

Proposed new Pathway Management Plan

Fact sheet: Pollen mills and pollen distributors



Long term growth and success of the kiwifruit industry requires biosecurity risks to be managed across the supply chain. KVH is proposing to introduce a Pathway Management Plan for the kiwifruit industry to prevent the spread of pests and diseases before we know they are here. This will give us the best possible chance of eradication and minimising the impact to our industry.

Our approach to risk management focuses on six improvement areas. If we can manage risk across these areas, we will be a long way towards protecting our investments from future biosecurity risk. This is one of a series of fact sheets available at www.kvh.org.nz, along with more detailed information and frequently asked questions that explain the implications of changes in these key improvement areas.

Why are we proposing changes to this pathway?

Growers should have a high degree of confidence in the biosecurity status of all plant material, including pollen, being moved into an orchard, and pollen suppliers should be able to demonstrate how they are managing biosecurity risk.

The movement of plant material (pollen, rootstock, mature plants, shelter belt plants, and budwood) presents the greatest risk of moving new pests and diseases around our industry. The proposed Pathway Plan aims to ensure all plant material moved onto an orchard has a consistent and low level of risk associated with it. It is acknowledged that the risk across plant material movements varies and the requirements will seek to reflect this difference in inherent risk.

The Pathway Plan proposes to manage risk associated with the movement of pollen by focusing on good biosecurity practices and traceability. Rather than specify the target organisms and testing required, flexibility is proposed to enable the industry to adapt to changing risk profiles of organisms and advances in science which may influence monitoring or testing processes. However, a key driver for KVH is to ensure an appropriate balance between risk management and cost for industry in meeting these requirements.

To assist ease with implementation, the existing Kiwifruit Plant Certification Scheme (KPCS) will be expanded to include pollen and available as a cost-effective option for pollen mills to demonstrate compliance with the rules of the Plan (see the set of rules document on KVH website for wording and explanation of proposed rules).

What does this mean for me?

If I receive pollen: growers receiving pollen should ensure they are sourcing this from a KPCS certified mill and maintain traceability, which means that any pollen provided remains within that orchard. If a grower wishes to move unused pollen off an orchard, registration of the movement will be required with KVH to ensure traceability is maintained.

If I provide flowers: growers providing flowers must ensure that their orchard is operating in accordance with their Orchard Biosecurity Plan and undertake crop protection, monitoring and testing for any high-risk organisms specified by KVH (we propose only testing for Psa, when supplying Psa non-detected orchards). Flowers must be provided to the mill with a KPIN number to enable traceability records are maintained.

The cost of diagnostic testing for Psa (to supply Psa non-detected orchards) is currently \$85 per block but can be aligned with other testing requirements such as budwood for efficiency, where possible.

Mill operators: every pollen mill is responsible for ensuring their operation is compliant with requirements such as undertaking appropriate hygiene practices and maintaining traceability records forwards and backwards. Pollen mills must also only accept flowers from orchards that can demonstrate compliance with requirements (such as supplying KPIN traceability and testing for Psa if supplying to Psa non-detected orchards). To achieve consistency with risk management across other pathways an annual audit fee of \$200 is proposed. Operators milling for own use are exempt from this audit fee (see distribution model below).

Pollen distributors: every pollen distributor is responsible for ensuring that they are registered with KVH and are only distributing certified pollen produced from a certified mill. In addition, they are also responsible for ensuring all pollen remains sealed and intact, and maintaining pollen traceability records. There are no additional costs proposed for distributors.

How is this different to the current state?

There are already risk management requirements for pollen movements under the National Psa-V Pest Management Plan (NPMP), however these are specific to Psa. The proposed changes do not significantly change the status quo but provide a framework to introduce specific monitoring and testing measures where warranted to prevent the spread of a high-risk organism.

The high-risk organism currently of concern is transmission of Psa to non-detected orchards. This means the only testing requirement proposed is that pollen being supplied to Psa non-detected orchards must be milled by a dedicated Psa non-detected mill. Flowers must be sourced from a Psa non-detected orchard. This is consistent with current practice, although is undertaken on a voluntary basis. Therefore, there are no proposed changes that would add significant costs to pollen mills, however the outcome is a framework that significantly improves our biosecurity risk management on this pathway.

Case study: Pollen transmission of pathogens

Under the proposed Pathway Plan there are less requirements for pollen than other pathways. While practicality is a consideration when setting requirements, this is ultimately based on the lower level of risk associated with this pathway. Current knowledge suggests kiwifruit pollen is capable of transmitting a narrower range of pathogens and doesn't transmit these as effectively as some other pathways such as budwood. However, there is significant uncertainty associated with this pathway and this position may change over time with new knowledge.

