

HI–CANE

The Hi-Cane season is just around the corner, and as always this is a critical period for getting things correct. There has been a lot of discussion (in our office anyway!!) about the best approach to Hi-Cane application this year.

With warmer weather in May we were thinking it would be a year of low chilling hours but in June we have certainly made up for it, with our chilling hours quickly passing 2011 & 2014, we are now sitting at approximately 270 hours (as the 16th July). Which means that we could accumulate around 600 hours below 7°C. Higher chilling hour's leads to earlier budburst and more compact period, while the warmer winter extends the burst period as well as makes it start later. Our general consensus is that if the general temp trends continue we will be looking to run our application programme 4-7 days behind last year, this will be reviewed on an orchard by orchard basis of course and dependant on what the weather does over the next 2-3 weeks.

There are a couple of “Must do’s” for growers and contractors to complete before spraying:

1. AI nozzles and low-drift adjuvants are recommended (ACL recommends Drift-Stop at 150-200 ml/100L).
2. Neighbours must be notified at least 24 hours before spraying – so make sure you have up-to-date contact details for them. This point is vital for continued use of Hi-Cane in the industry.
3. It's really important that sprayers are setup correctly, as poor coverage on canes or unsuitable conditions can lead to poor bud break.
4. Ensure Hi-Cane is mixed correctly to the 6-6.5% concentration and tractor ground speed is maintained as per the calibration data. Shake containers vigorously before adding to the tank mix. Water rate should not exceed 700L/ha, however we may drop to 600-650L depending on cane density. It is essential to achieve full coverage and thoroughly wet the cane and buds to the point of run off. While a higher rate may increase the risk of some mild burning where droplets have pooled on the underside of the canes and failed to dry we have found that if the conditions are right 700L is a good default water rate.
5. Temperatures should be a minimum of 12°C before applying and avoid windy conditions.
6. Consider re-spraying at half rate if significant rainfall (> 20mm) within 12 hours of application.

You will have no doubt have watched with interest the recent webinar on Hi-Cane application. The interesting points we took away were how the combination of drying conditions coupled with the use of drift-stop greatly improved both the coverage and drying profile. We focus on ensuring that the cane is touch dry prior to application, that weather conditions are beneficial for drying to occur and that we have a minimum window of 30 minutes of clear drying time immediately after application.

Make sure your sprayer is accurately calibrated before the spraying season starts. Contact us if you need help with this. Record batch number of Hi-Cane and ensure your product is not discoloured or that heavy crystallisation has occurred on the sides of the container. If so contact your supplier or try and replace the product. At very least take a sample for testing if there is any suspicion of its quality. Contact us for help with checking calibration details for your sprayer.

This is the Zespri Canopy URL <https://canopy.zespri.com/EN/grow/opc/taste/Documents/winter-chilling.pdf> for Chilling Units.

Ethan England—Hort Technical Team Leader

HI–CANE TRIALS

Last season Start.Afresh (Dr Dave Tanner) ran a trial for Aongatete which looked specifically at adjuvant use and corresponding budbreak on Hayward vines. In brief the results suggested that Drift Stop was easier to use than other adjuvants (easier to mix and therefore the results were more likely to be consistent in practice).

The trial further suggested that the use of 6.5% HC-50 and 200 ml/100L adjuvant under fast drying conditions will result in fewer lateral flowers (doubles and trebles) and fewer blind shoots!

This season we have engaged Start.Afresh to conduct a trial on Sungold that looks specifically at the effect of Hi-Cane/HC50 rate on lateral flower numbers. The aim is to find a rate (or a range of rates) that achieves a good bud break but minimises lateral flower number. Clearly there are a number of predisposing factors in action and this work will require refining over time. Zespri is helping to fund this trial.

Allan Dawson

REVIEW OF SEASON Continued...

Other factors to consider when looking at this are the general increase in productivity that Hayward has seen over the last 3 years. Larger yields can lead to a delay in maturation and lower dry matter percentages – particularly when combined with a low sunlight hours over summer.

Once all fruit is packed and submitted into inventory I'll be having a look at dry matter in a similar format.

Changes to Taste for 2017 harvest – how can it affect you?

Now that we are into winter pruning it is critical to set down the right canopy for the coming season – particularly when you consider the changes to G3 Minimum Taste Standard (MTS) and a possible change to the Hayward Taste system.

Gold3

The MTS for Mainpack G3 will be increasing by a further 0.2% dry matter (DM) for the coming season. This means that to be submitted into inventory each size must have 70% of the fruit above 16.1%.

This may not seem like a large increase but because sizes can be cleared via the regression line – a variance of 0.2% can be the difference between making inventory or not.

5. Gold3 Dry Matter By Count Size 2016

	Size									
	16	18	22	25	27	30	33	36	39	42
TZG	1.00	0.99	0.92	0.82	0.74	0.65	0.55	0.43	0.31	0.22
Taste Band Threshold	19.8	18.8	17.8	17.1	16.7	16.3	16.0	15.5	15.1	14.6
Taste Band	Y	Y	Y	Y	T	M	M	M	M	
Dry Matter - Average	21.8	20.6	19.5	18.7	18.3	17.9	17.5	17.1	16.7	16.3
Dry Matter - 70% Threshold	20.8	19.8	18.9	18.2	17.8	17.4	17.0	16.6	16.1	15.7
Criteria - 70% Threshold	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
Eligible For Mainpack	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗

Figure 2: Example of G3 TZG by Size

When considering the changes for 2017 – Size 39 in Figure 2 would now not be eligible for Mainpack.

