
<b>Sunflower</b>												
2021–22 f	11	16	0	0	7	7	0	0	0	0	0	0
2020–21 s	10	20	0	0	8	7	0	0	0	0	0	0
2019–20	4	5	0	0	4	6	0	0	1	1	0	0
Five-year average to 2020–21	7	9	0	0	5	5	0	0	1	1	0	0

f ABARES forecast. s ABARES estimate.

Note: Zero is used to denote nil or less than 500 tonnes or 500 hectares. Area based on planted crop that is harvested, fed off or failed.

Sources: ABARES; ABS; Pulse Australia

**Table 15 Supply and disposal of wheat, canola and pulses, Australia, 2014–15 to 2019–20**

<b>Crop</b>	<b>2014–15 kt</b>	<b>2015–16 kt</b>	<b>2016–17 kt</b>	<b>2017–18 kt</b>	<b>2018–19 kt</b>	<b>2019–20 <sup>s</sup> kt</b>
<b>Wheat</b>						
Production	23,743	22,275	31,819	20,941	17,598	14,480
Apparent domestic use	7,154	7,233	7,746	8,704	9,107	8,719
– seed	564	610	546	520	493	649
– other <b>a</b>	6,590	6,623	7,200	8,184	8,614	8,070
Exports <b>b</b>	16,587	16,116	22,636	13,820	8,981	9,132
Imports <b>b</b>	22	25	25	33	341	708
<b>Canola</b>						
Production	3,540	2,775	4,313	3,893	2,366	2,299
Apparent domestic use <b>a</b>	915	918	856	1,488	776	789
Exports	2,626	1,857	3,458	2,406	1,591	1,524
<b>Pulses</b>						
Production						
– lupins	549	652	1,031	714	799	591
– field peas	290	205	415	317	160	210
– chickpeas	555	875	2,004	998	205	235
Apparent domestic use <b>a</b>						
– lupins	306	398	637	258	540	376
– field peas	124	72	148	189	87	165
– chickpeas	1	1	1	1	1	1
Exports						
– lupins	243	254	395	456	259	215
– field peas	168	134	268	130	75	48
– chickpeas	663	1,145	2,293	724	372	349

**a** Calculated as a residual: production plus imports less exports less any observed or assumed change in stocks and, for wheat only, less seed use. **b** Includes grain and grain equivalent of wheat flour. **s** ABARES estimate.

Notes: Production, use, trade and stock data are on a marketing year basis: October–September for wheat; November–October for canola and pulses. Export data on a marketing year basis are not comparable with financial year export figures published elsewhere. Zero is used to denote nil or less than 500 tonnes. Due to a change in scope by the ABS of its agricultural data collections, crop production is shown for establishments with an estimated value of agricultural operations (EVAO) of \$5,000 or more until 2014–15, and an EVAO of \$40,000 or more from 2015–16.

Sources: ABARES; ABS; Pulse Australia

**Table 16 Supply and disposal of coarse grains, Australia, 2014–15 to 2019–20**

<b>Crop</b>	<b>2014–15 kt</b>	<b>2015–16 kt</b>	<b>2016–17 kt</b>	<b>2017–18 kt</b>	<b>2018–19 kt</b>	<b>2019–20 s kt</b>
<b>Barley</b>						
Production	8,646	8,992	13,506	9,254	8,819	10,127
Apparent domestic use	2,185	2,418	2,324	3,988	4,482	4,499
– seed	185	218	186	200	182	199
– other <b>a</b>	2,000	2,200	2,139	3,789	4,300	4,300
Export	5,932	6,342	9,873	6,496	4,553	4,067
– feed barley	3,070	4,351	6,364	3,641	1,740	1,992
– malting barley	2,149	1,394	2,826	2,084	1,946	1,332
– malt (grain equivalent)	713	596	683	771	866	743
<b>Oats</b>						
Production	1,198	1,300	2,266	1,227	1,135	1,143
Apparent domestic use	960	1,026	1,708	1,539	1,291	809
– seed	39	49	42	45	34	46
– other <b>a</b>	921	977	1,666	1,494	1,258	763
Export	111	109	106	121	127	238
<b>Triticale</b>						
Production	143	127	150	87	59	77
Apparent domestic use	143	126	150	87	59	77
– seed	4	3	3	2	4	4
– other <b>a</b>	139	123	147	84	56	73
Export	0	1	0	0	0	0
<b>Grain sorghum</b>						
Production	1,282	2,210	1,791	994	1,257	1,161
Apparent domestic use <b>b</b>	748	1,037	771	542	977	1,101
– seed	4	3	2	2	3	1
– other <b>a</b>	744	1,034	769	540	974	1,100
Export <b>b</b>	397	1,638	913	277	441	101
<b>Corn (maize)</b>						
Production	390	495	400	436	387	327
Apparent domestic use <b>b</b>	277	430	349	359	344	163
– seed	1	1	1	1	1	1
– other <b>a</b>	276	429	348	358	343	162
Export <b>b</b>	60	64	63	68	73	53

