

season update

This publication has been facilitated by HAL in partnership with Australian Citrus Growers & has been funded by the national citrus R&D levy. The Australian Government provides matched funding for all HAL's R&D activities.



Summary Edition: December 2006

RIVERLAND, MURRAY VALLEY & RIVERINA GA Summer Spray "ESSENTIAL SPRAY"

Findings from the Rind Breakdown project indicate that a summer GA spray is essential to reduce the incidence of rind breakdown. It is recommended for all export fruit to be sprayed with GA at 30-50mm fruit size. Due to the earliness of this season, your block could be ready to spray NOW (see heat unit section). Check the current stage development of your fruit. Summer GA spray has been shown to decrease albedo breakdown, chilling injury, and other types of rind breakdown that can lead to decay problems. The spray also increases rind firmness which results in a fresher looking fruit on the supermarket shelf. Sunraysia and Riverland should spray GA in early January whilst Riverina by mid of January. For blocks with a history of low albedo breakdown, 10ppm of GA is sufficient, however 20 ppm is recommended for blocks with a moderate to high levels of albedo breakdown problems. 10 ppm GA sprayed by mid January on Washington navel oranges has very little effect on delaying rind colour development whilst a 20 ppm spray may have a slight effect on delaying rind colour development (note: rates below 20 ppm are recommended for summer navels). Thorough coverage of the fruit is essential and follow label recommendations. Allow three to four weeks to pass after an oil spray prior to spraying GA. GA spray is regarded as an important risk management tool to reduce rind breakdown and subsequent decay issues that could significantly reduce exports returns. Should you spray GA, an oil spray must wait one to two weeks.

Heat Units accumulation from September to November for the southern growing districts of Riverina, Riverland and Sunraysia were above average (10%-40%). The combination of early flowering and above average heat units has started the season early and thus fruit development is at an earlier stage. Fruit size is larger than normal, but this could be due to the earliness of the season. The earliness of the season may require you to spray GA earlier than your traditional calendar date. Check your fruit to assess your crop development stage and adjust your GA spray accordingly. See ACG "Season Update" web page for your district's heat units tables and graphs.

Urea Fruit Size Spray. Low biuret urea spray (3kg/100L) applied at the end of cell division has been shown to increase fruit size in Californian Navel oranges. The end of cell division may have already passed in Sunraysia and Riverland and might be occurring now in the Riverina.

Yield Assessment, Fruit Size & Hand Thinning. Assess your crop load to check the need for hand thinning or adjusting your nutrition program to suit crop load levels. See "Orange Nutrient Accumulation Charts" fact sheet for more information on the amount of nutrients accumulated by fruit and leaves in orange trees. Contact your local CITTgroup leader in early January for information and Excel spreadsheet to conduct a preliminary yield assessment. The updated fruit MS Excel fruit size model is posted on the ACG "Resources" web page. The monthly growth increments are able to be modified in the updated

version so you can make your own growth model for any district or variety.

Nutrition Cell division has drawn to an end in Sunraysia/Riverland and is drawing to an end in the Riverina. The fruit are now in the early stages of cell expansion. A high amount of potassium and nitrogen is accumulated in the fruit during cell expansion. Rind Breakdown project findings have indicated that good nutrient levels in the rind of fruit is important to reduce the incidence of rind breakdown. Peak demands are now but be aware that excessive and/or too late applications of nitrogen or potassium can delay colour development and induce coarser rinds. However some intensive fertigation growers have applied low maintenance levels of nutrients throughout autumn without any significant delays in colour development. High nitrogen and/or potassium levels can have an additive effect on the delay of rind development experienced from GA sprays. Phosphorus can assist in counteracting the rind colour delay effect from nitrogen. See "Yield Estimate" section for information on conducting a yield estimate to check if your nutrition program needs adjustment to suit crop load levels.

Drought Water allocation reductions. NSW Sunraysia and South Australian citrus growers will encounter significant water allocation reductions (50-40%). Growers in these districts should take action now on conducting a water budget. Workshops are being conducted throughout the districts and a fact sheet on water saving and budgeting strategies is available on the ACG web site. Victorian growers may encounter similar significant reductions next year and should now consider some strategies for the following season (i.e. drip irrigation, soil moisture monitoring devices).

Sun Protection for Young Trees. The use of a kaolin clay spray to cover trees has been shown to significantly improve young tree growth during hot conditions. Current formulations are not recommended for mature trees and they can interfere with the natural processes of red scale predation and increase the probability of infestations occurring. However new formulations are being developed to be red scale predator friendly. Consider a spray for young trees, or a trial spray, on the onset of hot conditions.

PEST –Sunraysia: Apple Moth: Apple Moth larvae are still a problem. The hot weather in mid December did control large numbers and monitoring is still required. Larvae are being found under the calyx of fruit in most Sunraysia blocks. Numbers are significantly higher than last season. *Red & Soft Scale* population is increasing, large numbers of soft scale has been found in most areas. Soft scale crawlers are easily found on new shoots. Red scale crawlers and white caps are now being found. Look for scale, red and soft on young fruit and foliage.

Leaf minor: There was the odd leaf minor found in most districts, number generally low, the heat has controlled these numbers. *Spined Citrus Bug* eggs were found in a number of lemon and Murcott blocks. All were located on this season's fruit. Lemons are the variety mainly affected. Monitor first thing in the morning, sunny side of tree.

