

RISK BACKGROUND

Fresh cut flowers and foliage

Overview



(Image: Source DAWR)

Imported fresh cut flowers and foliage must be:

- Listed as permitted fresh cut flowers and foliage
- Be inspected and certified by the exporting National Plant Protection Organisation as free of live pests using either a systems approach, offshore methyl bromide fumigation or an alternative treatment
- Packaged in pest proof packaging
- Devitalised to prevent propagation (for certain species)
- Inspected on arrival

Note: Import permits may be required for certain pre-export measures from some countries.

Importers and department staff must 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 cut flowers and foliage have the potential to introduce exotic invertebrate pests, pathogens and weeds into Australia.

Invertebrate pests

Cut flowers and foliage have a high likelihood for insect infestation as insects naturally feed on them and are attracted to features such as flowers due to their colour and scent. Invertebrate pests associated with cut flowers have the potential to cause economic and environmental consequences in Australia. Invertebrate pests can impose significant costs to producers by reducing yield, quality and marketability of a wide range of plant crops and requiring ongoing field management and control. Invertebrate pests can also vector exotic diseases.

Thrips

Thrips and the orthotospoviruses they transmit can cause considerable economic consequences across a wide range of crops and considerable damage to a wide range of native vegetation. Further information including the species of thrips of concern to Australia can be accessed in the [Group pest risk analysis for thrips and orthotospoviruses on fresh fruit, vegetable, cut-flower and foliage imports](#).

Mites

Mites such as spider mites are pests of a wide range of field, orchard and glasshouse plants including those grown for cut flowers and foliage.

Leaf miners

Leaf miner flies (*Liriomyza* spp.) are exotic to Australia, they are a major insect pest of many crops and ornamental plants and are listed as one of [Australia's top 40 exotic plant pests](#). Leaf miner flies can infest *Chrysanthemum* spp. and *Gypsophila* spp. flowers. They have the ability to cause damage to agricultural industries and the natural environment and if established in Australia have the potential to spread quickly.

Aphids

Aphids can cause significant yield reduction to a wide range of plants through direct feeding damage and diseases introduced by virus transmission.

Psyllids

Many psyllid species, like the Tomato psyllid (*Bactericera cockerelli*) are highly invasive and have large host ranges and can survive in a wide range of habitats. They have the potential to cause significant economic impact on Australia's horticultural industries if they were to establish and spread. The eggs can be extremely small (0.5mm x 0.15mm) and are predominantly found on leaves but are also found on petioles and stems of hosts. Psyllid nymphs are known to attach to the underside of leaves.

Xylella fastidiosa insect vectors

Xylem feeding (sap sucking) insects (e.g. sharpshooters, spittlebugs and cicadas) have the potential to vector the bacterial disease [*Xylella fastidiosa*](#). This disease affects a large range of hosts including, but not limited to, important agricultural crops such as grapes, olives, citrus and a range of amenity species including species native to Australia.

Pathogens

Cut flowers can act as hosts of many plant pathogens such as fungi, bacteria, viruses and phytoplasmas. Some of these pathogens are asymptomatic.

Any imported flowers with symptoms of disease will be submitted to departmental plant pathologist for identification and assessment.

Fungi and Bacteria

Cut flowers can be a host to many fungal species causing infections mostly superficially on the flowers, leaves, calyces or stems. Many fungal species associated with cut flowers may not be considered to be pathogenic. However, there are species that can cause symptoms that affect the quality of the product, or even pose a biosecurity risk. Bacteria may cause lesions on any part of cut flowers and could be an external contaminant or cause internal infection.

Viruses and phytoplasmas

Viral pathogens can be spread by infected propagation material and insect vectors. These pathogens are not necessarily visible to the naked eye at inspection. Some examples of high risk viruses are Chrysanthemum stem necrosis virus, Impatiens necrotic spot virus, tomato ringspot virus, and strawberry latent ringspot virus.

Phytoplasmas (*Phytoplasma asteris*, *P. mali*, *P. aurantifolia*, *P. rubi*, *P. prunorum*) have been assessed on the cut flowers pathway and require biosecurity management activities such as devitalization to manage the pathogen risk.

Australia has a mandatory requirement for the devitalization of cut flowers that can be readily propagated, by dipping in glyphosate herbicide. This reduces the chance of propagation of imported material and manages the risk of introduction of many plant pathogens.

Seeds

Seeds may contaminate cut flower consignments and pose a risk of introducing exotic weeds and seed borne diseases to Australia. Seeds exceeding tolerance must be removed through reconditioning or sent for identification to confirm if the species poses a biosecurity risk.