Assessment of the effectiveness of biosecurity measures to manage the risks of brown marmorated stink bug (BMSB) entering Australia

Context

The brown marmorated stink bug (BMSB, *Halyomorpha halys*) is an exotic pest that poses a significant biosecurity risk to Australia's agricultural industries, as it is a voracious feeder that damages vegetable crops and fruit trees. It is known to feed on more than 300 hosts, including important agricultural crops such as apple, bean, cotton, citrus, maize, soybean and tomato. If BMSB were to enter and establish in Australia it would have a significant impact on the country's crop yield and affect the export value of crop production. In addition its agricultural risks, BMSB is also a smelly nuisance pest that may infest homes, offices and factories, emitting secretions that can cause allergic reactions in some people.

BMSB is a native of Japan, Korea, China and Taiwan and its global range is steadily increasing. First introduced to Pennsylvania in the 1990s, it is now found in 43 states in the USA and four Canadian provinces. In Europe, BMSB was first reported in 2008 near Zürich in Switzerland. Subsequently, it spread to Germany by 2012, Strasbourg in France and northern Italy by 2013, and Hungary by 2014. It is projected to spread further to nearby cool temperate countries and regions. Australia and New Zealand remain free, due to intensive efforts, despite increasing approach rates to both countries since 2010, especially since 2014.

BMSB has been arriving on cargo imported from a wider range of countries as it has spread around the northern hemisphere. It hibernates in a very wide range of materials which has meant that specialised biosecurity risk assessment, inspection and treatments must be applied to a large array of goods which were previously not of biosecurity concern.

Prior to 2014, the department found small numbers of live BMSB adults as hitchhikers on various goods from several countries. From December 2014 interceptions of very large numbers of live BMSB in cargo from the USA were detected, requiring the department to put urgent response measures in place during the BMSB season of 1 September to 30 April. Between 2015 and 2017 the department applied seasonal measures only to certain goods shipped from the US. In 2017–18 the department initially extended measures to vehicles and machinery shipped from Italy, due to large detections of BMSB on these goods. Measures were then extended to a wide range of containerised goods from Italy due to high rates of BMSB detected on these goods. For the 2018–19 season the department extended the seasonal measures to seven other European countries, as well as subjecting vessels from Japan to heightened monitoring and surveillance for BMSB.

In the BMSB season from 1 September 2018, this increased application of biosecurity measures to more goods imported from more countries resulted in substantial disruption to trade with industry concern. The department is actively working to optimise pre-border and border measures to minimise disruption to industry. However, BMSB's continued spread means that intensified efforts on a wider front will be needed to keep it out of Australia.

Due to this increasing BMSB risk, the intense and rapidly changing efforts by the department to manage it, and considerable stakeholder impacts, I decided to add to my 2018–19 work plan a review of the effectiveness of the department's biosecurity measures to manage the risks of BMSB entering Australia, and what if any improvements should be made.

Scope of review

The scope of this review of the department's BMSB risk management may include an evaluation of the department's activities in:

- developing and verifying effectiveness of offshore BMSB management measures
- BMSB profiling, assessment, inspection and treatment of conveyances and cargo arriving in Australia
- management of approved arrangements involved in onshore BMSB management activities, including reviewing the effectiveness of measures taken by industry to ensure compliance with biosecurity requirements
- approval/accreditation of offshore and onshore treatment providers
- engagement and consultation with industry and other stakeholders
- identifying improvements required to manage biosecurity risks, including:
 - o legal powers available to manage BMSB risks effectively, and
 - assessment of need for replacement and/or upgrade of current ICT systems used onshore.

Out of scope

This review will not examine policy and activities that are the responsibility of stakeholders—other than the Department of Agriculture and Water Resources—including state/territory governments, individuals and biosecurity industry participants.

Submissions

Interested stakeholders are encouraged to provide comments on this review to the Inspector-General of Biosecurity. Before providing comments please consider the review scope described above.

The closing date for submissions is **22 February 2019**.

Further information on how to make a submission to this review is contained on the submission coversheet.

Making your submission

All submissions must be accompanied by a completed submission coversheet, which identifies the review to which you are providing comment. Should you wish to provide comments to more than one review you will need to complete a separate coversheet for each review.

Contact

If you wish to discuss this review you can contact the Inspector-General as below:

Email: inspgenbiosecurity@agriculture.gov.au

Phone: +61 2 8334 7409