

Desired outcome

To reduce the risk of Psa-V spreading from unmanaged orchards to other orchards, nurseries or regions, by supporting growers to re-gain control of infection risk within their orchard(s) and return to a situation where Psa-V is effectively managed in accordance with a Psa-V Orchard Management Plan.

Background

Diseased orchards, if left unmanaged, will release inoculum into the environment that can pose a risk of wind and water-borne spread of Psa-V to neighbouring orchards. This increases the risk of Psa-V spread via a range of pathways to other orchards and regions. Lowering inoculum levels is considered by KVH to be a key part of the strategy to achieve successful kiwifruit production with more Psa-V tolerant varieties.

Growers need to decide the management approach best suited to their situation. KVH will continue to provide best practice advice to assist Growers, through the KVH Seasonal Management Guide. The NPMP requires that each Grower sets out their management approach in a Psa-V Orchard Management Plan (with ability to adapt this as their situation changes) and operates in accordance with it. The NPMP also requires that Growers (landowners or occupiers) responsible for a Psa-V positive orchard have an effective crop protection programme in place, which includes application of at least one effective crop protection product.

The focus of KVH is to intervene in serious cases where an orchard is in a state that could lead to spread of Psa-V infection to other orchards, and where every reasonable attempt has been made to achieve a voluntary solution, without success.

NPMP requirements and deciding when an orchard is 'unmanaged'

The NPMP states that a diseased orchard will be considered 'unmanaged' by KVH when:

- *the orchard is not being actively managed to reduce the amount of diseased material; and*
- *the disease situation is deteriorating; and*
- *the orchard is creating a serious risk to neighbouring Growers who are actively managing Psa-V, or to neighbouring 'containment' or 'exclusion' regions.*

The NPMP states that when deciding the level of risk that an orchard poses the following will be taken into account:

- *the overall level of infection within the region;*
- *the density, proximity and Psa-V status of neighbouring orchards;*
- *the nature and extent of the symptoms present on the orchard;*
- *the composition of different kiwifruit varieties grown within the affected orchard and associated level of inoculum these could potentially release; and*
- *the number and nature of movements off the orchard that could lead to further spread of Psa-V.*

To increase certainty for Growers, KVH will endeavour to clarify, in practical terms, how it is likely to interpret the criteria above on-orchard, e.g., by describing in practical terms the nature and extent of symptoms it considers 'significant', and describing the minimum management practices it will accept as reasonable where symptoms are significant. This clarification will be issued on the KVH website and communicated to Growers via the KVH Bulletin from time to time. It will be issued as guidance only and be updated from time to time, reflecting that the overall Psa-V disease situation is dynamic, and understanding of risk will continue to improve over time (i.e. with benefit of research, monitoring and grower experience).

Implementation approach for unmanaged orchards

KVH will only get involved to take action where there are serious risks (refer to definition in paragraph 5) and where reasonable attempt has already been made by the Grower's post-harvest operator, neighbours and regional coordinator to seek a voluntary solution, without success. That is, KVH will only take action where local and regional solutions have either been exhausted or are not leading to timely management of serious risks.

In practice there will be an escalation model, that starts with providing support and giving every reasonable opportunity to find a voluntary solution, but that also ensures timely action is taken so that serious risks get managed.

KVH will act where its staff identify potentially unmanaged orchards and will respond to reasonable reports or complaints.

The steps to be taken once a potentially 'unmanaged orchard' is identified are set out in Table 2, below. Table 2 also identifies the timing of steps, and clarifies that the speed of management response will be faster for 'extreme cases', compared to 'other cases that pose a serious risk', as follows:

- Extreme cases: this will apply, in particular, for less tolerant varieties, such as Hort16A and situations where disease progression is rapid and level of symptoms that could release inoculum is high. The aim will be to achieve actively management of risks on-orchard within one month.
- Other cases that pose a serious risk: this will apply, in particular, for more PsA-V tolerant varieties, such as Hayward, and situations where disease progression is slower and level of symptoms that could release inoculum is lower. The aim will be to achieve actively management of risks on-orchard within two months.

