

June 2017

Season Update

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This publication is developed with contributions from Mal Wallis, Citri Care, Queensland; Steven Falivene, NSW Department of Primary Industries; Bronwyn Walsh and Kevin Lacey, Department of Agriculture & Food WA.

Although the information in Season Update is designed to provide the latest seasonal information for growers, Citrus Australia strongly recommends growers seek professional advice before acting on any of the information.

Western Australia

Seasonal outlook

The seasonal outlook from June to August is that winter rainfall is likely to be lower than average south of Port Hedland. There is a very high chance of warmer daytime temperatures south of Port Hedland from June to August. For night time temperatures there is a 60-70% chance that they will be warmer than normal. In the far north there is a roughly equal chance of rain and temperatures being above the median.

For more information [click here](#).

Evaporation and irrigation

Average daily evaporation rates for the coming month of July are: Harvey 2.3 mm, Karnet 1.8 mm and Carnarvon 3.7 mm. A large citrus tree (14 metre square canopy area) will use an average of 17 – 25.5 litres of water each day during June in the south-west and 36 litres in Carnarvon.

Be sure not to over-water, as saturated soil at harvest time can impact negatively on fruit quality.



Phenology

We are now in the **floral induction stage** where buds in the tree are making the transition from vegetative to floral buds. Cooler temperatures during winter induce citrus buds to flower. The number of flowers produced and the proportion of different types of flowers is strongly influenced by crop load in the previous season. Most flowers are produced on shoots that grew during last year.

Internal maturity

Monitor fruit maturation rates closely to ensure fruit meets Australian Citrus Quality Standards before harvest. Citrus fee-for-service payers can have the internal quality of fruit

independently tested without charge (two samples per variety per grower). Just drop your samples to any agent at Market City, from Monday to Friday (up to 12pm) to ensure timely testing.

Management

The long-term management goal during the floral induction stage is to **achieve consistent levels of flowering with a high proportion of leafy inflorescences carried on strong bearing shoots.**

Light crop loads (for oranges < 3.5 to 4.0 fruit per 0.5 m quadrat); drought or water stress and good vegetative growth in the previous season can all result in excessive flowering. To achieve balanced flower numbers and good fruit size next season it's important to **act now by applying winter Gibberellic Acid (GA) and ensuring a well-pruned canopy.** More information is available at the DAFWA website, [Improving citrus quality using gibberellic acid](#).

Flower manipulation (Winter GA): Application of GA in the form of Ralex during floral initiation will reduce the number of leafless inflorescences (white blossom) and increase the proportion of leafy inflorescences. Leafy inflorescences set more fruit and have a higher initial growth rate, resulting in larger fruit at harvest. **The first opportunity to apply Ralex is in mid-June** however there will still be an effect if applied up to bud break. The timing of bud burst varies depending on variety and location, normally occurring between early August and mid-September in different varieties in WA. Apply Ralex in sunny conditions in the middle of the day, allowing trees to dry before nightfall to avoid the risk of marking fruit.

Pruning: A well-pruned canopy with a good distribution of strong bearing shoots close to main scaffold branches promotes leafy inflorescences. Pruning after harvest therefore assists in balancing crop load if heavy flowering is expected. Information on pruning is available from the DAFWA website, [Citrus pruning](#).

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 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.

Preparation for flowering: After harvest consider foliar applications of urea and micronutrients to promote flowering for the next season particularly if you suspect a light flowering year. Do not apply urea if you expect a heavy flowering.

Oleocellosis: Oleocellosis is rind damage usually in the form of spots or dark areas resulting from picking in poor weather conditions (too cold or too wet) and rough handling of fruit. Damage does not fully appear for up to 4 days after the injury/damage occurred and can significantly reduce the value of your fruit. To minimise oleocellosis, harvest in the warmest part of the day and pick from the northern side of the tree first. As a rough guide, ambient air temperatures should be above 12°C, however a wet bulb temperature and rind

oil release pressure test should be conducted to provide a more reliable guide. It is best not to harvest if fruit are wet.

Pests & diseases: Continue monitoring and bait spray programs for fruit fly until after harvest.

Keep an eye out for pests such as scale and mealy bug in the orchard whilst harvesting and record observations. This will help you take the correct action when determining control programs for the spring and summer period when juveniles of these pests are active. Look for galls of citrus call wasp in growth since Spring.

Queensland

Climatic conditions

Mild conditions have prevailed during May. Average maximum temperatures have been consistent with long term averages whilst average minimum temperatures have been 2 -3 degrees above average. Some general “set in” rain fell in most of the production areas during the month.

