RISK BACKGROUND

Fresh leaves for human consumption

Overview

(Image: Hoàng. V, (2013), *Rutaceae -Aegle marmelos,* https://flic.kr/p/fW4GKj (CC BY 2.0))

Fresh leaves for human consumption do not require an import permit but must be:

- a permitted plant part of an approved species
- from an approved country of origin
- appropriately treated
- subject to pre-export inspection by the exporting country
- accompanied by an original phytosanitary certificate
- securely packaged (i.e. insect proof)
- inspected on-arrival.

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

Importers and department staff should ensure that BICON conditions are met and that consignments are free from biosecurity risks.

Key risks

Imported fresh leaves may harbour a range of biosecurity risk material such as live insects, disease symptoms, and contaminants such as weed seeds, hitchhiker pests and trash. A range of import conditions are in place to manage specific biosecurity risks posed by each pathway. Some notable biosecurity risks posed by fresh leaves are provided below.

Bael leaves

Imported bael leaves may harbour the Asian citrus psyllid (ACP; *Diaphorina citri*) which causes damage to a wide range of plants, particularly those in the Rutaceae family. *D. citri* is a vector of citrus huanglongbing (HLB; *Candidatus* Liberibacter *asiaticus*, *Ca*. L. *africanus* and *Ca*. L *americanus*) which is a national priority plant pest for Australia that causes ill forming fruit and premature fruit drop. Consignments of bael leaves imported from countries where ACP is known to occur must be fumigated prior to export to manage the risks associated with this pest.

Cassava leaves

Cassava leaf blight, caused by the fungal pathogen *Xanthomonas axonopodis* pv. *manihotis*, results in wilting and necrosis of the vascular system. Cassava leaf blight is responsible for causing the largest yield losses for cassava worldwide. Cassava leaves are only permitted from Fiji and Tonga and must be accompanied by an additional phytosanitary declaration stating cassava leaf blight is not known to occur in the country of origin.

Charooya bhaji leaves

Leaf miners, including *Liriomyza huidobrensis* (serpentine leaf miner) and *Liriomyza bryoniae* (tomato leafminer) are national priority plant pests for Australia. They feed on a range of plant material and are serious pests of both ornamental and vegetable crops. Infestation is characterised by white, 'tunnel-like' markings on foliage or stems, or the presence of eggs on leaves. These risks are managed through sourcing leaves grown in New Zealand or a Pacific Community country only, and visual inspection which is undertaken pre-export and on-arrival in Australia.

Island cabbage

Whitefly (*Bemisia tabaci*) 'Nauru' biotype that has been identified as a high priority plant pest of the cotton, melon, nursery and garden industries in Australia. Whitefly is a phloem-feeder that causes chlorotic spots on foliage, while honeydew produced by nymphs disfigues flowers, and encourages mould growth on leaf surfaces. Whitefly is also known to vector more than 60 plant viruses.

Island cabbage is also known to host tortoise scale (*Coccus capparidis*) and Pacific mealybug (*Planococcus minor*) which also pose an unacceptable biosecurity risk to Australia due to their potential impact on Australia's horticultural industries.

The biosecurity risks associated with these pests are mitigated through as pre-export inspection and phytosanitary certification and inspection on-arrival.

Taro leaves and white taro leaves

Taro leaf blight, caused by the fungal pathogen *Phytophthora colocasiae*, results in large lesions on the leaves, petioles, flowers and corms. It is responsible for devastating effects on taro production in the South Pacific and is of biosecurity concern to Australia. Due to the biosecurity risks posed by taro leaf blight, white taro and taro leaves are only permitted from countries which are free from this pathogen.