**a** Calculated as a residual: production plus imports less exports less any observed or assumed change in stocks less seed use. **b** For summer crops, export and apparent domestic use volumes are shown in year of actual export and consumption, which is typically in the year following production. Export data are on a marketing year basis and are not comparable with financial year export figures published elsewhere. **s** ABARES estimate.

Notes: Production, use and export data are on a marketing year basis: November—October for barley, oats and triticale; March—February for grain sorghum and corn (maize). Zero is used to denote nil or less than 500 tonnes. Due to a change in scope by the ABS of its agricultural data collections, crop production is shown for establishments with an estimated value of agricultural operations (EVAO) of \$5,000 or more until 2014–15, and an EVAO of \$40,000 or more from 2015–16. Sources: ABARES; ABS; UN Commodity Trade Statistics Database (UN Comtrade)

**Table 17 Grain, oilseed and pulse prices, fourth quarter 2019 to second quarter 2021**

Crop	2019 Q4 A\$/t	2019 Q1 A\$/t	2020 Q2 A\$/t	2020 Q3 A\$/t	2020 Q4 A\$/t	2020 Q1 A\$/t	2021 Q2 A\$/t
<b>Wheat</b>							
Domestic: feed, del. Sydney	415	443	423	371	334	304	314
International: US no. 2 hard red winter, fob Gulf <b>a</b>	320	350	341	323	372	367	373
<b>Barley</b>							
Domestic: 2 row feed, del. Sydney	374	371	340	300	257	259	270
Export: feed <b>b</b>	319	308	336	278	267	270	285
Export: malting <b>b</b>	385	348	367	323	319	311	317
International: feed, fob Rouen <b>a</b>	275	287	279	280	323	341	336
<b>Grain sorghum</b>							
Domestic: feed, del. Sydney	433	428	391	337	349	354	323
Export <b>b</b>	732	1278	458	392	407	386	369
<b>Oats</b>							
Domestic: feed, del. Sydney	485	530	524	390	266	221	231
International: CME oats nearby contract	302	301	307	265	292	324	342
<b>Corn (maize)</b>							
Domestic: feed, del. Sydney	489	520	511	416	384	373	357
International: US no. 2 yellow corn, fob Gulf <b>a</b>	244	254	223	219	263	313	374
<b>Oilseeds</b>							
Domestic: canola, del. Melbourne	615	634	654	601	600	619	701
International: Europe rapeseed, cif Hamburg	637	663	628	627	661	732	859
International: US no. 2 soybeans, fob Gulf <b>a</b>	524	535	519	535	643	703	751
<b>Pulses</b>							
Domestic: lupins, del. Kwinana	432	529	552	497	386	393	362
Domestic: chickpeas, del. Melbourne	778	856	736	628	583	616	679
Domestic: field peas, del. Melbourne	489	527	520	449	394	406	415
Export: chickpeas <b>b</b>	830	856	867	771	693	692	747
Export: field peas <b>b</b>	612	663	665	650	515	481	496

**a** Average of daily offer prices made in US dollars and converted to Australian dollars using quarterly average of daily exchange rates. **b** Export unit values reflect the average price received for grain exported over the quarter, not current market prices. These prices are the average unit value (free on board) of Australian exports recorded by the Australian Bureau of Statistics. A long lag time can exist between when exporters negotiate prices and when the product is exported. Note: Q1 refers to the period January–March; Q2 refers to April–June; Q3 refers to July–September; Q4 refers to October–December. Prices used in these calculations exclude GST.

Sources: ABARES; ABS; CME Group; Farm Weekly; International Grains Council; Jumbuk AG; The Land; The Weekly Times; US Department of Agriculture