

SUBMISSION ON

Application to import or manufacture Sivanto Prime

22 August 2024

To: HS Applications, Environmental Protection Authority

Name of Submitter: Horticulture New Zealand

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OVERVIEW

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Our submission

Horticulture New Zealand (HortNZ) thanks EPA for the opportunity to submit on "Application to import or manufacture Sivanto Prime" and welcomes any opportunity to continue to work with EPA and to discuss our submission.

The details of HortNZ's submission and decisions we are seeking are set out in our submission below.

As this is a new mode of action insecticide, HortNZ supports the application to import or manufacture Sivanto Prime in New Zealand. In addition, we request that EPA does not impose unnecessary restrictions on the application use pattern that would prevent the extension of use to other horticultural crops.

This submission is supported by:

Vegetables New Zealand Inc
The Persimmon Industry Council
The Tamarillo Growers Association
Strawberry Growers NZ
Process Vegetables NZ

Submission Form

What is your view on what is proposed in the application form?

We support the application

The reasons for making our submission are:

- **Proven Safety and Efficacy:** Sivanto Prime has been widely and safely used in many crops in various other countries for a decade, demonstrating significant benefits in increasing saleable crop yield and reducing overall insecticide use.
- **New Mode of Action:** Due to its innovative mode of action, Sivanto Prime will help growers manage insecticide resistance in common pests, such as aphids and whiteflies, through management practices like rotating the products used.
- **Targeted and Safe:** As a highly targeted insecticide, Sivanto Prime poses minimal risk to non-target organisms, including bees, thus supporting more sustainable pest management practices.
- **Horticulture Benefits:** Expanding the use pattern of Sivanto Prime to other horticultural crops would safely provide substantial benefits to the wider horticulture sector and help to secure domestic food security.

I wish for the EPA to make the following decision:

Horticulture New Zealand urges the EPA to approve this application.

In addition, we request that EPA does not impose unfounded, non HSNO-risk-based restrictions on the approved use pattern in New Zealand due to the low level of risk this product poses to the environment.

All submissions are taken into account by the decision makers. In addition, please indicate whether or not you also wish to speak at a hearing if one is held.

I wish to be heard in support of my submission (this means that you can present your submission to the DMC at the hearing but does not allow you to introduce new information at the hearing)

I do not wish to be heard in support of my submission (this means that you cannot speak at the hearing)

If neither box is ticked, it will be assumed you do not want to appear at a hearing.

HortNZ's Role

Background to HortNZ

HortNZ represents the interests of approximately 4,200 commercial fruit and vegetable growers in New Zealand who grow around 100 different fruits and vegetables. The horticultural sector provides over 40,000 jobs.

There are approximately 80,000 hectares of land in New Zealand producing fruit and vegetables for domestic consumers and supplying our global trading partners with high quality food.

It is not just the direct economic benefits associated with horticultural production that are important. Horticulture production provides a platform for long term prosperity for communities, supports the growth of knowledge-intensive agri-tech and suppliers along the supply chain; and plays a key role in helping to achieve New Zealand's climate change objectives.

The horticulture sector plays an important role in food security for New Zealanders. Over 80% of vegetables grown are for the domestic market and many varieties of fruits are grown to serve the domestic market.

HortNZ's purpose is to create an enduring environment where growers prosper. This is done through enabling, promoting and advocating for growers in New Zealand.



HortNZ's involvement with crop protection regulation

On behalf of its grower members HortNZ works to help ensure that the regulatory settings and services that affect the availability and affordability of crop protection products in New Zealand are appropriate, workable, and cost-effective.

Executive Summary

HortNZ supports the approval of Sivanto Prime. We also request that EPA does not impose unnecessary restrictions on the use pattern of this targeted insecticide as this would prevent it from being safely used across the same range of crops that it is available for overseas.

This innovative insecticide, featuring the active ingredient flupyradifurone, has a proven record of effectiveness and safety in multiple international markets including Australia where it has been available to growers since 2015. Introducing a new mode of action insecticide to New Zealand offers significant benefits to growers, farmers, and the public.

However, we would like to see approval of Sivanto Prime for an expanded application pattern that is commensurate with its low risk as this would enable its use for a wider variety of horticultural crops. A broader, risk-proportionate approval would ensure the product's benefits are fully leverageable thus enhancing pest management (including integrated pest management), managing insecticide resistance issues, and contributing to increased productivity and sustainability in the horticulture sector.

Expanding Sivanto Prime's application to cover more crops aligns with New Zealand's needs for effective pest management solutions and supports the horticulture industry's ongoing commitment to sustainable practices. We urge the EPA to adopt this recommendation to support horticultural growth and ecological balance.

Submission

1. Horticulture Supports the Application to Import or Manufacture Sivanto Prime in New Zealand

Sivanto Prime is an innovative insecticide containing the active ingredient flupyradifurone at a concentration of 200 g/L. This new active ingredient in Aotearoa New Zealand has demonstrated effectiveness against sap-feeding pests with a proven safety profile overseas. The horticulture industry in Aotearoa New Zealand strongly supports the application for the following reasons:

1.1. Proven Safety & Efficacy Overseas

Sivanto Prime has been widely used by major trading partners since 2015, including Australia, Europe, the USA, Canada, and Japan. These overseas approvals underscore the product's efficacy and safety profile. Not approving this application would, therefore, continue to disadvantage our growers by denying them access to this novel product.

