

## Summary

### The 2016 season

Overall, the 2016 season continues to shape up as one of the best ever. Crops have been sown into moist soils since early April, regular rainfall has replenished soil moisture, and mild to warm temperatures have created optimum growing conditions.

The WA rainfall for May was average over most of the grainbelt. The exceptions were in districts north of Geraldton and the Esperance region which recorded below average rainfall.

Saturated soils in the central Kwinana and lower Albany zones have caused some delays to operations with bogged machinery a common, though conversely welcome, problem.

Crops are well advanced with canola flowering and lupins have early bud formation in the lower Geraldton zone. Post emergent weed control and fertiliser applications have been conducted in May in broadleaf and cereal crops in most districts.

The current conditions will promote the risk of pests and diseases so there is a need for growers to stay vigilant. Foliar diseases of wheat and barley are likely to be a threat. Sclerotinia in canola will require control in districts with a frequent canola rotation. Viruses in cereals and lupins may be more prevalent with aphid numbers likely to be high based on the early and high growth of pastures.

Additionally, cereals will be flowering earlier than usual. Frost damage is a constant issue in the southern half and with high yield potential in all districts, the frost risk will be higher than usual.

These threats don't seem to be dampening the optimism that growers have with the 2016 season and should the weather for the rest of winter and spring be average, it will be a bumper harvest.

### 2016 WA Crop Area Estimates (hectares)

Port zone	Wheat	Barley	Canola	Oats	Lupins	Field pea	State total
Kwinana	2,354,000	475,000	455,000	149,000	124,000	9,000	3,566,000
Albany	714,000	450,000	315,000	97,000	39,000	6,000	1,621,000
Esperance	490,000	288,000	278,000	6,000	9,000	15,000	1,086,000
Geraldton	885,000	39,000	120,000	8,000	174,000	1,000	1,227,000
<b>Totals</b>	<b>4,443,000</b>	<b>1,252,000</b>	<b>1,168,000</b>	<b>260,000</b>	<b>346,000</b>	<b>31,000</b>	<b>7,500,000</b>
Since May 2016	-0.2%	0.0%	-0.2%	0.0%	1.5%	0.0%	-0.1%

## **Kwinana Zone**

### **The Midlands**

'The best early season conditions in memory' is a common refrain throughout the Midlands, from Warradarge to Wubin and south.

While some pre-seeding spray budgets have been blown out by 100%, crops have been established without weed competition and are in excellent condition.

Seeding has basically finished, with ameliorated soils being the last to be planted to allow the soils to settle for better seed depth placement.

Post emergent weed spraying in wheat has commenced along with weed control in canola and lupins.

Lupin establishment on the poorer sand soils, typically non-wetting with low water holding capacity, is the best in years.

Barley is at the 3 to 6 leaf stage, while wheat is emerging at the 3 leaf stage. Extra nitrogen has been applied to match the early yield potential. All crops are looking in excellent condition.

Production risks revolve around frost and disease. Early sown cereals will mature earlier than usual and may have a higher risk of weather related grain quality issues. Sclerotinia in canola is a higher possible risk than usual.

Weeds seem to be in very low numbers, due to several knockdown applications. The main weed to date is radish, again in low numbers.

### **Kwinana east**

Most districts in the east Kwinana zone have good seasonal prospects at this early stage. The districts of Bencubbin to Beacon to Wubin, and Trayning to Kellerberrin to east Merredin are all enjoying good conditions.

The northern districts from Beacon to Bonnie Rock could do with more rain to bolster soil moisture.

Most growers have completed seeding with some field pea and chickpea paddocks being sown to finish programs.

All crops have germinated in May with wheat at the 3 to 4 leaf stage. Some post emergent weed control has started but weed numbers are very low. Canola is bolting with the odd crop at early flowering.

There will be a heightened disease risk with the early growth in cereals and the green bridge may pose a virus threat.

Expectations are for an average season at worst with plenty of upside.

### **Kwinana west**

Strong crop growth is seen from Southern Cross to Naremburn to Bruce Rock, Merredin to Kellerberrin. A slightly dry June could be useful as all soils are at field capacity and there is a risk of localised waterlogged and delays to crop spray and top up nitrogen programs.

Canola is very well advanced with some crops up to full flower stage. Post emergent herbicides and nitrogen has been applied.

Barley is mid stem elongation, while wheat is tillering to first node stage.

The big question now is if and/or when to apply more nitrogen and how much? Yield potential is extremely high but it's too early to be confident of gaining a benefit from extra nitrogen. It is estimated that at least 20 to 30 units of additional nitrogen is needed to achieve up to an extra 1.5 tonnes per hectare of yield that the crop is currently capable of yielding.

Cereal crops were planted into moisture long before the average date for the break to the season. Because of the warm growing conditions, early sown crops are way ahead of recently germinated crops, causing logistical headaches for post emergent application of nitrogen and pesticides.

Frost risk is front of mind for growers with early sown wheat. Many growers have used a mix of varieties and planting times to reduce this risk. Growers budget on an unseen loss to frost each year of around 10%. The risk for 2016 is likely to be a lot higher.

## **Albany Zone**

The Lakes region of the Albany zone is experiencing an exceptional season to date. Soils in all districts are wet, but short of being waterlogged.

Crop establishment has been very good on all soil types in all crops. Early growth has been strong. This may be a significant advantage should rainfall be above average in winter as the risk of localised waterlogging is real. The advanced crop growth will aid in minimising any losses if above average rainfall eventuates.

Canola growth ranges from 6 to 8 leaf to bolting, and some early crops are flowering.

