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Western Australia

Seasonal outlook

Heading into May temperatures normally fall by 2°C to 4°C across the State. The May to July temperature outlook shows a greater than 60% chance of experiencing warmer than normal temperatures for most of WA production areas, as well as a 70% or higher chance of warmer nights than normal.

Rainfall normally increases in May by about 85mm in Donnybrook, 62mm in Harvey, 50mm in Pearce, 44mm in Badgingarra and by 11 mm in Carnarvon. Only in Kununurra does rainfall normally decrease by 23mm. Southwest and far north WA have roughly equal chance of a wetter or drier from May to July.

Evaporation and irrigation

Average daily evaporation rates for the coming month of May are: Harvey 2.7 mm, Karnet 2.1 mm, Gingin 3 mm and Carnarvon 5 mm. A large citrus tree (14 metre square canopy area) will use an average of 20–29 litres of water each day during May in the south-west and 49 litres in Carnarvon.

Seasonal outlook

April to June holds a 60–65% chance of wetter than average conditions over most of WA citrus production areas. In the far north however it is likely to be drier than average.

There is an over 60% chance of warmer than normal days and nights for WA, south of Lancelin and north of Carnarvon.

Phenology

Most early season varieties reach 50 to 60% colour in mid to late April. Some mid-season varieties have now reached colour break. Colour break is when the rind changes from dark to light green. Keep a good record of when colour break occurs in each variety in your orchard. This will help with the accurate timing of GA applications.



GA Applications for rind quality

For maximum delay of rind aging and extension of harvest apply 10 ppm GA at colour break. This may delay colour development by 20 to 30 days. Ten parts per million of

GA applied at 10–50% colour may delay colour development by 10–15 days. Note: Late navel colour development is more sensitive to GA than other navels.

Apply GA to Imperial mandarins at three-quarter colour for the management of watermark.

Internal maturation rates

Monitor maturation rates of fruit closely and ensure fruit meet the minimum Australian Citrus Quality Standards before harvest. Fruit that does not meet these standards will result in a poor eating experience for consumers. The resulting consumer backlash could impact upon the entire citrus industry.

Growers in WA can send their fruit for two tests per variety for pre-harvest testing. This is part of a WA program in the industry development project that complements testing from the retail and wholesale market. Imperial and Hickson mandarins in particular should be sent in for pre-harvest testing to get the best time to pick.

WA growers can send their fruit in for pre-harvest testing. Contact Bronwyn, Industry Development Manager, for more details, 0400 873 875.

Harvest timing

Think carefully about the timing of harvest as this can have a significant impact on the rind quality of the current crop and on flowering and fruit set for the next season. A late harvest for any given variety will reduce flowering the following season, particularly in many mandarin varieties. For mandarins, have an early select pick, taking the largest and most coloured fruit first. This takes the load off the tree and allows the remaining fruit to increase in size.

Copper sprays

Spray copper before autumn rains to protect fruit from fungal infections and disease. Copper works by protecting the fruit surface on which it is applied. It does not kill fungus in already infected fruit. Coverage deteriorates over time as fruit grows and when exposed to wind and rain. Note: Copper can darken blemishes such as wind rub.

Copper foliar sprays can also be used for the management of snail populations, forcing them out of the canopy and onto the ground where baits await. Be careful not to contaminate ground applied snail baits with the copper spray as this will deter the snails from eating them.

Soil management

If your soil requires the addition of gypsum (for soil structure improvement in heavy soil types) or lime (to increase soil pH or make it more alkaline) now is the best time to apply.

Pests

- Copper sprays should be applied before autumn rains to reduce the incidence of Septoria spot, greasy spot, Phytophthora, brown rot and anthracnose.
- Monitor leaf miner and control with oil sprays when activity is detected.
- Monitor scale crawlers and apply oil spray to infested areas when crawlers are active.
- Continue to monitor fruit fly levels and control with bait sprays. Be prepared to increase baiting frequency and density if trap numbers indicate the need.
- Continue to KILL THOSE SNAILS! Snail activity will increase towards the break of season and now is the best time to bait. Autumn baiting will kill adult snails before they have a chance to lay eggs. Snails are also hungry after their summer hibernation.



Monitor for distinctive woody galls which can grow up to up to 250 mm long and 25 mm thick on citrus twigs. These can contain hundreds of larvae. Early detection of galls in orchards is essential for preventing their spread throughout your property. <https://agric.wa.gov.au/n/3398>

Queensland

Climatic conditions

Another month of extremely hot and dry conditions have greeted growers during April, with average maximum temperatures approximately two degrees warmer than historical averages. Average minimum temperatures have also been at least one degree warmer than historical averages.