We note that it has been almost four years since the application was submitted to EPA. The horticulture industry views this prolonged assessment period as a missed opportunity to enhance sustainable pest control practices in New Zealand and to reduce insect-related losses of saleable fresh produce.

1.2. Highly Targeted Insecticide

Compared to older classes of chemicals, Sivanto Prime has a safer profile for non-target organisms and the surrounding ecosystem. This means this product would make positive contributions towards more sustainable pest management practices. It is designed to target specific pests while minimizing harm to beneficial insects like pollinators (e.g., bees) and natural predators of pests. This selectivity is particularly important for horticultural crops that rely heavily on pollinators for fruit and vegetable production. The horticulture sector values this safety profile, as it aligns with the industry's commitment to sustainable and environmentally friendly farming practices and is much needed for integrated pest management programmes.

1.3. Effective Tool Against Insecticide-Resistant Pests

As pointed out in the consultation summary document, Sivanto Prime targets the nicotinic acetylcholine receptors in the nervous system of insects, leading to the paralysis and death of targeted pests. This unique mode of action would support growers to prevent development of insecticide resistance. This is because it has been shown to be highly effective against sap-feeding pests like aphids and whiteflies, and it will enable growers to rotate between insecticides utilising different modes of action. For the horticulture industry, this would mean more effective pest control and reduced crop losses, ensuring higher quality and quantity of fresh produce for export and domestic consumption.

2. Horticulture New Zealand Requests EPA Approves Broader Applications

Horticulture New Zealand highlights that the proposed controls in the application, such as maximum application rates for specific crops, are highly prescriptive and not risk based. We view this as unnecessary and disproportionate to the lower risks associated with the use of this product compared to more traditional chemistry products. Imposing prescriptive use patterns will needlessly restrict its use in other crops within the horticulture sector by adding unnecessary regulatory burdens to extending its use to other crops or via an alternative method of application. We request that this application be future proofed to not restrict the use patterns to specific crops to allow Sivanto Prime to be used on horticultural crops, to maximize its utility in New Zealand.

2.1. Importance to New Zealand's Horticulture Sector, National and Regional Economies, and Domestic Food Supply

A decrease in the number of crop protection products in the New Zealand market will have significant impacts on the commercial viability of horticulture in this country. The NZIER (2019) report¹ estimated that without appropriate and effective crop protection products, horticulture would lose 75% of the value of its crops, and New Zealand's economy would lose approximately \$5 billion per year. About 85% of vegetables produced are sold for domestic consumption. Without crop protection, New Zealand food security could be at risk. Ensuring access to advanced, targeted, safer products like Sivanto Prime is critical for the industry's sustainability and economic stability.

2.2. Wider International Use and Benefits in Horticulture

Sivanto Prime has been widely used in countries where it is registered, such as Australia, Europe, the USA, Canada, and Japan, significantly benefiting their horticultural industries. The range of horticultural crops that are benefitting from the use of Sivanto Prime overseas includes citrus, pip fruits (e.g., apples, pears, persimmon), stone fruits (e.g., peaches, cherries), berries, and vegetables (e.g., tomatoes, cucumbers)^{2,3} [more details are provided in Appendix 1]. Sivanto Prime enhances crop protection, maintains high yields, and promotes sustainable agricultural practices across diverse horticultural landscapes. New Zealand growers could gain similar benefits, improving both productivity and sustainability.

2.3. Addressing Crop Protection Gaps in New Zealand

Sivanto Prime has the potential to address significant crop protection gaps in New Zealand's horticulture industry, particularly for managing aphids, scale, and whiteflies [more details are provided in Appendix 2].

- **Aphids:** Current control measures for crops such as buttercup squash, stone fruit, tomatoes, lettuce, and spinach rely on older chemicals with limited effectiveness and usage periods. Sivanto Prime, with its safer profile for non-target organisms

¹ [The importance of crop protection products for the New Zealand economy \(nzier.org.nz\)](https://nzier.org.nz)

² [Sivanto+Prime+Fact+Sheet+English.pdf \(bartlett.ca\)](#)

³ [US EPA, Pesticide Product Label, Sivanto 200 SL,06/03/2021](#)

and effectiveness against resistant sap-feeding pests, can provide a much-needed alternative.

- **Scale:** Crops like kiwifruit and citrus face limited efficacious and new mode of action insecticide control options. Sivanto Prime could offer an effective solution with its broad-spectrum activity.
- **Whiteflies:** Affecting citrus and tomatoes, Sivanto Prime can fill the critical need for new modes of action to combat resistance and maintain efficacy.

