

Communiqué:

2022 Quarantine Regulators Meeting

17, 19, 24 and 26 May 2022 (virtual)

The 2022 Quarantine Regulators Meeting (QRM) was held across four sessions on 17, 19, 24 and 26 May 2022. This year's theme was *Turning Challenges into Opportunities: Adapting Biosecurity Regulation using advancing technology in an uncertain environment*. The focus of the meeting was the use of innovative approaches and technologies to further the detection and management capability of government biosecurity agencies. This was the 13th QRM hosted by the Australian Department of Agriculture, Water and the Environment (DAWE), and the second to be held virtually.

Each of the four sessions were attended by approximately 180 delegates (800 total), representing over 40 biosecurity agencies. There were a total of 18 presentations, which discussed a range of topics including the management of pest outbreaks, detector dogs and general biosecurity detection, and innovative treatment technologies.

Session 1 – 17 May

Mr Andrew Tongue, Deputy Secretary, DAWE opened the meeting. Mr Tongue began by acknowledging the challenges facing quarantine regulators and biosecurity management globally, including climate change, increasingly complex global trade patterns, COVID-19 and shifting community expectations. Mr Tongue emphasised the importance of international engagement and collaboration and highlighted some of the technologies Australia has been trialling to combat emerging challenges. These include 3D X-ray, the biosecurity portal, environmental DNA and RNA, and RingIR.

Dr Sarah Bruce from DAWE presented on new technologies for Hitchhiker Pest Management. The presentation outlined developing technologies for better hitchhiker pest detection in sea containers. The technologies included the hand-held hyperspectral camera system, biosecurity automated threat detection system, environmental DNA and point-of-care technology, Brown Marmorated Stink Bug (BMSB) detecting mobile application, RingIR, and a 4WD robot for inspections.

Mr Abelardo de Garcia Scanapieco from the International Regional Organisation for Plant and Animal Health (OIRSA) outlined the Dominican Republic's experience in the management and eradication of an outbreak of African Swine Fever. The presentation outlined some of the measures taken to manage the outbreak, including the hosting of information sessions and seminars, and collaboration with regional governments to formulate a prevention plan for the further spread of the disease. OIRSA also developed the 'OIRSA Library' application, which contains a regional manual for good practice in the management of health emergencies.

Mr Cheng-Chung Chen from Taiwan's Bureau of Animal and Plant Health Inspection and Quarantine (BAPHIQ), spoke about the use and management of quarantine detector dogs in Taiwan. The presentation provided an outline of the history and current standing of the detector dog operations, including an overview of the detection results in mail pathways.

Mr Stu Rawnsley from New Zealand's Ministry for Primary Industries presented on the strengthening of biosecurity excellence in the mail pathways. The presentation explored some of the technological innovations being developed to enhance biosecurity threat, such as 3D scanning. The following discussion and questions demonstrated a high level of interest surrounding innovations in the mail pathway system.

Session 2 – 19 May

This session was co-hosted by OIRSA.

Mr Leonardo Martin Vasquez from OIRSA discussed Costa Rica's experiences in the management and eradication of a Giant African Snail outbreak. The presentation provided a description of the outbreak (including the location of initial detection and a map of its spread), as well as a clear outline of the steps taken to manage the outbreak, which included the chemical control of the pest.

Mr Cesar Ulises Dangu from OIRSA presented on the lessons learned from the training of canine units for Giant African Snail scent fixation. The presentation provided a clear outline of the steps used to implant the scent of Giant African Snail in the canine's olfactory memory, following a comprehensive outline of the safety measure to ensure the sanitary containment of the Giant African Snail.

Ms Yu-Ling Jhana from BAPHIQ spoke about the strengthening of phytosanitary measures for international mail articles and e-commerce in Taiwan. The presentation outlined the current issues faced in the mail and e-commerce pathway, such as most recipients not declaring goods and the challenge of screening all packages. The Plant Protection and Quarantine Act was emphasised as an effective response which included provisions for the destruction of plant regulated material upon arrival. The results demonstrated these measures to be an effective response to biosecurity challenges associated with the international mail and e-commerce pathway.

Mr Nathan Reid from DAWE encouraged everyone to think of next year's QRM theme, where he emphasised innovation and new approaches. Mr Nathan Reid suggested a focus on the progress which the COVID-19 pandemic has forced quarantine regulators to make, and on how the innovations discussed in this year's QRM have improved or assisted work being undertaken.

Mr Juan Pablo Villalobos from Chile's Agriculture and Livestock Service (SAG) presented on the phytosanitary requirements for the entry of used products that may carry BMSB. The presentation outlined the requirements for the treatment of used imported goods for BMSB, which includes their treatment prior to import into the country. Treatments include the use of insecticide, methyl bromide and heat treatment.

Mr Steve Peios from DAWE spoke about the Methyl Bromide Fumigation Methodology review. The presentation provided an outline of the review, the changes made, the consultation process and highlighted the necessary next steps.

Session 3 – 24 May

Ms Kathy Belka from DAWE presented on the Biosecurity Portal. The presentation outlined technological innovations aimed at improving the way Australian industry interacts with DAWE when booking inspections and other services. The presentation also provided an overview of the Client and Workload Management project, its objectives and benefits for the department and wider Australia.

Mr Jon Webber from DAWE spoke about Australia's import profiling – current capability and future uplift. The presentation outlined mail, traveller, and cargo profiling processes and capabilities. The presentation also outlined what profiling entails and innovations for enhanced performance, such as machine learning.

Mr Sam Griffiths from DAWE presented on treatment methodologies, outlining their importance, purpose and effectiveness. The presentation also provided an overview of the steps in developing treatment methodologies.

Dr W.A.R.T. Wickramaarachchi from Sri Lanka's National Plant Quarantine Service gave an overview of vapour heat treatment for fresh fruits in Sri Lanka. Vapour heat treatments are primarily used to treat mangoes for fruit flies. The presentation discussed the damage that fruit flies inflict on crops and provided a detailed explanation of the efficacy of vapour heat treatment in treating this pest.

Session 4 – 26 May

Dr Oscar Camacho from SAG provided an overview of the expansion of the canine brigade. The presentation outlined selection and training process of detector dogs. The presentation also highlighted the effectiveness of the canine brigades, with data and examples of detections provided.

Mr Joel Willis from DAWE presented on the use of advances in technology for biosecurity risk detection. The presentation discussed emerging technologies, including 3D X-ray technology, how the technology works and provided examples of findings as a result of this technology. Innovations such as the use of detector dogs were also discussed.

Ms Jessica May from DAWE spoke about biosecurity innovation. The presentation outlined the Biosecurity Innovation Program, including past, present, and proposed future in projects in the biosecurity innovation space. Members were provided with advice on how to apply for funding, as well as contact details.

Mr Nathan Reid from DAWE closed the meeting by re-emphasising the importance of the QRM for collaboration and engagement with partners and thanked everyone for being involved. Mr Nathan Reid remarked that DAWE is looking forward to seeing members outside of the QRM before officially closing the 2022 QRM.