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Biosecurity Advice 2020/P06

RELEASE OF THE FINAL REVIEW OF IMPORT CONDITIONS FOR CUCURBITACEOUS VEGETABLE SEEDS FOR SOWING

This Biosecurity Advice notifies stakeholders of the release of the *Final review of import conditions for cucurbitaceous vegetable seeds for sowing*.

This final report identifies eight pathogens as quarantine pests that require additional biosecurity measures to manage the risk to a very low level in order to achieve the appropriate level of protection (ALOP) for Australia.

This final report takes into account comments received from stakeholders on the draft report released on 6 December 2017.

Australia depends heavily on imported seeds to produce a wide range of crops, including vegetables, and imports large quantities of these seeds annually.

The distribution of pathogens (which cause disease) associated with seed is expanding across the world and new biosecurity risks continue to emerge. The trade in vegetable seeds has become globalised with seed being commercially developed, multiplied and processed across various countries instead of within a single country. Therefore, the risk of seeds being exposed to new pathogens, as well as the risk that these pathogens may enter Australia via imported seeds, has increased. The increased biosecurity risk associated with imported seed prompted the department to review the import conditions for vegetable seeds for sowing.

Acknowledging the change in risk profile associated with this trade, the department is undertaking [a series of seed reviews](#) of the import conditions for four key vegetable families. Cucurbitaceae is one of four vegetable families being reviewed. Cucurbitaceous vegetables include cucumber, watermelon, melon, squash, zucchini and pumpkin.

The department released the draft report of the review of import conditions for cucurbitaceous vegetable seeds for sowing on 6 December 2017, for public consultation ([Biosecurity Advice 2017-27](#)). Comments raised by stakeholders on the draft report were taken into consideration in the preparation of the final report.

The key findings from the review of cucurbitaceous vegetable seeds for sowing are:

- Eight pathogens were identified as quarantine pests—*Diaporthe cucurbitae* (formerly *Phomopsis cucurbitae*), *Cucumber green mottle mosaic virus* (CGMMV), *Kyuri green mottle mosaic virus* (KGMMV), *Zucchini green mottle mosaic virus* (ZGMMV), *Melon necrotic spot virus* (MNSV), *Bitter melon yellow mosaic virus* (BgYMV), *Cucumber fruit mottle mosaic virus* (CFMMV) and *Tomato black ring virus* (TBRV).
- Additional biosecurity measures are required to manage the risks posed by these pathogens and four pest risk management options are recommended:

- Option 1. Polymerase chain reaction (PCR) test—an option that is applicable to all eight identified quarantine pests.
 - Option 2. Enzyme-linked immunosorbent assay (ELISA) test—an option that is applicable to CGMMV, KGMMV, MNSV and ZGMMV.
 - Option 3. Broad spectrum fungicidal treatment—an option that is applicable to *Diaporthe cucurbitae*.
 - Option 4. Heat treatment—an option that is applicable to MNSV.
- Additional biosecurity measures will be required for imported seeds of nine cucurbitaceous species and any hybrid of these species: watermelon (*Citrullus lanatus*), rockmelon and honeydew melon (*Cucumis melo*), cucumber (*Cucumis sativus*), squash (*Cucurbita maxima*), pumpkin (*Cucurbita moschata*), zucchini (*Cucurbita pepo*), bottle gourd (*Lagenaria siceraria*), bitter melon (*Momordica charantia*), snake gourd (*Trichosanthes cucumerina*).
 - If the required treatment or testing is undertaken off-shore, phytosanitary certification is required with the additional declaration that the testing or treatment has been conducted in accordance with Australia's requirements.
 - Imports of seeds of the nine cucurbitaceous species for sprouting or micro-greens production for human consumption are exempt from these additional measures if imported directly for germination at a production facility operated under an Approved Arrangement. This is to mitigate risks from the diversion of seeds to other end-uses.
 - Seeds of most cucurbitaceous vegetable species reviewed were not found to be hosts of quarantine pests for Australia and they will continue to be subject only to the department's standard seeds for sowing import conditions.

The final report, stakeholder comments and the department's responses are available from the department's website.

The department invites stakeholders interested in receiving information and updates on biosecurity risk analyses to subscribe via the department's online [subscription](#) service. By subscribing to Biosecurity Risk Analysis Plant, you will receive Biosecurity Advices and other notifications relating to plant biosecurity policy, including the vegetable seed reviews.

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