Australian Government
Department of Agriculture and Water Resources

FOR EXTERNAL CIRCULATION

2016-17 Brown Marmorated Stink Bug Summary

2017

Contents

Executive summary

Continuing from the 2015-16 season, the 2016-17 BMSB season saw the department and industry (shipping lines, importers, brokers, stevedores, ports) working together to manage the potential risk of entry into Australia of Brown Marmorated Stink Bug, a biosecurity pest of concern for Australia.

Background

Brown marmorated stink bugs (BMSB) are invasive insects that were first detected in large numbers in 2014-15 in vehicles and machinery shipped to Australia from the United States. Emergency response measures were put in place at that time, and have since been reviewed to manage subsequent BMSB seasons. The 2016-17 response measures were largely the same as for 2015-16 which proved to be effective for managing the risk of BMBS entry into Australia.

The 2016-17 season implemented some minor changes to continue to strengthen the measures in place from previous seasons. The review below outlines the 2016-17 season measures, detections and resulting recommendations for the coming season.

The 2016-17 measures

Break bulk

- From 1 September 2016, all used goods in the target tariffs shipped as breakbulk were required to be treated for potential stink bug infestations prior to shipment on or before 30 April 2017.
- New goods in the target tariffs manufactured and/or stored between 1 September 2016 and 1 December 2016 and shipped as break bulk on or before 30 April 2017 were required to undergo offshore treatment, unless subject to safeguarding arrangements approved by the department.
- New goods in the target tariffs manufactured on or after 1 December 2016 and shipped as break bulk on or before 30 April 2017 required a consignment specific manufacturer's 'new and used and not field tested' (NUFT) declaration which was required to include the date and place of manufacture.
- Goods that arrived untreated must have undergone treatment onshore on wharf, or at an Approved Arrangement site 1.1 if safe to move. Treatment was to occur within 48 hours of discharge at the wharf of arrival. If this could not be arranged, the goods were not permitted to discharge, but could be shipped to another port where treatment facilities were available. Alternatively, the goods could be exported.

Note: The department considers goods transported on flat rack containers to be break bulk cargo.

Containerised

- Full Container Load (FCL)/Full Container Multiple House Bills (FCX) containerised goods in the target tariffs are subject to the same requirements as break bulk, with measures:
    - for used goods shipped between 1 September 2016 and 30 April 2017
    - for new goods manufactured and/or stored between 1 September 2016 and 1 December 2016
    - for new goods manufactured on or after 1 December 2016.
- As with the last season, Less than Container Load (LCL) containerised goods were not targeted under these measures.
- FCL and FCX containerised goods that arrive untreated required mandatory treatment onshore. Containers were permitted discharge to the wharf if the seals were intact, and

moved to either an Approved Arrangement site 1.1 or 1.3 (where fumigation facilities were available) for treatment.

Treatments

The 2016-17 treatment conditions:

- Sulfuryl fluoride – at least 48g/m3 for 6 hours or longer, or at least 16g/m3 for 12 hours or longer both with end point reading of 50% or more of the initial concentration and conducted at a temperature of 10°C or higher.
- Methyl bromide – at least 16g/m3 for 12 hours or longer with an end point of 50% or more of the initial concentration and conducted at a temperature of 15°C or higher.
- Heat – at 50°C or greater for at least 20 minutes in the coldest location in the vehicle.

Detections

US origin detections

The table below shows the number of BMSB detections on US cargo during the 2016-17 season.

Total Detections *	Number of live BMSB detections	Number of dead BMSB detections	Number of live BMSB	Number of dead BMSB	Total number of BMSB
13	7	6	7	23	30

* Detections refers to the finding of insects. There may be several insects in a single detection.

European detections

The table below shows the number of BMSB detections on European cargo during the 2016-17 season.

Total Detections *	Number of live BMSB detections	Number of dead BMSB detections	Number of live BMSB	Number of dead BMSB	Total number of BMSB
16	5	11	41	87	128

* Detections refers to the finding of insects. There may be several insects in a single detection.

Asian origin detections

- There were 5 detections from Asia, all for single bug detections, 1 live ex China and one live ex Japan. The limited nature of these detections are consistent with those of previous years and probably attributable to the existence of natural predators, given that BMSB originate from Asia.

Emerging factors

- The establishment and spread of BMSB populations in Europe and subsequent arrival on goods into Australian territory.
- Detections of BMSB in containers of goods not currently captured in target tariffs (eg. white oak ex US).
- BMSB has now been recorded in South America.

Recommendations

1. Continuation of the US seasonal BMSB management strategy

The measures applied on US imports in 2016-17 season should be continued for the next season with the following modifications:

- Target goods tariffs should be reviewed to ensure we continue to manage high risk goods appropriately.
- The safeguarding arrangement option should be continued but reviewed to ensure it remains fit for purpose.
- Continued review of pathways for effective management of biosecurity risk.

2. Expansion of the current measures as applied to exports from the US to include measures for Europe

- Current measures for US to be expanded to include cargo originating out of identified BMSB areas within Europe.
- Source areas within Europe to be assessed based on whether BMSB are established or non-established within the relevant areas, and if there is evidence that these may become an active risk on the cargo pathways to Australian territory.
- Safeguarding arrangements to be developed and introduced for affected European pathways. This may include, but is not limited to certification for specific facilities and/or pathways to facilitate the reduction of intervention on arrival.

3. Increased coordination with NZ MPI on a collaborative Oceania strategy

Collaborative and coordinated review of evidence relating to:

- US season measures
- European season measures
- Response to recent detections of BMSB in Chile

4. Continued monitoring and surveillance

- The use of stink bug traps on break bulk vessels should be expanded to ensure a better chance of detection of BMSB from European origin goods or from non-treated US cargo carried on a previous run.

- Early BMSB warning systems should be instituted at arrival ports, particularly at break bulk wharves.
- On wharf surveillance of European origin break bulk cargo should be increased.
- European stakeholders to be encouraged to monitor and manage BMSB from point of origin and throughout the pathway to Australian territory.

5. Continued focus on communication/dialogue with stakeholders

- engagement with stakeholders on measures for the next risk season and longer term management
- production of materials such as flyers and fact sheets to raise awareness of risk, in particular around how to minimise risk and consequences of increases in BMSB detection in Australia.
- use of a wide range of mechanisms and delivery platforms (including social media and external agencies)
- continued focus on accessibility of material on website.
- cleaning/inspection advice specific to BMSB detection.

6. Awareness and recognition

- Develop process for recognition of proof of freedom certification for BMSB.
- Establish recognition of offshore safeguarding supply chain systems and voluntary compliance.
- Research into alternative and potentially more effective treatments for BMSB.