

# Benefits outweigh risks from genetically modified plants

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Australian states should not ban commercial production of genetically modified (GM) plants and food as the risks are alarmist and exaggerated, according to a new study.

The UQ PhD study found the benefits of GM plants and food outweighed the risks, finding no compelling evidence of harm to humans from GM plants.

GM plants have been trialled in most states with South Australia, Tasmania and Western Australia the only states to ban GM plants. South Australia and Tasmania are reviewing their moratoriums.

The study author, ethicist Dr Lucy Carter, spent three-and-a-half years examining arguments and evidence for and against the development and use of GM plants and food in Australia and in the developing world.

Dr Carter said there was no evidence to justify continuing moratoriums on commercial GM planting so long as thorough risk assessments were done.

Opponents say GM products are unnatural, potentially harmful to humans and capable of environmental injury and creating 'superweeds'.

She said the risks of GM plants transferring allergenic proteins to novel foods or creating superweeds were very low.

"If you take a GM plant and a conventional plant, you can't easily create a hybrid that is both strong enough to withstand natural environmental conditions as well as survive all eradication attempts unless you're in the lab," Dr Carter said.

"It's just too difficult."

Asked if it was too early to tell if GM plants were safe, Dr Carter said research that included risk assessments showed no reason for alarm.

Food products that contain more than one percent of a GM ingredient must be labelled and most people have already eaten GM food in some supermarket junk food.

"I think the risks and benefits are overstated by both sides of the debate," she said.

"Opponents tend to inflate the risks while proponents at times overstate the benefits.

"My research has shown that there are enormous benefits to investment in GM plants.

"To proceed with care is the most prudent decision regulatory authorities can make at this stage."

She said GM plants were often made drought, pest and virus resistant and could theoretically produce enough food to feed Third World countries although some infrastructure obstacles remained.

GM golden rice had enough beta keratin to help prevent blindness caused by Vitamin A deficiency in the developing world.

In order to protect plant patents, most GM plants have in-built seed sterilisation or obsolescence, which means future generations of seed will not grow.

GM plants are different to conventionally-propagated plants from nurseries in that they have had new genes added from an unrelated plant or animal.

"Scientists have isolated genes from cold-water fish such as salmon and inserted them into tomatoes in order to prevent damage to crops in frost-prone environments," Dr Carter said.

Source: University of Queensland

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