2.4. Benefits of a Broader Application Pattern

Making the application for Sivanto Prime more generic or broader will expedite its approval for additional crops, making the process faster and more cost-effective. This approach ensures that a comprehensive application is not needed for every additional crop, streamlining regulatory procedures, and allowing a greater number of growers to benefit from Sivanto Prime's targeted pest control capabilities. This strategy supports sustainable agriculture and addresses critical pest management gaps efficiently and economically. By future-proofing the application to include a broader range of crops, particularly horticultural crops, we can maximize Sivanto Prime's use in New Zealand, promoting both horticultural productivity and environmental stewardship.

3. Concerns about EPA's Proposed Application of a Default Environmental Exposure Limit

It is concerning that the current setting of Environmental Exposure Limits (EELs) by the EPA does not appear to be based on a comprehensive risk assessment. While the EPA's own evaluations suggest that it is **unlikely** Sivanto Prime will pose a concern for human or ecological health, EPA specified an EEL of 0.1 μ g/L only because of its **potential** for leaching to groundwater. The limit, however, is unlikely to provide significant protection for human or ecological health and could become an unnecessary constraint on pesticide use in horticulture in the future without a clear risk-based justification. The approach taken seems to apply a broad, generalized method rather than a targeted, risk-proportionate measure, as also evidenced in the APP204167 decision on Emesto Prime⁴. The current approach does not align with the requirements of the HSNO Act (section 77B) in setting these groundwater limits.

Additionally, there is a significant lack of clarity on how these EELs for various chemicals will be enforced and monitored to ensure compliance. The EPA has not provided a robust framework for enforcement or detailed how monitoring will be conducted, raising concerns about the practical effectiveness of these controls. HortNZ concurs with the Parliamentary Commissioner for the Environment⁵ that the EPA should develop and publish an appropriate policy for setting EELs that is risk proportionate. Furthermore, the EPA should provide clear guidance on enforcement and monitoring to ensure that when it is necessary to set an EEL it is not merely a theoretical concept but can be actively upheld in practice.

⁴ [APP204167-Decision.pdf \(epa.govt.nz\)](#)

⁵ [Regulating the environmental fate of chemicals.pdf \(pce.parliament.nz\)](#)

Appendix 1. Sivanto Prime has been used in other countries since 2015 to control insects in a wide range of horticulture crops that are also grown in New Zealand

Country or Region	Year of Registration or Approval	Horticultural crops that it is approved for
Australia	2015	<ul style="list-style-type: none"> • Citrus: Primarily for pests like aphids & whiteflies • Other Fruits: Including avocados, mangoes, & papaya, targeting pests like fruit spotting bugs & planthoppers • Vegetables: Potatoes, tomatoes, eggplants, capsicum, cucumbers, & melons focusing on pests like whiteflies & aphids
Europe	2015	<ul style="list-style-type: none"> • Aphids & whiteflies on various fruits (such as apples, pears, & stone fruits) & vegetables.
USA	2015	<ul style="list-style-type: none"> • Citrus: Used to control pests like aphids & whiteflies. • Pip & Stone Fruits: Such as apples, pears, peaches, & plums. • Vegetables: Potatoes, sweet potatoes / kumara, tomatoes, peppers, eggplants, cucumbers & other cucurbits (including melons). • Other Fruits: Such as avocados, mangos, & papayas. • Tree Nuts: e.g. almonds & walnuts.
Canada	2016	<ul style="list-style-type: none"> • Vegetables: Including tomatoes, eggplants, & potatoes. • Fruits: Such as blueberries, citrus & melons
Japan	2016	<ul style="list-style-type: none"> • Vegetables: Such as tomatoes, peppers, & other field-grown vegetables. • Citrus: Including oranges. • Melons: Like cantaloupe & honeydew. • Berries: Such as blueberries.

Appendix 2. Sivanto Prime could help to address current gaps in New Zealand horticulture growers' crop protection toolboxes

Target Pests	Crops	Urgency ⁶	Reason for Current Gap in NZ's Crop Protection Toolboxes
Scale	Kiwifruit	5	Only bifenthrin & spirotetramat available for control now thiacloprid has been withdrawn.
	Citrus	2	
Whiteflies	Citrus	5	Diazinon is due for phase-out in 2028 & replacement chemistry is critical. In general, insufficient control chemistry is available, which also poses resistance risks, & new modes of action are needed.
	Tomatoes	4	Loss of efficacy of available chemicals. Industry moving towards integrated pest management approach but require targeted chemicals with new modes of action that are compatible with the use of biological control agents.
	Passionfruit	2	No registered control options. Loss of available chemistry.
Aphids	Summerfruit	4	Only older chemicals currently registered & these are under reassessment, i.e. organophosphates, synthetic pyrethroids, & carbamates.
	Lettuce	4	Resistance issues. Unwanted reliance on neonicotinoids.
	Spinach	4	Limited control options registered.
	Passionfruit	2	No registered control options. Loss of available chemistry.
	Tomatoes	2	
	Buttercup squash	1	Only options available are older chemicals with limited use periods.
	Onions	1	The loss of synthetic pyrethroids & organophosphates is limiting options.

⁶ Key to Urgency Ranking: **5** = imperative, requires immediate attention; **4** = very important, needs sorting within 2 years; **3** = important, but other issues rank higher, sort in 3-5 years; **2** = can live with it for now, needs sorting within 5 years; **1** = could be deferred, nice to have.