



Australian Government
**Department of Agriculture,
Fisheries and Forestry**

Maintaining a BMSB-free Australia: Assessments and Practices

SPS Committee Thematic Session:

**‘International Standards and Best Practices in Pest Risk Identification,
Assessment and Management’**

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Brown marmorated stink bug; BMSB
***Halyomorpha halys*; Pentatomidae**

- Native to SE Asia – now widespread in northern hemisphere
- Serious production and amenity pest
- Winter diapause in adults – ‘hitch-hiker pest’ attributes
- Not present in Australia – many interceptions at border

... and other pentatomid quarantine pests

Yellow-spotted stink bug; YSSB – *Erthesina fullo*



...and many superficially similar native species:
Notius consputus



History : Assessment and exclusion

- **Emergency measures:**
February 2015 (consistent with ISPM 13)
- **Pest risk analysis finalised:**
December 2019 (consistent with ISPM 1)

Ongoing :

- applying measures to support safe trade
- targetting measures to minimise impacts while maintaining biosecurity (ISPM1)
- informing stakeholders of changes:
www.agriculture.gov.au/bmsb
- enhancing ability to detect and identify

Final pest risk analysis for brown marmorated stink bug (*Halyomorpha halys*)

December 2019



Minimising impacts of measures:

Measures are partitioned by:

- means of transport (sea cargo)
- seasonality of shipment
(1 September to 30 April inclusive)
- country of origin or transhipping
(‘target risk’: 38; ‘emerging risk’: 2)
- character of goods
(‘target high risk’ goods: mandatory treatment;
‘target risk’ goods: random inspection)



Ability to detect

Multiple means:

- Human inspection
- Detector dogs
- Traps and lures

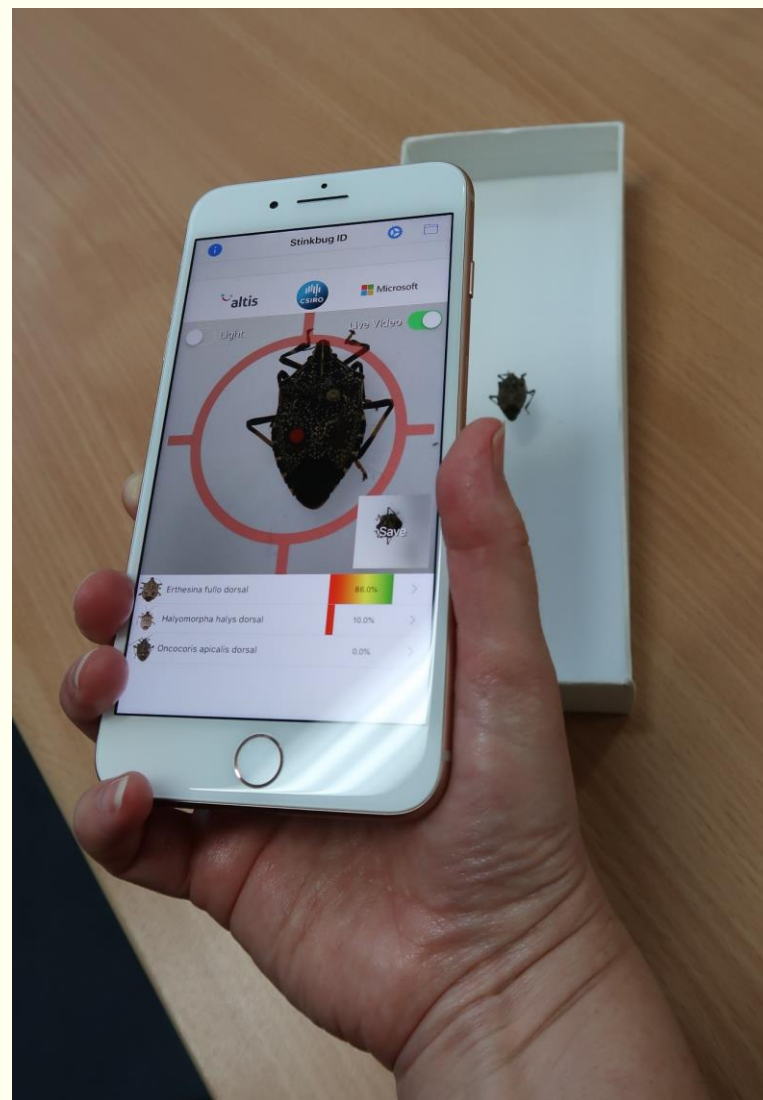
Detections

- Season 2020-21: 232 detections
- Season 2021-22: 158 detections



Enhanced ability to identify

- New mobile phone app
- DAFF- and CSIRO-developed
- uses Microsoft's Custom Vision AI model and verified bio-specimens
- fast, accurate recognition of top and underside views of 45 stink bug species, including BMSB
- currently in field trials – aims to be a low cost, automated, portable solution to assist in rapid identification
- follow-up detections with laboratory confirmation





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