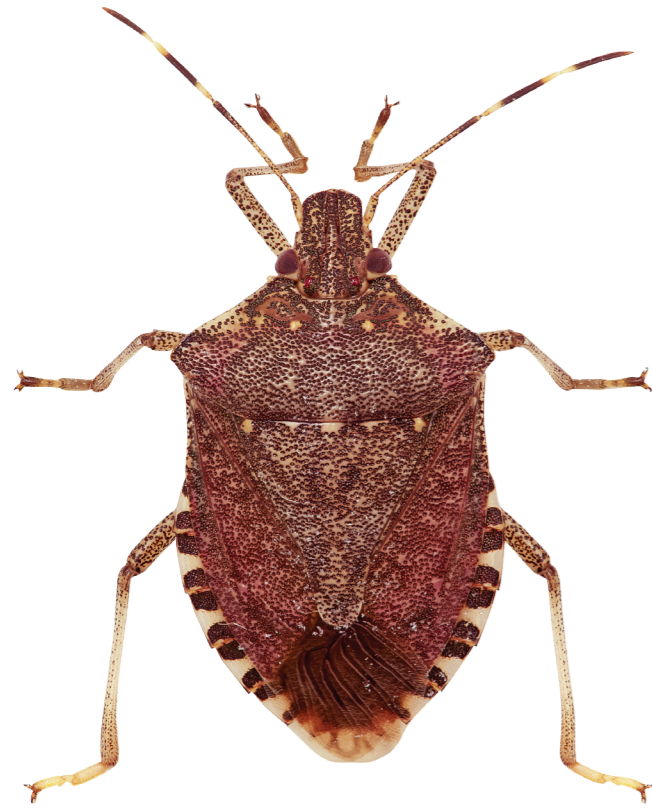


A COLLECTIVE NATIONAL APPROACH

Transition to Long Term Management (LTM)

The decision to transition to LTM would be made collectively under GIA, between industry beneficiaries and MPI, when eradication is no longer a feasible response objective (i.e. pest is widespread and/or present in large numbers). The transition to LTM would conclude cost-sharing and joint decision arrangements set out in the Operational Agreement. However, parties may consider preparing and implementing new arrangements for a full LTM programme such as a pest management plan.



KEY ELEMENTS OF LONG TERM MANAGEMENT FOR THE KIWIFRUIT INDUSTRY

Movement Controls (KVH)

Movement Controls in the form of Restricted Place Notices or Controlled Areas would not remain in place beyond the decision to transition to LTM. However, in circumstances where there is value in attempting to slow the spread of the pest, a Long Term Management Programme may include some requirements associated with the movement of high risk items (most likely in the form of inspection before movement).

Trade implications and agrichemicals (Zespri)

BMSB not considered a market access pest, any restrictions are expected to be short term duration. Using agrichemicals on kiwifruit vines is unlikely to form a significant component of our long term management strategy due to the residue issues associated with post-flower usage, which is when the pest is most likely to be present.

Bifenthrin could potentially be used pre-flowering on vines or shelter belts, however use at the most effective high application rates would incur increased residue testing costs for the pool and need to be balanced against the effectiveness of such actions.

Sustainable on-orchard management (KVH)

LTM of BMSB is likely to result in an IPM approach with more sustainable practices to prevent residue issues on fruit and outbreaks of secondary pests. An approach to managing BMSB on kiwifruit orchards has been developed with input from ZGS and international BMSB experts. This approach will be refined with input from ZGS based on offshore experience. Elements of this approach include:

- release of the Biocontrol Samurai Wasp
- physical exclusion with netting
- use of traps for monitoring or as attract and kill
- use of trap crops to deter BMSB from kiwifruit
- attract and kill methods (i.e. ghost nets).

Reducing post-harvest impacts (Zespri)

A significant portion of fruit loss resulting from BMSB occurs post-harvest as storage rot. A project is underway to understand the impacts to kiwifruit cultivars and how technology employed post-harvest may be able to mitigate these impacts (e.g. NIR, UV).

Post-harvest facilities would also want to consider approaches to physically exclude BMSB from their facility through a combination of screening/exclusion, inspection, treatment and controlling entry, particularly in autumn/winter during overwintering.

COMMUNICATIONS

The key messages for Long Term Management (LTM) must be clearly aligned with response communication objectives and communications protocol which has been developed by KVH with input from Zespri and NZKGI.

When developing key messages for LTM:

- Explain what is happening.
- Explain why decisions have been made as they have.
- Provide need to know, helpful and instructive information (e.g. what you must do, what you need to consider).
- Provide up-to-date key facts, figures and maps about affected areas.
- Make sure people know where to go for more information.
- Keep messages simple, succinct, and accurate (updated).

Communications could include:

- Face-to-face meetings and briefings with influencers and community leaders.
- Grower meetings.
- Regional Coordinators.
- Industry and wider horticulture sector newsletters and publications.
- Websites.
- News media and social media.
- Provision of regular briefings and interviews from spokespeople.
- Signage, fact sheets and information guides.
- Longer term engagement and behavioural change projects.

ADDRESSING KNOWLEDGE GAPS

BMSB Council and National Readiness Programme

BMSB Council established to drive collective readiness work program under the OA. KVH is a member, along with MPI and other horticultural sectors.

Biocontrol: The most promising tool being pursued under this readiness programme is a biocontrol agent, the Samurai Wasp (*Trissolcus japonicus*). The wasp parasitizes BMSB eggs at rates above 80% which would significantly reduce the pest pressure for kiwifruit growers. In August 2018, EPA approval was granted for release of this biological control in a BMSB incursion scenario. The BMSB Council are now progressing an eradication release plan which addresses a number of questions such as the number of wasps required, frequency of release, timing of release, effective searching range and the impact of any previous spray applications on wasp mortality. Once released, these would then establish a self-sustaining population.

Kiwifruit/Kiwiberry industry readiness

Industry-specific projects to improve readiness for an KVH and Zespri have established a “Biosecurity Steering Group” with the goal of reducing the risk and impact of biosecurity incursions through addressing knowledge gaps and prioritising research. Specific BMSB projects include:

- Understanding BMSB lifecycle and impacts to kiwifruit operations.
- Developing sustainable control tools for use on kiwifruit orchards.
- Developing a sustainable management strategy for kiwifruit incorporating existing knowledge and novel tools.
- Refining existing technology to reduce post-harvest impacts.