A recent review of pollen risk commissioned by KVH and Zespri concluded that pollen has been shown to transmit bacterial, fungal, and viral pathogens from diseased to healthy hosts across a range of plants. Kiwifruit pollen is only reported to transmit certain bacteria and viruses, and while there are no reports to date of fungal transmission on kiwifruit pollen, it is highly possible that certain fungal species could be pollen transmissible. There is evidence of several kiwifruit viruses spreading on pollen. *Pelargonium zonate spot virus* is one example, which is impacting kiwifruit in Italy.

We know that at least one bacterium, Psa, can spread with contaminated kiwifruit pollen. However, there is still some question around whether contaminated pollen increases disease incidence in orchards where Psa is already present. Pollen is considered a pathway for introducing Psa to areas where it is not already present. Therefore, the only diagnostic testing proposed at this point is for Psa, for the movement of pollen to non-detected orchards to prevent this bacteria being introduced. We will continue to work with the science community to better understand the risks associated with this pathway.

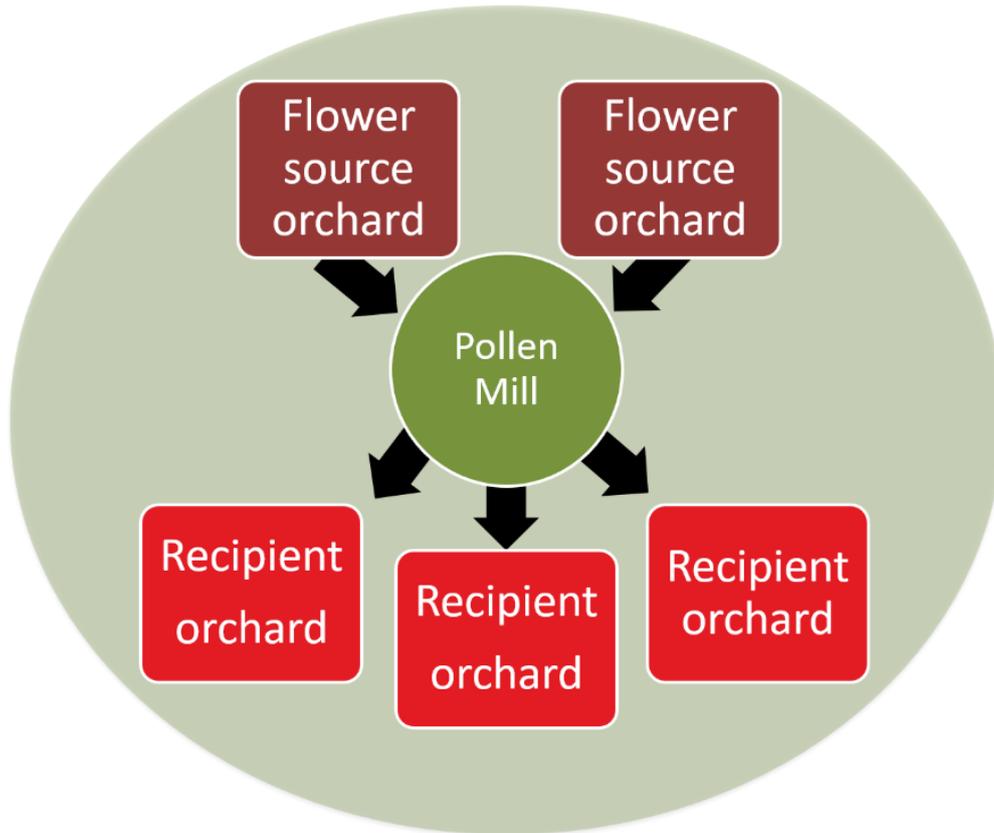


Take the opportunity to have your say

KVH is consulting with growers and other industry groups (nurseries and post-harvest for example) about the proposed new Plan. Based on feedback received, the Plan and implementation schedule will be finalised, with changes likely to come in to effect from 1 April 2022. Let us know your thoughts on the proposed Plan by Friday 30 October 2020. Speak to any of the team, send an email to info@kvh.org.nz or phone 0800 665 825.

Distribution models

1. **Non-supplier** - use own pollen mill exclusively to mill pollen from own orchard for supply of the same orchard. No specific requirements.
2. **Mill for your own use - Registration required.** Flower source orchards, recipient orchards and pollen mill are all under same ownership. Pollen mill exclusively used for these orchards only.



3. **Pollen Mill Certification Scheme - Certification required.** Pollen mill is certified under this scheme to ensure that all requirements are being met. This includes maintaining traceability from source orchard to recipient orchard and/or pollen distributor.

