

# Winter 2020 Spray Guide - Conventional - all varieties



	Timing	Purpose	Product	Rate/100L	Water rate/Ha	PHI (DAYS)	REI (HRS)	Notes
  	Immediately post harvest - KiwiStart/early mainpack	Psa	Copper ⊕	Nordox™ 75WG - 37.5g Kocide® Opti™ - 70g ChamplON® - 70g	1500-2000L	7	WFD	Apply after harvest to protect picking scars. Apply at summer rates during KiwiStart/early mainpack periods (when leaf condition is good), moving to winter rates as leaf condition deteriorates. Use a superspreader like DuWett® to improve coverage. <b>Do not apply within 5 days of Movento® or 7 days of oil.</b> May be tank mixed with Actigard®.
		Psa	Actigard® ⊕	200g/Ha	1500-2000L	Pre-flowering or post harvest only	12	Apply after harvest while leaf condition is good. Requires 4-7 days for full effect. Maximum 4 applications per season (from harvest to harvest). <b>Do NOT apply to plants that are stressed due to drought, excessive moisture, wind, cold weather or disease.</b> May be tank mixed with copper.
		Scale	Movento® 100 SC	960ml/Ha	1500-2000L	Off-label application - suggestion only	12	This suggested Movento® application should only occur if there was a scale problem last harvest - check with your Grower Services Representative if you are unsure. <b>This is an off-label application and requires a JA.</b> Apply only while leaf condition is good (i.e. during KiwiStart/early mainpack). Add Kwicken® for greater efficacy. <b>Do not apply within 5 days of copper.</b> Consider buffering pH of spray tank to less than 7.5. * A maximum of two scale control sprays are allowed between harvest and flowering.
	Immediately post harvest - Mainpack/leaf fall	Psa	Trichoderma atroviride	KiwiVax® - 20g	1000-2000L	3	WFD	Apply after harvest to the rootzone of kiwifruit plants in damp conditions during periods of active root growth. Soil temperatures must be above 10°C. Three applications per year are recommended, either split or combined in bud phase (i.e. between budbreak and flowering) and post harvest for active root colonisation.
		Psa	Copper	Nordox™ 75WG - 55g	1000L	7	WFD	Apply after harvest to protect picking scars. Apply at winter rates as leaf condition deteriorates. Use a superspreader like DuWett® to improve coverage. <b>Do not apply within 7 days of oil.</b>
	Post harvest/leaf fall	Passion Vine Hopper/Cicada Eggs (and Scale)	Assail® 100EC (plus Engulf)	100ml (+ 100ml)	1000L	Post harvest/dormancy periods only	48	Apply after harvest as soon as good coverage of canes is possible but before mid-July and before winter pruning. Target canes/soft wood for PVH/Cicada control (and leader zone for Scale). Note - due to the high rate of product, Zespri counts this sprays as one of the two "scale sprays" allowed between harvest and the start of flowering. Also spray the orchard surrounds if they are a significant source of PVH/Cicada. Mahoe, Blackberry, Wildberry and Bracken Fern are favoured host plants of PVH.
		Accelerate leaf fall	Copper sulphate (plus urea)	600g (+2kg)	1500L	Post harvest/dormancy periods only	24	Leaves should be held on the vines for as long as naturally possible to maximise accumulation of reserves in the roots. Using copper to drop leaves should be avoided where possible and will significantly add to the annual copper budget allowed by Zespri (8kg/ha per year). Timing is critical - applications of copper sulphate plus urea need to be made at the time of natural senescence (leaf drop).
	Dormancy	Psa	Copper	Nordox™ 75WG - 55g	1000L	7	WFD	Apply winter rates of copper after pruning. If pruning late in winter (and close to bud enhancing sprays) apply copper prior to winter pruning to lower Psa inoculum levels. Use a superspreader like DuWett® to improve coverage. <b>Do not apply within 7 days of oil or bud enhancing sprays.</b>
		Enhance Budbreak	Hydrogen cyanimide (plus Driftstop/ Surecane)	6L (+ 100-200ml)	700L	Dormancy period only	120 (5 days)	<b>Use Air Inclusion (AI) nozzles and drift reducing adjuvant to minimise drift</b> - use higher rates of adjuvant around sensitive areas or where you want to reduce risk further. <b>Do not apply within 7 days of copper.</b>
			Advance Gold® (plus Activator)	3L (+12L)	700-900L	Dormancy period only	WFD	Hydrogen cyanimide alternative for <b>Gold3 located in cold sites</b> . For best results apply 35 days before expected natural bud break or conduct a BreakNSure® test to identify ideal application window. Refer Zespri® Canopy for more information.

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.

Estimated Spray Date	Copper No1	/ /	Copper No2	/ /	Copper No3	/ /	Copper No4	/ /
Estimated Spray Date	Scale No1	/ /	Scale No2	/ /	PVH/Cicada	/ /	Leafdrop	/ /
Estimated Spray Date	Budbreak No1	/ /	Budbreak No2	/ /	Other	/ /	Other	/ /
Estimated Spray Date	Other	/ /	Other	/ /	Other	/ /	Other	/ /

## Key

⊕	Actigard® and copper may be tank mixed.
REI	Restricted Entry Interval
PHI	Pre-Harvest Interval (days)
WFD	When Fully Dry
JA	Zespri® Justified Approval
AI nozzles	Air Inclusion nozzles

## Notes

- This spray guide covers the period from harvest to budbreak referred to as "post harvest" and "dormancy" 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.
- Applying agrichemical sprays near unharvested crop increases the chance of residue detection due to spray drift and/or failure to clean spray tanks effectively.** ALL spraying should be conducted with caution and in ideal spraying conditions. Agrichemical residues on fruit at harvest may result

in the destruction of the crop at the growers cost.

- 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. Refer to KVH for more information on product efficacy.
- Mixing copper with products that contain oils, penetrants, chelating agents, amino acids and/or nitrogen may result in phytotoxicity.
- Do not apply hydrogen cyanimide within 7 days of copper.
- When spraying hydrogen cyanimide, avoid spraying wet canes or spraying under very cold, slow drying conditions. Always notify your neighbours at least 12 hours prior and do not spray when wind is above 20km/hr. Report bad spray practices observed to NZKGI on 0800 232505.
- All rates listed are for dilute (high volume) spraying only (i.e. spraying up to the point of run-off or full coverage). For concentrate (low volume) spraying, adjust dilution rate accordingly (refer to the "Spray Tech Box" on Zespri® Canopy website).

## 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.
- Once the previous seasons Spray Diary is submitted for Final Audit, "new seasons" spray applications must be recorded in Spray Diary.
- 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 (spraydiary@zespri.com).
- 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 agrichemical 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.