Coupled with another month of well below average rainfall, April 2016 appears to have been one of the driest and warmest April months on record, with most growing areas recording above average temperatures.

Location	Monthly Rainfall mm	Historical Avg Rainfall	AvgMax Temp °c	Historical Avg Max Temp	Avg Min Temp °c	Historical Avg Min Temp
Gayndah Airport	0.6	24.7	31.3	29.0	16.3	15.2
Mundubbera Post Office	0	40.9	N/A	N/A	N/A	N/A
Emerald Airport	1.0	34.4	32.1	29.8	18.6	16.9
Gin Gin Post Office	38.4	69.3	N/A	N/A	N/A	N/A

Phenology

The harvest of Imperial, Navel, lemons and grapefruit is progressing whilst the harvest of Nova, Freemont and Sunburst is just beginning.

There is no doubt that the external colour development of the fruit has been severely hampered by the above average maximum and minimum temperatures. It is only as the minimum temperatures tended to get down towards 15°C that colour break started in earnest.

Internal qualities of Imperial mandarins have been reasonably good, as evidenced by the results of the Citrus Australia testing program. There have however been examples of external quality issues (browning of the rind after processing) with Imperials, particularly early in the harvest. This also indicates that the rind was relatively immature when harvested.

Small fruit size has become an issue for some growers as the dry finish to the growing season has prevented this fruit achieving optimum size. This is particularly prevalent in blocks where there has not been as much pruning and thinning.

Pests and diseases

Black spot expression is continuing and has become a serious issue in some blocks/ orchards, with widespread fruit drop occurring. This is a latent disease where the infection can occur any time after petal fall and the symptoms will only appear once the fruit starts to mature. Therefore, isolating the exact timing of infection is always difficult.

The summer was dominated by high temperatures and humidity with many storms that have obviously given rise to infection. It is also known that infection levels and field expression levels can be completely different (as shown by incubation trials) and may be influenced by the stress levels of the tree.

There is no doubt that the conditions experienced during March and April have stressed trees and could be a determining factor in the amount of black spot being expressed.



Severe black spot infection in Imperial mandarins

Emperor brown spot levels are very low at present, as one would expect when conditions are so dry. The conditions experienced during autumn (heavy dews and fogs) provide an environment for this disease to flourish. Preventative fungicides need to be maintained during this period.

Spined citrus bug and fruit spotting bug continue to appear sporadically, particularly in Murcott mandarins.

Queensland fruit fly is still active in early season varieties. Adult flies have been seen to be foraging around late season varieties as well. Fruit fly baiting should include late season varieties once per week.

All mite species are relatively quiet, however there is the odd flare up of Oriental mite and Brown citrus rust mite.

Citrus rind borer is causing damage in some blocks, but damage is patchy in nature. Control of this pest has been warranted in some blocks.

Riverland, Murray Valley and Riverina

Climate

Mean daily maximum and minimum temperatures were about one to two degrees above average. No significant rain occurred during the month apart from sporadic thunderstorm activity moving throughout the regions on the last day of the month.

Phenology

The fruit are at colour break and maturing.

Fruit development, size & harvest

Internal fruit quality was passing BrimA in early to mid April and subsequently harvesting and de-greening of M7 and Navelina has occurred. The bulk started in the last week of April. Colour development is slightly slow with the above average temperatures and mild nights. Fruit size is average for early season Navels.

Disease Management – CRITICAL

It is critical to apply Copper sprays (if not already) to protect fruit from fungal infection and reduce the incidence of Septoria spot, Phytophthora brown rot and greasy spot in the orchard (Note: Copper will NOT protect against sour rot or blue/green mould). Phytophthora is an export quarantine disease of concern and copper application is essential for export fruit. A second application might be required in the Riverina in early July for later hanging fruit.

Spread your harvest – GA

Bureau of Meteorology are predicting above average winter rain. Rain can delay harvest from a few days to a week. Spreading the harvest can assist in reducing mid-season supply pressures. If winter rains delay your harvest you could be left with over mature fruit that have a high susceptibility to rind breakdown and are unsuitable for export. The application of GA now can significantly assist in maintaining good rind quality. It can also help to reduce puffing of mandarins. GA application will provide benefits if harvest is delayed. Applying GA during the later colour development stage (i.e. half to three quarter colour) is considered to have some benefit, but a lesser effect as compared to the early colour break stages. Discuss GA options with your packer and/or advisor and check with your state authority. Always follow label recommendations.

