

Summer 2020/2021 Spray Guide - Conventional - all varieties



	Timing	Purpose	Product	Rate/100 L	Water rate/Ha	PHI (DAYS)	REI (HRS)	Notes
	Bees out / immediately post fruitset	Leafroller	Emamectin benzoate	Proclaim® - 2g Velocity™ - 2ml	1500 - 2000L	42	WFD	Add a non-ionic surfactant to ensure coverage. Can be tank mixed with copper. If being tank mixed with copper ensure good drying conditions. Apply second application 21 days later if orchard has a historical leafroller issue or if no pre-flower leafroller spray was applied (a total of 3 leafroller sprays are allowed between budphase and monitoring). May be replaced with 2 x applications of Bt (50g/100L) 14 days apart post fruitset.
		Psa	Copper	Kocide® Opti™ - 70g Champion® - 70g	1500-2000L	7	WFD	From fruitset to harvest copper should be applied in response to high risk weather events - refer KVH Risk Model. Fruit marking can occur at any time but risk is increased during the skin sensitive periods. To minimise the risk of fruit stain, copper should be applied in good drying conditions. Do not apply within 7 days of mineral oil. May be alternated or replaced with Aureo Gold® (50g/100L) for applications within 6 weeks of fruitset - do not apply Aureo Gold® within 14 days of copper.
		Scale	Mineral oil	Excel Organic Oil® - 1L	1500-2000L	14	WFD	Apply to Hayward ONLY within 14 days of fruit set or to Gold3 within 21 days of fruitset if pre-flower Movovento® application was missed. Fruit marking can occur at any time but risk is increased during the skin sensitive periods. Do not apply within 7 days of copper.
	Post male prune	Psa	Copper	Kocide® Opti™ - 70g Champion® - 70g	1500-2000L	7	WFD	Apply once male pruning is complete. Fruit marking can occur at any time but risk is increased during the skin sensitive periods. To minimise the risk of fruit stain, copper should be applied in good drying conditions. Do not apply within 7 days of mineral oil.
	Fruitset to monitoring	Passion Vine Hopper	Pyrethrum	Pyganic® - 100ml ZETaPY® - 250ml Pylon™ - 250ml	2000L	14	WFD	Do not use more than 2L/ha of ZETaPY® or Pylon™ or residues may occur. Monitor host plants adjacent to the orchard for PVH nymphs during November/December - if levels are high treat these bush/gully areas with Calypso® at 20ml/100L until January 15th under JA only. To minimise PVH on crop apply pyrethrum at dusk or between 4am and 7am when PVH is inactive.
		Wheat Bug (loading pads)	Glyphosate	500ml - 1L (0.5 - 1% depending on product and label claim)	Spray to run off	2	WFD	Serious quarantine pest. Control weeds on load pad and keep weed free from 2-3 months before harvest until harvest is complete. Do not apply herbicides close to harvest. Keep adjacent area mown. Monitor for the pest - if an insecticide spray is required close to harvest contact Zespri Crop Protection team. Refer to KiwiGreen Factsheet: Wheat Bug.
	Monitoring	Psa	Copper	Kocide® Opti™ - 70g Champion® - 70g	2000L	7	WFD	From fruitset to harvest copper should be applied in response to high risk weather events - refer KVH Risk Model. Fruit marking can occur at any time but risk is increased during the skin sensitive periods. To minimise the risk of fruit stain, copper should be applied in good drying conditions. Do not apply within 7 days of mineral oil.
		Leafroller	Emamectin benzoate	Proclaim® - 2g Velocity™ - 2ml	2000L	42	WFD	Apply in response to your KiwiGreen monitoring results to blocks that exceed the 0.5% threshold. Begin monitoring green varieties 5 weeks after fruitset and gold varieties 7 weeks after fruitset. Use non-ionic surfactants to ensure coverage when using Proclaim® or Velocity™. Note differences in PHI's between products - if applying within 42 days of harvest use Bt.
			Bacillus thuringiensis (Bt)	Bio-Bit® DF - 50g Delfin® WG - 50g	2000L	2	WFD	
		Scale	Mineral oil	Excel Organic Oil® - 1L	2000L	14	WFD	Apply in response to your KiwiGreen monitoring result to blocks that exceed the 4% threshold. The scale monitoring period begins 8 weeks after fruitset for all varieties. Apply outside of skin sensitive periods. Fruit marking can occur at any time but risk is increased during the skin sensitive periods. Do not apply within 7 days of copper. Apply to Gold3 during the second and third weeks of February ONLY.
		Prevention of sooty mould	TripleX™	300ml	1000L	2	WFD	Use as a preventative spray every 2-3 weeks from early January to late March (or at the first sign of adult PVH/cicada). Use in conjunction with approved insecticidal sprays to reduce numbers of PVH and cicadas in the orchard and boundary areas.
		Fruit stain removal	Jewel Clean LF™ KiwiLustre LF™ CP Cleaner™	500ml	3000L	0	WFD	Apply stain removal products at 1500L water/ha pre-harvest in both directions (total 3000L water/ha).

