RISK BACKGROUND

Fresh berries for human consumption

Overview

(Image: Heydrienne, (2006) *Berries,* https://flic.kr/p/hZKjN (CC BY 2.0))

Permitted species of fresh berries may be imported from New Zealand without an import permit when:

- subject to pre-export inspection by the exporting country
- accompanied by a phytosanitary certificate
- securely packaged (i.e. insect proof)
- inspected on-arrival.

Fresh strawberries may also be imported from Korea and California, United States of America (USA) if the above conditions are met and consignments are:

- accompanied by a valid import permit
- sourced from a registered pest free place of production (Korea) or offshore systems approach (USA).
- treated to mitigate risks of key pests of concern to Australia.

The department has not developed import conditions for species or countries of origin that are not listed in BICON.

Importers and department staff should ensure that BICON conditions are met and that fruit is free from biosecurity risks, as well as the key risks described below.

Key risks

Spotted wing drosophila

Fresh berries are a host of spotted wing drosophila (SWD; *Drosophila suzukii*) which is a highly invasive pest. Due to its large host range, SWD has the potential to seriously impact Australia's horticultural industries and is considered to be a national plant priority pest for Australia. Eggs are laid below the skin of host fruit where larvae feed and develop. Some necrosis may occur around the puncture site. Mandatory pre-export fumigation addresses the risks associated with SWD from Korea and California, USA. As SWD is not reported in New Zealand, risk management measures are not required.

Thrips

Western flower thrips (*Frankliniella occidentalis*) and onion thrips (*Thrips tabaci*) can be present in fresh berry consignments. As some species, such as *T. tabaci* can vector orthotospoviruses, many species which may already be present in Australia are considered to be actionable. Orthotospoviruses may cause considerable economic consequences across a wide range of fruit, vegetable, legume and ornamental crops. The biosecurity risk associated with thrips is managed by phytosanitary certification and inspection. As New Zealand is free from orthotospoviruses of concern, only exotic species of thrips are considered actionable.

Blueberry rust (*Naohidemyces vaccinii*)

Fresh New Zealand blueberries and cranberries imported into South Australia, Tasmania, Victoria and Western Australia are subject to additional measures for the fungal disease, blueberry rust. Infected plants are characterised by leaf spots, loss of foliage and eventual reduction in fruit production. The risks associated with blueberry rust are addressed by a pre-harvest inspection of fungicide spray within 14 days of harvest and phytosanitary certification.

Angular leaf spot (*Xanthomonas fragariae*)

Fresh strawberries from Korea and USA may introduce *Xanthomonas fragariae*, a bacterial pathogen that causes angular leaf spot (ALS). ALS is characterised by the presence of water-soaked lesions on leaves. ALS has the potential to significantly reduce strawberry yields and is therefore of biosecurity concern to Australia. Depending on the country of origin, the risks associated with ALS are mitigated through the application of:

- Korea mitigates the risks associated with ALS by producing strawberries in area maintained free from *X. fragariae*.
- The USA uses a systems approach which is underpinned by in-field treatment as wells as packinghouse and pre-export inspections to mitigate risks associated with ALS.
- Onshore measures such as on-arrival inspection for the presence of disease symptoms in the consignment.

Image: *Angular leaf spot on strawberry calyx,* Department of Agriculture and Water Resources.

Specific phytosanitary measures for ALS are not required for strawberries imported from NZ as ALS is not reported to occur in NZ.