RISK BACKGROUND

Fresh dragon fruit for human consumption

Overview

(Image: samaha2010 (22 February 2012), *Dragon fruit* https://flic.kr/p/bBcVkF (CC BY-ND 2.0))

Fresh dragon fruit (*Hylocereus* spp.) for human consumption require an import permit and must also be:

- sourced from Vietnam
- treated prior to shipment with vapour heat treatment (VHT)
- subject to pre-export inspection by the exporting country
- accompanied by a phytosanitary certificate
- securely packaged (i.e. insect proof) and labelled to enable traceback
- inspected on-arrival.

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 the BICON conditions are met and that goods are free from biosecurity risks, as well as the key risks described below.

Key risks

Fresh dragon fruit for human consumption may harbour biosecurity risk material such as live insects, disease symptoms, and contaminants such as weed seeds, soil, hitchhiker pests and trash. These risks are managed through the import conditions outlined above. The following are the key biosecurity risks found on the fresh dragon fruit.

Fruit flies

Fresh dragon fruit are hosts of fruit flies, such as guava fruit fly (*Bactrocera correcta*), melon fly (*Bactrocera cucurbitae*) and oriental fruit fly (*Bactrocera dorsalis*), which are highly invasive and have a large host range. They have the potential to cause significant economic impact on Australia's horticultural industries and are 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 on affected fruit.

Pre-shipment VHT is considered an appropriate measure to mitigate the risk associated with these fruit flies to achieve Australia's Appropriate Level of Protection (ALOP).

Mealybugs

Fresh dragon fruit are hosts of mealybugs, such as grey pineapple mealybug (*Dysmicoccus neobrevipes*), coffee mealybug (*Planococcus lilacinus*), Pacific mealybug (*Planococcus minor*) and Jack Beardsley mealybug (*Pseudococcus jackbeardsleyi*). These mealybugs attach the flowers, fruit and stem of the dragon fruit and causes direct damage to plant hosts, reducing productivity and damaging the fruit.

The biosecurity risk associated with mealybugs is addressed through phytosanitary inspection and certification, along with inspection on-arrival and remedial treatment of infested consignments as required.

Diseases

Commercially grown dragon fruit in Vietnam is less vulnerable to pests and diseases than other kinds of fruit crops. No diseases of dragon fruit from Vietnam have been assessed as not meeting Australia's ALOP.