# **RISK BACKGROUND**

## Fresh leafy vegetables for human consumption

### Overview



(Image: Salisbury. S, (2014) Upcountry Kula Farmers Market Leafy Greens Sue Salisbury Maui Hawaii, https://flic.kr/p/o7T9ge (CC BY 2.0))

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

- a permitted species and plant part as specified on BICON
- grown and exported from an approved country
- subject to pre-export inspection by the exporting country
- accompanied by a phytosanitary certificate
- securely packaged (i.e. insect proof)
- inspected on-arrival.

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

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

## Key risks

#### **Arthropods**

Depending on the type of leafy vegetable and their country of origin, imported consignments can carry a number of arthropod pests that pose a high biosecurity risk to Australia. Existing risk management measures, such as pre-export inspection and phytosanitary certification, are in place to address these risks.

- Imported fennel and celery is a host of the carrot rust fly (<u>Psila rosae</u>), a high priority plant pest for the Australian vegetable industry. Larvae cause damage to the roots and adult flies may be present on the foliage of host plants. Australia requires that host species mentioned above, are certified to be free from Carrot rust fly, prior to export by the exporting countries National Plant Protection Organisation.
- Leafy vegetables such as spinach, lettuce and celery may introduce <u>leaf miners</u>, including the vegetable leaf miner (*Liriomyza sativae*), tomato leaf miner (*Liriomyza bryoniae*) and the American serpentine leaf miner (*L. trifolii*). Leaf miners are <u>national priority plant pests</u> for Australia. They feed on a wide 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/stem parts.
- Celery is also a host of the tarnished plant bug (<u>Lygus lineolaris</u>), a highly polyphagous insect that is considered to be a <u>national priority plant pest</u> for Australia. While plant bugs are difficult to detect with the naked eye, infestations are characterised by ragged, discoloured leaves.
- Exotic strains of the cotton aphid (<u>Aphis gossypii</u>) may be present in imported celery and lettuce. This aphid is a high priority plant pest for Australia's cotton, nursery and garden industries. Cotton aphids can cause damage to host crops through feeding and vector exotic plant pathogens that are of concern to Australia. Infestations can be detected visually as they are often associated with the presence of honey-dew on leaves.
- Silverbeet is a host of tomato-potato psyllid (<u>Bactericera cockerelli</u>), which is a sap-sucking insect capable of causing significant damage to solanaceous crops. It is a high priority pest for Australia's tomato and potato industries, and is also a vector of the bacterial pathogen Candidatus Liberibacter solanacearum. Tomato-potato psyllids are found on foliage, with eggs attached to leaves and new shoots by short pedicels.

## Other pathway risks

Imported fresh leafy vegetables may also harbour biosecurity risk material including live insects, disease symptoms, and contaminants such as weed seeds, non-permitted plant parts, hitchhiker pests and trash. These risks are managed through the import conditions outlined above.