DRIFT STOP

Manage spray drift and enhance spreading and retention of agrichemicals on kiwifruit.

Nufarm

Grow a better tomorrow.

A unique surfactant blend for the management of spray drift and to enhance spreading and retention of Hi-Cane® and some other agrichemicals when using air inclusion nozzles during the dormant and pre-flowering period on kiwifruit.

HI-CANE EFFICACY

Driftstop® use in conjunction with Hi-Cane has been common practice in kiwifruit for over 10 years, with initial trials starting as far back as 2002, with no recorded impact on efficacy or bud/cane damage. This has been in conjunction with much improved drift reduction and spray coverage, with higher rates of Driftstop giving higher levels of drift control where required.

More recent work has further built on this previous data on efficacy and drift reduction, along with extensive use in the field and demonstrated multiple uptake benefits of adding Driftstop to Hi-Cane applications.

FASTER UPTAKE:

Hi-cane uptake into dormant buds and canes was significantly higher after 15 minutes when it was applied in tank mixture with Driftstop (as seen in Table 1).

INCREASED RAINFASTNESS:

The rapid and higher uptake of Hi-Cane plus Driftstop over a range of temperatures and particularly at low temperatures reduces the need for re-application of sprays where rainfall occurs within 15 minutes of spraying (as seen in Table 2).

REDUCED RISK OF BUD BURN:

When Driftstop is used with Hi-Cane the spray droplets appear to dry more quickly. Driftstop has super-spreading properties and lowers spray surface tension, which enables the spray to cover surfaces more evenly. The addition of Driftstop to Hi-Cane applications reduces the level of pooling of sprays around buds and spray accumulation at drip points, which can lead to burning.

Note: When Hi-Cane is tank mixed with Driftstop the solution should be sprayed within 24 hours, otherwise recharge the spray tank with the full rate of Driftstop prior to application.

Droplets on kiwifruit dormant bud surfaces 30 seconds after application

HI-CANE (6%) ONLY

HI-CANE (6%) + DRIFTSTOP (0.2%)

Photos: Plant Protection Chemistry NZ

Table 1: FASTER UPTAKE

Effect of environment and Driftstop adjuvant addition on uptake (as % of applied) of Hi-Cane (36L/600L/ha) into dormant buds and canes (Gaskin, et al., 2016).

Treatment	Conditions Temp/RH	BUD			CANE		
		15 min	1 HAT	4 HAT	15 min	1 HAT	4 HAT
Hi-Cane	20°C/70%	32.6 de	83.5 abc	88.1ab	24.6 e	72.5 c	92.1 a
+ Driftstop 0.2%		82.1 bc	87.9 ab	90.6 ab	42.0 d	74.6 c	90.3 ab
Hi-Cane	20°C/50%	49.1 c	79.6 a	80.9 a	34.3 d	71.1 b	86.5 a
+ Driftstop 0.2%		69.2 b	79.7 a	81.6 a	38.2 d	63.1 b	81.4 a
Hi-Cane	12°C/70%	27.3 f	76.9 bc	82.1 ab	21.1 f	68.2 cd	86.8 ab
+ Driftstop 0.2%		79.8 ab	83.8 ab	84.4 ab	43.5 e	60.4 d	87.9 a
Hi-Cane	12°C/50%	28.1 f	74.5 ab	70.7 abc	25.7 f	54.4 de	86.2 a
+ Driftstop 0.2%		69.0 bc	73.0 ab	76.8 ab	43.5 e	57.8 cd	78.7 ab

HAT = Hours after treatment RH = Relative humidity

Table 2: INCREASED RAINFASTNESS

Effect of environmental conditions and Driftstop adjuvant on Hi-Cane droplet drying time (minutes) on dormant buds and canes (Gaskin, et al., 2016).

Day temp °C	Relative Humidity %	BUD		CANE	
		Hi-Cane	Hi-Cane + Driftstop	Hi-Cane	Hi-Cane + Driftstop
12	50	30	5	10	5
	70	40	7.5	20	5
20	50	6	5	6	5
	70	40	12	20	12

USE WITH OTHER KIWIFRUIT CHEMICALS

Zespri® now encourages kiwifruit growers to use Air Induction (AI) nozzles and include drift reducing adjuvants such as Driftstop when applying all early season sprays. This is compulsory for Hi-Cane and bactericide (i.e. Kasumin®/KeyStrepto™) applications. The use of Driftstop with AI nozzles allows good coverage of kiwifruit vines and foliage during the period from dormancy until flowering. Apply in at least 800 litres water/ha. AI nozzles and Driftstop should not be used after the start of flowering as coverage is compromised.

The following products have been found to have no effect on the wetting/spreading properties of Driftstop, and as a result can be used with Driftstop at normal label rates of 50-250ml/100L water (typically 100-200ml/100L).

When applying Driftstop with Kasumin, use 250ml/100L water of Driftstop and apply immediately.

DO NOT tank mix Driftstop with spraying oils.

- Copper fungicides
- KeyStrepto™
- Mesurol®
- Ambitious 10SL
- Luna® Privilege
- Prodigy™
- Movento® 100SC
- Actigard®
- Talstar® 100EC

FIG 1. 3.5M/SEC WIND STANDARD SPRAYING SYSTEM NOZZLES + LATRON B

FIG 2. 2.9M/SEC WIND AIR INCLUSION NOZZLES + DRIFTSTOP

Photos: Plant Protection Chemistry NZ

RATES & APPLICATION

Apply Driftstop at 50-250ml/100L (typically 100-200ml/100L). Higher rates of Driftstop will give a greater reduction of fine droplets and additional drift control, which may be beneficial when spraying close to sensitive areas or in higher wind speeds. Follow all label 'Directions and Warnings' in regard to the use of tank mixture partners and Driftstop. Ensure spray is adequately reaching all targeted parts of the kiwifruit vine.

For more information please refer to the label of the products being applied.

THE INFORMATION CONTAINED IS INTENDED AS A QUICK REFERENCE ONLY. ALWAYS CONSULT THE PRODUCT LABEL BEFORE USE.

POWERFUL REWARDS FOR LOYALTY TO NUFARM

Every purchase of Driftstop earns you valuable reward points in Priority Partnership®, the rewards programme for New Zealand farmers. If you would like to know more visit www.prioritypartnership.co.nz.

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