Kelly's Thrip numbers are still a problem. Regular monitoring is still recommended, lemons need to be

monitored at least once a week for at least another month. High numbers of fruit can be damaged in a very short time. *Mealy Bug* is now being found in reasonable numbers in and around the calyx areas. Main variety affected is grapefruit. Cottony cushion scale is also being found, mainly in the centres of young trees. Most districts are affected.

Riverina LBAM: Low to moderate amounts of LBAM larvae are being detected, but many young larvae are dying before doing significant damage. Possibly due to heat. All stages of *Katydid*s are present from young 1st instar nymphs to adults. Many of the navel crops have started to harden off and damage from katydids is only rarely increasing.

Soft scales/ mealybugs: Localised heavy infestations, usually associated with high levels of ant activity. *Red Scale:* Most new fruit is clean having missed the peak of crawler production from the 1st generation. A few crawlers are now present and will likely start moving to fruit.

Riverland Available on website shortly.

WESTERN AUSTRALIA

Climate. Temperatures and rainfall have generally been average throughout the south west region in December. Average daily evaporation rates for December are: Harvey 7.8 mm, Gingin 9 mm, Carnarvon 9.9 mm and Kimberley Research Station 8.4 mm.

Phenology. All varieties are nearing fruit growth stage two 'cell expansion', some have reached this stage and some navels are at golf ball size.

Production. Harvest of White Flesh Grapefruit continued throughout the month in the Burekup area as did Valencia and lemon harvest in Gingin. All other varieties are now finished for the season.

Management. This is a critical period for irrigation and water stress during this time can cause excessive shedding of fruitlets. Monitor irrigation requirements closely and avoid water stress, especially if temperatures are high. Apply 25% of annual nitrogen and 30-50% of annual potassium, supplementing potassium with foliar applications of potassium nitrate to promote cell division.

Albedo breakdown. Continue foliar applications of Calcium nitrate through the cell division stage (<30 mm diameter) and apply a GA spray at golf ball size.

Pests and Diseases. Monitor for Kelly's Citrus Thrip weekly until calyx closure and Greenhouse thrip weekly on fruit to be harvested late (January – March). Also monitor scale crawlers and leaf miner, applying targeted oil sprays where necessary. Programs for the release of *Aphytis* for red scale control should be well under way. Ensure you have your ants under control as they can exacerbate a scale problem. Consider releasing Green lacewings if Mealybug is a problem.

QUEENSLAND

To be made available on ACG website shortly.

PROCESSING

The ratios for Valencia fruit are lower than at the same time last year at around 13. The poor ratios are a result of the drought, earlier frosts and surplus old season fruit drawing nutrients from the tree at the end of last season, which in some cases have led to smaller fruit and lower juice yields.

While processors describe this season as "chaotic", they add that the quality of juice is good and that the supply to processing plants is meeting forecasts so far.

Contract prices for industrial Valencia fruit are set at AUD220-260/tonne this season and a spot market has emerged over the past month with fruit changing hands for around AUD220/tonne. Processors do not expect these cash prices to ease given the current market conditions.

The farmers are reportedly looking to maximize returns due to the unclear outlook.

The Australian processing sector is also expecting production from the 2007/08 crop to be negatively affected by the current drought and many are considering measures such as altering blends and/or educating consumers on the reason why they will need to pay more for juice next year.

A clearer crop forecast for 2007/08 will be available from the various State Boards in February/March 2007.

Meanwhile, the retail chilled juice sector is looking good this season with sales up 6% (MAT), this is attributed to heavy promotional activity by the major players.

Overseas

The Brazilian frozen concentrated orange juice (FCOJ) market remains expensive and firm with prices over USD2500/tonne. While these high prices have major implications for the Australian ambient and reconstituted orange juice market, volumes of domestic fruit being put to concentrate are very limited, say processors. Packers claim that most of the large domestic importers have covered their needs for the next six months in "the low USD2000's (per tonne)".

MARKETING

The drought continues to be the main topic of discussion for growers, packers and marketers alike. While most growers have made adjustments to live with the current restrictions, further cuts to allocation will mean further hardship and adjustments by the industry at large. Most of this season's Valencia crop has already been harvested. Domestic and exports markets slowing down due to stonefruit and northern Hemisphere citrus supplies coming on stream with significant volumes at lower prices. The non-contract juice price has increased giving the growers a better bottom line for their product

LEMONS

Domestic USA and Queensland lemons are in the market, still in short supply so prices are staying firm. Southern-grown 'summer' lemons are still 2 weeks away from harvesting, but size is quite small.

Export Nil

VALENCIA

Domestic Sales volume for all grades of Valencia has dropped by 80% due to abundant supplies of stonefruit and mangoes at low prices. (albeit prices have not been impacted). Sales that are being made are giving a grower return of A\$200-220/t minimum, and lowering our sale prices will not increase sales volume.

Export Demand for our Valencia has dropped off as Chinese navels, preferred for table and prayer fruit, continue to grow in volume into the Asian markets. Their prices are around USD9/15kg ctn while Australian Valencia's are around A\$18.0/21kg ctn. USA navels have been ordered and are in transit at prices below Australian for smaller sizes and above for larger sizes. Sale prices are being maintained as per the previous month.

Contributors:

Steve Falivene, NSW DPI.

Dan Papacek, Bugs for Bugs, Qld.

Helen Ramsey, WA Dept of Agriculture.

Stefan Worsley, www.juicemarket.co.uk

Scott Searles, AHEA.

Weekly domestic market reports can be accessed from the Murray Valley Citrus Board website: www.mvcitrus.org.au/publicat.html.

For further information, visit the ACG website: www.australiancitrusgrowers.com