The course of action to address risk associated with an unmanaged orchard will typically entail removal of infected material and disposal in accordance with KVH protocols, and application(s) of an effective crop protection product.

Table 2. Steps and timing once a potential unmanaged orchard is identified, showing how timeframes would differ for ‘extreme cases’ and ‘other cases that pose a serious risk’.

Step	Indicative timeframe	
	<i>Extreme</i>	<i>Other</i>
A. KVH contacts Grower to verify orchard status, affirm KVH position on unmanaged orchards, and initially assess Psa GAP / Orchard Management Plan compliance. KVH contacts post-harvest and regional coordinator.	Within 24 hrs	Within 24hrs
B. Post-harvest and regional coordinator assess the orchard, then discuss with KVH to agree whether the case is extreme, or otherwise poses a serious risk. <ul style="list-style-type: none"> <i>if denied entry then proceed to Step E.</i> <i>if no serious risk is identified then stand down.</i> 	Within 48 hours	Within 48 hours
C. Post-harvest work with the Grower to agree course of action to manage risks, update the Grower’s Psa-V Orchard Management Plan, and facilitate assistance where appropriate (e.g., neighbours / contractors). Post-harvest update KVH (including copy of agreement reached and updated plan).	By end of week 1	By end of week 1
D. Post-harvest check in with the Grower regarding progress and the situation on-orchard, and any further support required. Post-harvest update KVH. <ul style="list-style-type: none"> <i>If Grower completes agreed course of action and risk is managed then stand down.</i> 	As required, up until end of week 2	As required, up until end of week 4
E. If there is evidence the agreed course of action is either not taken or is not effective, KVH investigates, discusses the situation with the Grower and their post-harvest operator, and attempts to reach agreement on a way forward. <ul style="list-style-type: none"> <i>If agreement cannot be reached proceed immediately to step F.</i> <i>If agreement is reached and course of action is taken and is effective then stand down.</i> 	Start of week 3	Start of week 4
F. KVH checks in with the Grower regarding progress and the situation on-orchard. Post-harvest facilitate assistance where appropriate (e.g., neighbours / contractors). <ul style="list-style-type: none"> <i>If Grower completes agreed course of action and risk is managed then stand down.</i> <i>If course of action is not sufficiently managing the risk, then all parties to agree changes required.</i> 	As required, up until end of week 3	As required, up until end of week 6
G. Where Grower cooperation and action has not been achieved through prior steps, KVH issues a Notice of Direction (notice), which specifies the management actions to be taken and when those actions must be undertaken by (the conditions of the notice). Post-harvest facilitate assistance where appropriate (e.g., neighbours / contractors). <ul style="list-style-type: none"> <i>If Grower complies with conditions of the notice, then stand down.</i> 	Start of week 4 (or earlier, at KVH discretion, where a Grower does not cooperate or make any real attempt to address the orchard situation)	Start of week 6 (or earlier, at KVH discretion, where a Grower does not cooperate or make any real attempt to address the orchard situation)
H. KVH monitors. Where conditions of the notice are not met, KVH selects a contractor to undertake the management actions, and recovers costs.	As per timeframe specified in the notice	As per timeframe specified in the notice

Compliance management and cost-recovery for un-managed orchards

- Where reasonable efforts to achieve a voluntary and timely solution have not been successful, a KVH authorised person will issue the 'Notice of Direction' under section 122 of the Biosecurity Act, which sets out the management actions that must be taken by the land owner or occupier, and when those actions must be undertaken by.
- Where a Notice of Direction is not complied with, KVH will act on default under section 128 of the Biosecurity Act, by appointing a contractor to carry out the work set out in the Notice of Direction.
- KVH will procure services (as referred to in paragraph 9. above) from a 'panel of contractors', which it pre-selects on the basis of ability to reliably deliver cost-effective and timely services. KVH will consider at least two quotes before selecting its preferred contractor.
- KVH will recover costs from the landowner or occupier under section 128 of the Biosecurity Act, and will only recover the costs of services delivered by the third party contractors (as referred to in paragraph 9 above). KVH will not recover costs associated with KVH staff time or legal advice.
- All costs recoverable shall be a charge against the land concerned.