## What is spray drift?

The industry has mechanisms which minimise the distance sprays travel from their target.

One of these mechanisms is Air Inclusion (AI) nozzles with a draft reducing additive, like DriftStop. This makes the droplets bigger and heavier and research has shown this significantly reduces drift.

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.

## How to keep safe?

Our industry is working hard to ensure all growers and spray applicators understand their responsibilities for safe spraying under their regional plans, as well as obligations set by the Environmental Protection Authority and NZ Standard 8409 for safe spraying.

Sprays used on kiwifruit vines are not harmful when used correctly. If you live close to an orchard, you will be notified about any spraying that is taking place and any precautions that are required. When you have been notified of Hi-Cane 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 neighbouring 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.

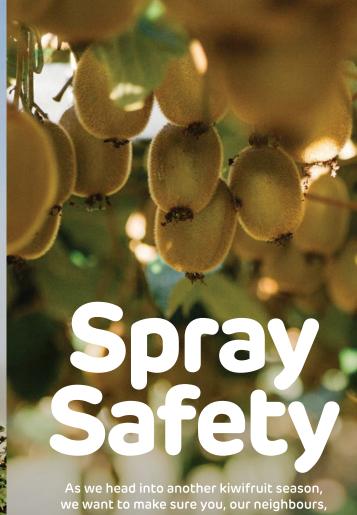
All spray complaints are received by NZKGI, and Zespri investigates the complaints and determines the appropriate course of action.

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.

You can also contact your regional council directly with questions or complaints and they can take enforcement action. The industry and councils work together to resolve issues as they arise.

Call: 0800 232 505 Email: info@nzkgi.org.nz





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 consumers 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 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.

#### 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 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, sometimes known by the brand name Hi-Cane, 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.

Sprays such as these are used under strict protocols – this includes informing neighbours before use and keeping spray on the orchard.

#### 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 internationallyrecognised 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 an orchard map 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.



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.

Put up signs at all orchard entrances – 'Spraying in progress' signs must be displayed at the property entrance before spraying starts, and taken down when it is safe to re-enter. The signs must identify the agrichemical being used, when it will be safe to re-enter the orchard and the contact details of the person applying the spray.

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 breeze.

Orchards should have shelter – Shelter belts can help control spray and absorb any drift that may occur. Growers should consider having 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 low-drift technology – Al 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 applicators must take special care around roads, walkways, houses and schools to keep people and their pets safe.

"These sprays are applied as needed at the right times and in the right conditions with modern equipment and by trained spray operators."