Location	Monthly Rainfall mm	Historical Avg Rainfall	AvgMax Temp °c	Historical Avg Max Temp	Avg Min Temp °c	Historical Avg Min Temp
Gayndah Airport	26.4	29.4	25.7	25.4	13.2	10.4
Mundubbera Post Office	42.8	39.3	N/A	N/A	N/A	N/A
Emerald Airport	19.2	21.3	27.4	26.1	14.3	12.9
Gin Gin Post Office	55.2	59.0	N/A	N/A	N/A	N/A

Phenology

Early season varieties are nearing the end of their harvest period. The lighter crop of Imperial mandarins has ensured that the harvest of this variety has finished much sooner than last season. The harvest results for the Imperials has been mixed between growers with the degree of postharvest rind breakdown influencing sales results. The harvest results of all other early season varieties have been relatively good.

Flowering and subsequent fruit set is now occurring in some lemon blocks.

Pests and diseases

Broad mite and citrus thrips are starting to impact young lemons.

Emperor Brown Spot levels continue to increase given the very moist conditions that have prevailed since the rains of late March. Prolonged fogs have been very common and this has provided ideal infection periods for the susceptible varieties. If these moist conditions continue, growers will have to increase the frequency of their fungicide applications to combat the disease pressure.

Queensland fruit fly levels continue to remain low. Growers should be looking to include all Murcott blocks in their baiting program.

Oriental mite levels seem to have finally dissipated. There are some blocks with low levels of this pest, however the population does not seem to be increasing rapidly at this time of the year.

Miticide applications for bud mite should be made from now in all lemon blocks that require control.

Riverland, Murray Valley and Riverina

Climate

Mean daily maximum temperatures for May were near average however minimum temperatures were 1 to 2 degrees below average. Frosts occurred late in May and early June. The frosts were only an issue on selected low lying or frost prone blocks, the majority of blocks within the regions were not affected. No significant rain fell throughout May and early June. The cold conditions and frosts have been favourable for fruit colour development. Conditions have generally been very good.

Phenology



Washington navel's have reached full colour. Most trees will enter the **floral induction stage** from the middle of May. This period is thought to extend to about early to mid-June. Floral induction is the transition of vegetative buds to floral buds. Low temperatures during winter induce citrus buds to flower. The number of flowers produced and the proportion of different types of flowers is strongly influenced by crop load in the previous season. Most flowers are produced on shoots that grew during the previous year.

Management

Harvest: Navelina harvest proceeded well and has drawn to an end. M7 harvest has also drawn to an end with good crops being harvested. Leng navel harvest commenced in early June and Washington navel harvest began in the second week of June. There is a wide variation of size this season due to the protracted flowering. The crop is larger in volume and slightly smaller in fruit size than last season. Fruit have been passing internal maturity.

Crop regulation – winter GA: The application of registered forms of GA during floral induction period (mid-May to early to mid-June) will reduce flowering and yield (crop regulation). There is significant variability within regions and blocks and growers should assess individual blocks for signs of biennial bearing (graph yields over numerous years and observe leaf flush levels).

GA crop regulation sprays reduce the number of leafless inflorescences (white blossom) and increase the proportion of leafy inflorescences. Leafy inflorescences tend to set more fruit and have a higher initial growth rate, resulting in larger fruit at harvest. Trees will soon enter the first peak of sensitivity: mid-May to early to mid-June. Apply at a time of day that will allow trees to dry before nightfall to avoid the risk of marking fruit.

Pruning: A well-pruned canopy with a good distribution of strong bearing shoots close to main scaffold branches promotes leafy inflorescences. It is an essential practice for growing a higher proportion of export grade fruit. Pruning after harvest therefore assists in balancing crop load if heavy flowering is expected (in an “on” year).

Pests & diseases: Red Scale has been a problem in some blocks this autumn as occurred in the previous two seasons. This was due to mild autumn conditions encouraging an extra generation of scale. Maintain a good weed control program to reduce the incidence of Fullers Rose Weevil and to help control snail populations. Apply snail baits as required, these can be more effective after a copper spray which will knock the snails down on to the ground and the bait.

Oleocellosis: Oleocellosis is rind injury damage resulting from rough picking and handling of fruit. Damage does not fully appear for up to 4 days after injury and can significantly reduce the value of your fruit. It is most likely to occur when the cells on the surface of the orange are fully swollen due to adequate irrigation or cold weather. It is important to familiarise yourself with optimum harvest practices to reduce the incidence of oleocellosis, taking special care with new pickers. A new Harvest handbook for pickers has been developed by NSW DPI.



Events calendar

August 18 WA Industry Day and Citrus Australia
Regional Forum, WA

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