Weed control & tree skirts

Maintaining high tree skirts is vital to ensure fruit are not contaminated with herbicide or become infected with Phytophthora (low hanging fruit are at high risk to Phytophthora). It is best to skirt and remove low hanging fruit then risk export quarantine issues. Shrouded herbicide sprayer should be used throughout the season to ensure fruit are not contaminated with herbicide.

Cling sprays

The application of a cling spray is important to reduce premature fruit drop especially on susceptible varieties (Leng) and late hanging fruit. It also helps to maintain greener buttons on fruit. A second spray before bud burst (late June/early July) might be required to hang fruit longer. Sprays applied after bud swell (late July) might distort new growth. Fruit sprayed with cling spray have less button tears. Removed buttons are a possible site for disease infection. Refer the label if GA can be mixed with the cling spray.

Pruning

Pruning is a good method to encourage higher quality wood development and reduce potential flowering sites. Pruning can be commenced straight after harvest and should be a serious consideration for early maturing varieties.

Snails & Fuller Rose Weevil

Autumn rains have begun and now is the time to apply snail baits to control snails before breeding occurs. This season is expected to have a higher snail pressure from the summer rains and increased vegetation. Spray copper for disease control and to deter snails entering the canopy. Ensure tree skirts are maintained and a good weed control program is implemented to reduce FRW risk and soil diseases affecting fruit.

Oleocellosis & harvest handbook

Some incidents of oleocellosis has occurred on semi coloured early navels. Younger/greener fruit are more susceptible to oleocellosis. Harvesting for degreening should be conducted with extra care. Familiarise yourself with optimum harvest practices to reduce oleocellosis damage. A PDF Pre-release version of the "Australian Citrus Harvest Handbook" is available from most packers and it provides instructions to new pickers on how to handle fruit carefully. A few seconds of poor harvesting can ruin a season of fruit growing.

Export Protocols

Ensure that no split or damaged fruit are harvested. Insects that attack damaged fruit can cause quarantine problems. Continue with snail baiting if required and maintain tree skirts to reduce the ability of pests (FRW) to move into trees.

Processing Report

The Australian industry continues to harvest the 2015/16 Valencia crop. The long hot summer across the growing regions has led to concern about the upcoming water restrictions. South Australia has been given an opening irrigation entitlement below 100% for first time in many years.

Brix:acid juice ratios are registering around 17 – similar to last month. Producers harvested a bumper Valencia crop this season. The fruit continues to size up and growers say the bins fill very quickly as a result. Valencias have reportedly been exported as table fruit to Asia this season in a bid to stem the over-supply.

The high volumes of fruit available have led to relatively low pricing for industrial quality. Processors can pick up non-contracted fruit for under AUD200/tonne farm gate, compared with AUD270–300/tonne for fruit contracted before the season began. Processors have begun to crush some Navels and brix:acid juice ratios are also coming in at around 17. The abundance of Valencia on the market this season means the volume of Navels being processed will be limited.

The industry will begin running the winter fruits in early June. The 2016/17 Valencia crop will follow in September/October. Early indications suggest next season's crop will be 0–30% down on the current season. It is likely there will still be old season Valencia fruit on the trees at the time pickers begin harvesting the 2016/17 fruit.

Juice retail

Juice sales on the Australian retail market are performing well at the moment. Chilled juice as a sector is showing a return to modest growth (+4%) on the back of a year of declines. Orange as a flavour is up 5.8% over the last quarter due to strong organic growth, say retailers.

There are also new product innovations, such as double pulp orange juice, which is helping to stimulate consumption.

However, new retailers, such as Aldi, have entered the Australian market and increased competition at the retail level. Packers in South Australia are seeing average retail prices for premium-chilled juice at lower levels than this time last year.

This is great news for consumers, but not so good for suppliers – including the growers.

Overseas

The USDA forecast for Florida's 2015/16 orange crop has been raised to 76.0 million boxes, 5 million boxes higher than the previous month, but still down 22% from last season's final figure. The frozen concentrated orange juice futures market is currently trading at around USD1.36/lb and traders say the market is having trouble maintaining price levels.

The crop in Mexico is winding down now. Mexico and Brazil have been good suppliers to the US this year and are the main beneficiaries of the decline in Florida's output. After a prolonged processing campaign the 2015/16 season is effectively over in Brazil.

Current market indications on production from the next Brazilian crop have been adjusted downward to 270–275 million boxes due to reports of flower loss.

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