

Questions & Answers on licence application DIR 218 –

Commercial release of tomato genetically modified for purple fruit colour

What is this application for?

All Aussie Avocados Pty Ltd (trading as All Aussie Farmers) is seeking approval from the Gene Technology Regulator for the commercial release of a genetically modified tomato, the GM Purple Tomato. The purpose of the application is to allow cultivation of the GM Purple Tomato Australia-wide. At this stage, it is proposed to be grown in commercial greenhouses. The GM tomato and its products would enter general commerce, including use in human food. The release would be subject to restrictions in some Australian States and Territories for marketing or biosecurity reasons.

Can the GM Purple Tomato be sold as food?

Permission for GM Purple Tomato and its products to be sold as food for human consumption requires a separate application to Food Standards Australia New Zealand (FSANZ). FSANZ also sets the requirements for GM food labelling in Australia. You can register on the [FSANZ](#) website to receive notifications on food issues, including consultations on applications.

How is the GM Purple Tomato different from non-GM tomatoes?

The GM Purple Tomato has been modified to switch on production of natural blue pigments called anthocyanins in the fruit while it is ripening. The introduced genes, *Delila* and *Rosea1*, were sourced from garden snapdragon (*Antirrhinum majus*). The GM Purple Tomato also contains an antibiotic resistance marker gene, *nptII*, which was used in its initial development.

In fruit of **red non-GM** tomato varieties, **red pigments** are present.

In ripe fruit, the **skin and flesh** are **red**.



The effect of the introduced *Delila* and *Rosea1* genes is that **blue pigments** are present in the ripe fruit in addition to the **red pigments**.

This makes **both** the **skin and flesh** of the fruit **purple** in the **GM Purple Tomato**.



This looks different to **purple non-GM** tomato fruit in which **both red and blue pigments** are mainly in the **skin** (see fruit of the non-GM tomato *Indigo Rose*).

In ripe fruit, the **skin** is **purple** and the **flesh** is **red** (although some varieties may have a darker tinge in parts of the flesh).



You can easily tell the ripe fruit of the GM Purple Tomato from non-GM purple tomato varieties:

If ripe tomato fruit has purple skin and purple flesh, then it is the GM Purple Tomato. Currently, there is no non-GM tomato fruit that looks anything like this.

When can I comment on this application?

Public consultation is expected in **September 2025**.

We will notify subscribers to [OGTR News](#) of the consultation and advertise it in newspapers and on our [website](#). The consultation will be open for written submissions for at least 30 days.

Where can I find more information?

For more information on this licence application, please search for **DIR 218** on our [website](#). We will provide more information on this application when we start the public consultation.

Please ensure you quote our identifier **DIR 218** in your communications about this application with us.