DISCLAIMER: This is a guide only provided to help with your decisions regarding pest, disease & Psa options. We make no warranty, representation or guarantee of the accuracy of the information due to environmental pressures, conditions & mechanical/human error and will not be responsible for any loss arising from reliance on the information. Please contact Zespri or your preferred supplier for any updated information or advice.

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Estimated Spray Date	Copper No1	/ /	Copper No2	/ /	Copper No3	/ /	Copper No4	/ /
Estimated Spray Date	Scale No1	/ /	Scale No2	/ /	Leafroller No1	/ /	Leafroller No2	/ /
Estimated Spray Date	PVH No1	/ /	PVH No2	/ /	Other	/ /	Other	/ /
Estimated Spray Date	Other	/ /	Other	/ /	Other	/ /	Other	/ /
Other Key Dates	Size Girdle No1	/ /	Size Girdle No2	/ /	Dry Matter Girdle No1	/ /	Dry Matter Girdle No2	/ /

Key

REI Restricted Entry Interval

PHI Pre-Harvest Interval (days)

WFD When Fully Dry

JA Zespri Justified Approval

Notes

- This spray guide covers the period from fruitset to harvest referred to as the "fruitset to monitoring" and "monitoring" periods in the Zespri® Crop Protection Standard (CPS).
- Not all products that are listed in the CPS are listed in this spray guide - refer the CPS for all allowed products for use in this period.
- Monitor for Psa regularly. Remove infected material promptly to reduce the risk of Psa spread. Always sanitise tools between vines with proven products, e.g. methylated spirits, Varicide, Virkon S, Sterigene, EnviroSan, Aussan L44.
- Mixing copper with foliar fertilisers or products that contain oils, penetrants, chelating agents, amino acids and/or nitrogen may result in phytotoxicity, fruit staining or russetting. **Fruit stain/russet may increase reject rates at packing or repack.**
- The "skin sensitive period" is defined as the period when the kiwifruit skin is at the greatest risk of marking/damage. Currently this period is identified between **14-35 days post fruitset for green varieties, and between 21-80 days post fruitset for gold varieties**. Caution is advised when spraying or conducting orchard work during this period as skin damage may occur.
- Due to the risk of marking, all sprays applied post fruitset should be applied in good drying conditions.
- To minimise fruit damage from contact with sprayers/tractors, tie up all low hanging fruit before each spray application.
- Remove sclerotinia infected flowers and fruit from the orchard - dropping these on the ground will promote infection next year.

Zespri® Requirements



- Zespri® requires all agricultural compounds applied to the vines, orchard floor, shelter or outside the boundary shelter used in the management of plants, pests, diseases or animals to be recorded in the Zespri® Spray Diary. This includes pesticides, herbicides and foliar fertilisers.
- Only products listed in the Zespri® Crop Protection Standard are allowed to be used without the prior approval of a Justified Approval (JA).
- Products not listed in the CPS may be allowed under JA by Zespri® under certain circumstances - refer to Zespri® for more information.
- Products must be applied at the label rate and as recommended. Where there is a rate/and or timing conflict between the label and the CPS the CPS will apply.
- Growers must take all practical and reasonable steps to protect bees from the risks of agricultural sprays.
- The GlobalG.A.P Management System Owner (MSO) is solely responsible for ensuring the spray diary is accurate and complete, regardless of who enters the information.
- Remember to record the fruitset date in Spray Diary at the end of the flowering period. Fruitset is defined as when 90% flowers have set (generally 2-3 days after full bloom).