G3 Kiwistart MTS will remain at 70% of fruit above 16.9% DM.

Hayward

There is no clear indication as to what changes will be made to the Taste calculation for Hayward at the moment, however, there is strong evidence that change will occur. This could come in the form of an increased MTS, changes to TZG calculation or an increase in the percentage of the Maximum Taste Payment that can be achieved (currently this sits at 50%).

For growers of both varieties that have struggled with dry matter over the last few years it is recommended that winter pruning targets be reviewed with the possibility of tying down less buds per square metre being considered.

If you have any questions regarding taste and how it could affect your orchard – feel free to give me a call.

Aaron Hokopaura—Grower Services/Technical Support

ZESPRI ROADSHOWS

The recent Zespri road shows were the first opportunity for Growers to raise questions on the 2016 Harvest and the recent release of 400 hectares of G3 (GA/Sungold).

The 2016 Harvest was a standout due to the record tray numbers of both Gold and Green, the extremely late maturity and low dry matter in Hayward. These along with crop management raised the majority of questions.

The statistics of taste showed an increasing trend towards lower dry matter fruit and again Zespri indicated that this would need to change for the benefit of all Growers, with the overlying message being that Growers are strongly encouraged to complete their winter canopy work for the 2017 crop on the basis there is likely to be further changes to taste incentives to encourage production of high dry matter fruit.

Crop management was well debated with concern over why the large size fruit were being selected for this strategy. After considerable discussion this mainly boiled down to the fact that large size fruit with low dry matter was being selected by post harvest. This decision was also made due to a shortage of small sized fruit, so while it may seem counterintuitive it would seem the right fruit is being chosen in order to benefit the Green pool overall.

The next most popular question was why release another 400 hectares of G3 when volumes are still currently increasing. The Zespri team explained that they foresaw a gap in volume versus demand four to five years out and if action was not taken then this would or could be a window for competitors to enter the Gold market that Zespri is growing.

Richard Allen - Grower Services Representative

July 2016—Aongatete was approached by the owner of this orchard for assistance by our Horticulture Team under a “Service Level Agreement “ to undertake winter maintenance, including winter prune work and ‘transition” the orchard to what it is now.

Winter Pruning with Loppers begins...



Orchard ‘transitioned” to what it is now after winter orchard maintenance work completed by Aongatete’s Horticulture team. Canopy work undertaken on the basis there is likely to be further changes to taste incentive to encourage production of high dry matter fruit.

Aongatete Horticulture Team



ZESPRI GAP 2016—GRASP

Aongatete encourage Growers to keep up to date with the forthcoming changes to GAP including GRASP - a short checklist of thirteen questions addressing social responsibility.

Please refer to the monthly “Up2Date” releases by Zespri and issues 25 and 26 which include the latest information on the GAP changes and GRASP control points. If you would like copies of these, please either refer to the Zespri Canopy Website www.zespri.com/canopy or contact Madeleine in Grower Services, phone 07 552 0916 to arrange for a copy to be emailed or posted to you.

FERTILISER PROGRAMS

With all the results back from the lab and many hours spent analysing the results everyone’s soil results and recommendations have been sent out to Growers. Those who are ordering and spreading their own fertiliser products should be following this table as a guideline as to when applications occur:

GOLD	GREEN	PRODUCT
Early July (Completed)	Early July (Completed)	Lime/ Gypsum
Late July (In Progress)	Early August	Winter Base
Late August	Early September	Bud Burst (side-dressing)
Late October	Early November	Pre Flower (side-dressing)
Early December	Mid December	Summer (side-dressing)

With applications of Lime, Gypsum completed and Winter Bases for Gold varieties in progress we are now in the process of applying onto the Hayward orchards.

Please remember that if you have any questions concerning your fertiliser recommendation to contact myself.

Ethan England—Hort Technical Team Leader

Psa-V MONITORING

Growers of all Kiwifruit varieties are required to have a Psa-V Orchard Management Plan that includes an effective monitoring plan for the early detection of Psa-V symptoms. Frequent orchard monitoring will ensure that any infection is detected as early as possible. Early detection and early intervention is the most effective method for controlling and minimising the impact of Psa-V on your orchard.

Psa will be found more predominantly on the males or low, cold, damp regions within your orchard, this will be via leaf spot, exudate and cane death. And Aongatete’s experience is that Chieftain Males will often show less susceptibility to Psa compared to other male clones, and show an improvement in fruit size and so it is recommended to graft over any weak males to Chieftain.

Once winter pruning has been completed, Aongatete’s experienced Psa Management Team will be gearing up for our first round of monitoring and removal this season. Aongatete offers services in both Psa monitoring, with our experienced and knowledgeable team ready to help. If you would like any of these services, don’t hesitate to get in touch with either the Technical Team or your Grower Services Representative.

Ethan England—Hort Technical Team Leader