

## What is spray drift?

One of the risks during spraying is drift, when wind blows spray droplets a short way off target.

To minimise any HiCane spray drift onto neighbouring properties or waterways, growers must use Air Inclusion (AI) nozzles with a drift-reducing additive, like DriftStop. This makes the droplets bigger and heavier and research has shown this significantly reduces the risk of drift. AI nozzles and Driftstop have been compulsory for HiCane applications since 2013 and is a key part of the industry's commitment to acting responsibly.

Other important factors that can minimise drift include shelter belts and buffer zones between neighbouring properties as well as weather conditions at the time of spraying.

Growers and their spray contractors are responsible for keeping sprays on the orchard and minimising drift onto neighbouring properties. Some growers choose to use alternative products in sensitive areas however some of these alternatives are not suited to all orchard conditions and have limited effectiveness.

## How to keep safe?

Our industry is working hard to ensure all growers and spray contractors understand their responsibilities for safe spraying.

Most sprays used on kiwifruit vines are not harmful when used properly and work can continue immediately after orchard application. There are special requirements for HiCane and people should stay out of an orchard for five days after spraying. When you have been notified of HiCane spray activity, you should keep yourself, children and pets, particularly dogs, away from boundaries on the orchard side. It is also best to talk with your neighbour or grower if you want more information on any of the orchard's activities.

## What to do if you have questions or concerns?

The kiwifruit industry voluntarily operates a national public service to provide information and receive feedback on kiwifruit growing operations – including spray activity, noise (bird scarers and fans) and labour compliance. We have provided this service for more than a decade to educate the public and inform our compliance activities.

All spray complaints are received by NZKGI, and Zespri investigates to substantiate the complaints and determine the appropriate course of action. Under GLOBALG.A.P, Zespri can impose sanctions on growers who don't meet conditions of supply which include following rules around spray use and application methods. These sanctions include suspending or cancelling GLOBALG.A.P certification.

Call: 0800 232 505 Email: [info@nzkgi.org.nz](mailto:info@nzkgi.org.nz)

# Spray Safety

As we head into another kiwifruit season, we want to make sure you, our neighbours, have all the information you need about what happens on our orchards, the products we use, how we use them, and what you can do if you have any questions or concerns.

Our industry wants to make sure people in the communities we grow in understand their rights and the industry's commitment to keeping communities safe and the environment protected.



## Key seasonal orchard activities

A kiwifruit orchard is a hive of activity throughout the year, from pruning and fertiliser spreading to thinning and harvesting.

In **WINTER** growers prepare their orchards for the following season. This is a good time to work on pest control, while there is no fruit on vines. This is also a busy time for pruning and applying a budbreak spray to get consistent quality kiwifruit production.

In **SPRING** life is much busier on a kiwifruit orchard with growers applying sprays to manage pests and diseases, then getting beekeepers to bring in bees to pollinate the vines.



The kiwifruit is harvested in **AUTUMN**. Fruit is picked off the vine and packed into trays in packhouses before being exported to millions of customers around the world.

During **SUMMER**, workers thin the canopy and carry out more pruning; care is taken to irrigate where required and manage the growing crop.

## Spray management

Kiwifruit growers spray their orchards with agrichemical sprays and fertiliser, and they also apply water and compost. Some of the sprays control pests like leafroller caterpillar, and diseases such as the vine disease Psa, which can devastate vines if it's not controlled properly. Other products like foliar fertilisers help the vines grow, providing key nutrients as and when required. These sprays are applied as needed at the right times and in the right conditions with modern equipment and by trained spray operators.

Without these products, kiwifruit quality and yield production levels would be significantly lower than they are today, meaning fewer jobs and less income returned to New Zealand and our rural communities.

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## Safety steps growers must take

Zespri and New Zealand Kiwifruit Growers Incorporated (NZKGI) have worked together for many years to make sure all growers and spray contractors understand their responsibilities for safe spraying. We take safety seriously and expect all growers to follow best practice when using agrichemicals.

All growers are certified to the internationally-recognised best practice standards GLOBALG.A.P and must comply with all requirements. This means growers must:

**Make a spray plan** – under Zespri's GLOBALG.A.P programme, growers must prepare a spray plan before each season starts, detailing how they will manage spray and mitigate risks. This includes identifying any sensitive areas near orchards and how they'll apply sprays to minimise spray drift.

**Notify neighbours** – There are different rules in different regions for how much notice growers should give their neighbours before spraying and this is set by regional councils as part of their Air Plans.

## What's used on kiwifruit orchards?

Here are some of the products used throughout the year to improve the health of the vines and the quality of fruit harvest.

Copper is commonly used to protect against Psa and other conditions affecting kiwifruit, and foliar fertilisers are sprayed on leaves and applied to the soil to encourage growth. Modern insecticides target specific pests and are generally applied in early spring, before vines flower. Biological products use microbes, rather than chemicals, as the active ingredient and are used to control pests and diseases.

Hydrogen cyanamide, known by the brand name HiCane, encourages flower growth and leads to greater yields of quality fruit which ripen at the same time. It's an important tool for kiwifruit growers.

It supports budbreak and flowering, resulting in more fruit and consistent productivity, particularly with green kiwifruit. It is more relied upon in warmer environments as natural budbreak and flowering is lower in these regions. The spray is applied once in late winter (from late July to early September) and there are strict rules about how it is used so it can be done safely.

Like any chemical, it can be toxic to humans and animals if they're directly exposed to it. That's why it's used under strict protocols – this includes informing neighbours before use and keeping spray on the orchard.

Notice can be given in person, over the phone, by text or by email and growers also need to let their neighbours know if plans change. Check with your Regional Council for more information.



**Watch wind** – Spray applicators must check wind conditions and direction. It is best practice to spray on a dry day with little wind so any spray drift can be managed. Spray should not be applied if wind conditions are more than a slight breeze.

**Keep sprays on the orchard** – Shelter belts can help control spray and absorb any drift that may occur. Orchards should have shelter on boundaries, especially road frontages. If there is no shelter – or the shelter has gaps – growers should use other ways to make sure spray doesn't drift onto neighbouring properties and roads like directing spray away from the boundary or not spraying along the outer edge of the orchard.

**Use nozzle technology** – Using Air Inclusion (AI) nozzles, plus a drift-reducing adjuvant, reduces spray drift as the nozzles spray larger, heavier droplets that are less likely to be blown away.

**Use low-drift technology** – AI nozzles spray larger, heavier droplets which are far less likely to be blown away. Drift-reducing adjuvants, such as DriftStop, further reduce spray drift by reducing the percentage of very small driftable droplets within the spray mix.

**Be careful** – Growers and spray contractors must take special care around roads, walkways, houses and schools to keep people and their pets safe.