Cereals crops are around the 4 to 5 leaf stage or early tillering. Nitrogen applications have been made and early post emergent weed control, where needed, has also been achieved. Crops in the main are very clean with the success of weed control pre-seeding apparent with very few weeds emerging so far.

Average winter rainfall will provide for above average yield potential.

With yield potential well above average, but with so much of the season ahead, growers are weighing up the risk of chasing high yields with nitrogen and fungicide use.

There are slight changes in the mix of crops in the Lakes district with sown wheat area giving way to larger areas of canola and oats. Areas sown to barley and lupins are similar to past seasons.

Seeding is complete in the lower Albany zone, except for some very wet paddocks in the Kojonup and Boyup Brook shires.

Emerged crops are in excellent condition and with low weed burdens. There have been delays already to paddock operations because the soil is very wet. Planes and helicopters are being used for pest and fertiliser applications where tractors can't get onto the paddock. It is likely that control of weeds, pests and diseases will be affected by less than ideal timing as a result.

Yield potential looks to be very good at this very early stage, though waterlogging in low lying country remains a threat should average rainfall be recorded for June and the remainder of winter.

## **Esperance Zone**

Seeding is finished in the Esperance zone after an early start in April. Wet conditions has caused the need for some re-seeding on heavier soils but this is minimal. Crops have germinated very well and crop growth has been strong throughout May.

Canola has had nitrogen and post-emergent weed control applied. Barley crops have shown a range of typical barley disease and control has been required.

All this is happening much sooner than normal and keeping growers extremely busy.

Soil moisture levels are excellent in almost all districts. The eastern districts and far north Mallee could use some rain to top up topsoil levels.

In contrast, the coastal districts from Hopetoun to Munglinup are very wet and face waterlogging, along with poor growth, if winter rainfall is anything more than below average.

Green Peach Aphids are about in big numbers, due to the prolonged season and summer rains.

Yield potential is looking to be very high, rivalling that from 2013 and 2014 at least. However, it is only June and there is a long season ahead.

## **Geraldton Zone**

The districts north of the Geraldton/Mullewa road received their break to the season in late May with only 10 to 15 mm of rain so some seeding was delayed, but the follow up rain of up to 45mm in early June was welcomed in these districts.

Seeding is almost complete with a large portion of the crop having been dry sown. Crops are germinating on the recent rain. Regular rainfall during June is needed to provide for average yield potential.

Canola and lupin areas have been reduced to adjust to the dry start with those remaining paddocks being redirected to fallow.

The districts of Pindar, Canna and Tardun have received more rain than neighbouring districts and are in very good condition.



The districts of Geraldton, Morawa, Mingenew and south Mullewa are generally in good condition. Crops in the districts further south in the Geraldton Zone South are in very good condition. Districts with coastal sands south of Geraldton have increased their lupin area significantly. With the warm and wet conditions in April, lupin establishment on non-wetting sand has been very good. Canola in the Ballidu, Coorow to Three Springs districts has a large amount of white spot disease. However, crops are likely to grow away from the disease without the need for control. The appearance of the disease is unusual and due entirely to the warm wet start to the season. White spot has been an annual issue further south, in districts such as Moora, without causing yield declines. In the southern districts, nitrogen applications are being applied to match the high yield potential of canola and cereal crops. Wheat is at the mid-tillering stage and canola is flowering. In the northern region, no further nitrogen will be applied unless the season provides significant rainfall events in winter and promises more than below average yield potential. Weed control in pre-seeding knockdowns has been very successful. Crops have a low to nil weed burden with growers looking to control broadleaf weeds later after a full germination. Based on the current state of the crops yield potential is below average for northern districts, average for the wider Mingenew region and well above average for the southern districts.

### Season Outlook

**Dr David Stephens**

**Australian Grains Export Innovation Centre**



Very positive crop prospects are likely with excellent soil moisture reserves, optimal early sowing and weed management occurring over much of the wheatbelt (except the far north).

Climate indicators are positive as well with warm water to the north and northwest of Western Australia and cooler water near the Perth coast. Low pressure anomalies have persisted in the Australian region over the last month and cold fronts have moved through without much resistance from high pressures.

However, there is warmer than normal water in the central south Indian Ocean which will work against a wet winter. This forecast would be fortunate for wetter shires with full soil profiles and a waterlogging risk. The current situation however looks similar to previous seasons where June recorded below average rainfall.

Both the Bureau of Meteorology and the DAFWA statistical seasonal forecasting model are predicting average to above average rainfall in central and eastern regions for the rest of the season with slightly below average rainfall forecast for the wetter southwest. AEGIC analogue years also have average to above average rainfall forecast for the rest of the season.

The current projection is for the SOI to continue moving towards a positive scenario and a La Niña situation. Currently it is close to neutral, but it will need to continue to rise for a La Niña to properly develop. A La Niña tends to reduce barometric pressure in the Australian region and favours wet conditions in eastern Australia.

### Bureau of Meteorology

#### Rainfall outlook

- June to August (winter) rainfall is more likely to be above average across most of mainland Australia. However, southwest WA, southern Victoria, and most of Tasmania have roughly equal chances of a wetter or drier three months.
- Large parts of the country are more likely to have a wetter than average June. However, southwest Australia, southwest Victoria, and eastern NSW have roughly equal chances of a wetter or drier June.
- The current outlook reflects the combination of increasing odds for La Niña, chance of a negative Indian Ocean Dipole, and very warm sea surface temperatures surrounding northern and eastern Australia.
- Historical outlook accuracy for winter is moderate over southern WA, northeast Australia, and western Tasmania, with low accuracy elsewhere.

