

NSW Cut Flower Industry

Managing Grey Mould (*botrytis* Spp.) in Cut Flowers

Description

Diseases caused by the genus *Botrytis*, especially *B. cinerea*, are among the most common and widely distributed diseases of cut flower and other horticultural crops.

Botrytis diseases are commonly known as grey mould because of the grey-brown appearance of fungal growth on affected plant tissue. This fungal growth is clusters of spores that develop on the tips of dark brown stalks. They can be observed with a 10x hand lens. *Botrytis* species can infect plants at any stage of growth, directly infecting flower petals and entering vegetative plant parts through wounds. They thrive in cool, moist and high humidity conditions. *B. cinerea* favours temperatures between 18-23°C.

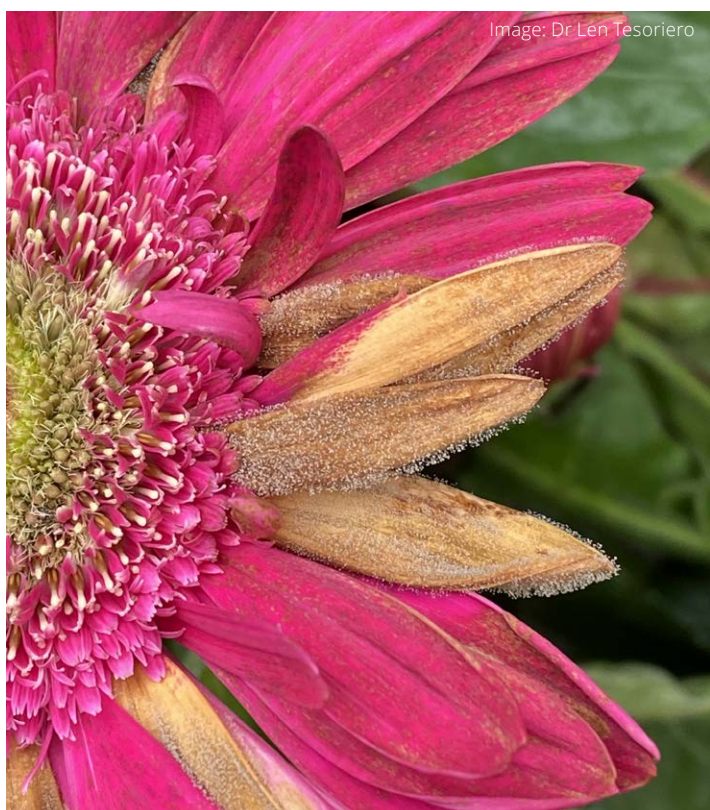


Figure 1. Botrytis blight on gerbera flower

Damage

Botrytis species cause a variety of symptoms, including blights, spots, blotches, wilts, cankers, rots, and damping off. Infected flowers display spots and irregular flecks, with rapid rotting of older blooms. Soft, brown lesions form on leaves, stems, and flowers. Affected parts may become covered with grey mould. Petals of heavily infected flowers may stick together and become matted, reducing the aesthetic and commercial value of the flowers.

→ Quick Facts

- **HOST PLANTS:**
All cut flower plants are susceptible
- **WHERE TO CHECK:**
Inspect buds, flowers, leaves, and stems, particularly in areas with poor air circulation and high humidity
- **WHEN TO MONITOR:**
Throughout the growing season, especially during cool, damp periods
- **HOW OFTEN TO MONITOR:**
Monitor regularly, at least weekly, or more frequently during high-risk conditions
- **ACTIONS:**
Implement preventive measures, conduct regular inspections, and apply control methods as needed



Figure 2. Fungal spores of botrytis blight on Cordyline (<https://www.horticulture.com.au/globalassets/hort-innovation/resource-assets/nyl5002-botrytis-fact-sheet.pdf>)

Disease Management

Grey mould is difficult to manage using fungicides without an integrated program of cultural control in the nursery.

Cultural

- Reduce humidity and increase airflow in growing environments. Increase plant spacing.
- Use sub-irrigation instead of overhead watering to minimise moisture on plant surfaces – time irrigation to avoid long periods of leaf wetness.
- Maintain proper hygiene by removing dead plant material and using clean planting material.
- Avoid overuse of nitrogen fertiliser that creates soft, luxuriant growth.
- Avoid conditions that predispose plants to infection by keeping plants healthy, avoiding fertiliser burn, and ensuring careful handling during transplanting.

Chemical

A range of registered fungicides can be applied as a preventative program. Ensure rotation between different fungicide activity groups.



Image: andreaobzerova

Take Aways

- **Monitor Regularly:** Keep a close eye on buds, flowers, leaves, and stems, especially during cool, damp conditions
- **Control Humidity:** Lower humidity and improve airflow to prevent grey mould
- **Sub-Irrigate:** Use sub-irrigation to avoid moisture on plant surfaces
- **Practice Hygiene:** Remove dead plant material and use clean planting materials
- **Use Fungicides Wisely:** Apply registered fungicides and rotate products to manage resistance

References / More Information

- <https://www.horticulture.com.au/globalassets/hort-innovation/resource-assets/ny15002-botrytis-fact-sheet.pdf>
- <https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/biosecurity/plants/diseases/horticultural/botrytis-grey-mould>
- <https://agriculture.vic.gov.au/biosecurity/plant-diseases/vegetable-diseases/grey-mould-botrytis-in-greenhouse-tomato-crops>

This fact sheet has been developed by RMCG and reviewed by Dr Len Tesoriero as part of a Storm and Flood Industry Recovery project to reduce chemical use in the NSW cut flower industry.



Image: hedgetog94

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Australian Government



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