



Genetically Modified (GM) Carnations in Australia



GM carnations were the first GM flowers in the world to be commercialised. They have been on the market since the mid-90s.

The GM carnations have been modified to have mauve, purple or violet coloured flowers. This has been achieved by introducing genes from petunia or pansy. The genes are responsible for making blue pigments in the flowers.

There are seven different GM carnations available on the Australian market. They are either grown in Australia or imported from overseas as cut flowers.

Prior to allowing their commercialisation in Australia, the Gene Technology Regulator (the Regulator) carried out science-based risk assessments and concluded that the GM carnations presented a negligible risk for the health and safety of the people and the environment.

The seven GM carnations are all included on the [GMO Register](#).



Moonlite™, Moonshade™, Moonshadow™, and Moonvista™

The first varieties of GM carnations in Australia were Moonlite™, Moonshade™, Moonshadow™, and Moonvista™. More than 4.5 million of these GM carnations have been sold in Australia since 1995.

Initially, a licence was required to propagate and grow the GM carnations and to distribute the cut flowers.

However, after an assessment process, the Regulator determined that the risks associated with these GM carnations were minimal and that there was no need to regulate their use to protect the health and safety of the people or the environment.

As a result of this assessment, the Regulator decided in 2007 to include the GM carnations on the GMO Register. From that moment, anyone could grow and use these GM carnations without a licence.

Moonaqua™, Moonberry™, and Moonvelvet™

Initially, a licence was required and only permitted import, transport and disposal of cut flowers of the Moonaqua™, Moonberry™, and Moonvelvet™ GM carnation varieties. More than 200,000 of these GM cut flowers have been sold in Australia since 2015.

After another assessment process in 2020, these GM carnation varieties were also included on the GMO Register. The Register allows anyone to import, transport and

dispose of GM cut flowers. As the Register does not permit propagation or cultivation, these GM carnations **must not be grown** in Australia.

Instead, these GM carnations are produced in Colombia and Ecuador and then exported to Australia.

At the border, the GM cut flowers are treated to prevent propagation. This is a requirement by the Department of Agriculture and Water Resources for both non-GM and GM cut carnations.

GM carnations in the world

Internationally, GM carnations are authorised for import in United States of America, Canada, Japan, Malaysia, Singapore, and the European Union.

More than 4 million GM carnations are sold world-wide every year. The GM carnations are not known to have any adverse effects on the health and safety of the people and the environment.

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Further reading

Genetically modified organisms in Australia

How are genetically modified organisms (GMOs) regulated in Australia?

Version 3	September 2020
Version 4	November 2021

