

Growing GM crops in Australia

People have a variety of opinions and concerns about the future farming of GM crops in Australia.

In this activity, you will assume that an Australian university has developed a new variety of salt-tolerant wheat. The researchers are trying to work out whether or not it will be accepted by a wide range of people. The acceptance is the key to being able to proceed.

You will explore concerns or opinions that people may have from different points of view. You will also explore the risks and benefits of this new crop.

After your own investigation and discussion with others you should be able to be more confident of your own view.

You will need:

- access to the internet
- access to the information on GM crops from *Biotechnology Online*

What to do:

1. Divide the class into up to nine groups. You should have at least two students in each group. Each group should adopt one of the following roles. As many as possible of these roles should be adopted.
 - **A farmer** — concerned about the cost of seeds and labour for the farm and about obtaining a good income from the farm.
 - **A neighbour** — (of a farmer who uses aerial spraying of the farm crops as part of the farm weed control program) who is concerned about the effects of this spray on the property and the health of the family.
 - **An environmentalist** — concerned about any effects that the seeds of the farmer's crop may have on the environment.
 - **A supermarket manager** — who wants the products on the shelves to be popular with his customers and sell well.
 - **A cook** — concerned about the safety and quality of the oil from GM canola plants.

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- **A seed merchant** — who wants to obtain maximum sales of seeds and herbicides to customers.
 - **An import/export manager** — who wants the seeds and food products they sell overseas to compete successfully with those from USA and Europe.
 - **A university scientist** — who wants the research to help farmers grow crops on land that is currently unusable.
 - **A consumer** — concerned that foods derived from this type of wheat will cause health problems for their children.
2. Each group should then share the work of reading about arguments for and against the use of GM crops and the safety of GM food in the materials from the websites below. Decide which of these views or ideas are of concern to a person in the role adopted by the group.
- Biotechnology Australia: Arguments for and against genetic modification
<http://www.biotechnology.gov.au/index.cfm?event=object.showContent&objectID=D2D25898-BCD6-81AC-1580E45464029EE0>
 - Biotechnology Australia: Potential genetic engineering issues for rural producers
<http://www.biotechnology.gov.au/index.cfm?event=object.showContent&objectID=D321DE62-BCD6-81AC-17B29E1564039454>
 - CSIRO: The science behind biotechnology
<http://www.csiro.au/science/ScienceBehindBiotech.html>
 - ProQuest: <http://www.csa.com/discoveryguides/gmfood/overview.php>
 - Greenpeace's concerns at the True Food Network:
<http://www.truefood.org.au/index2.html>
 - Agrifood Awareness Australia:
http://www.afa.com.au/pdf/10_For_and_against.pdf

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3. Working in your group, and using this or any other relevant information you find, develop an argument for or against farming this new GM wheat in Australia in the future. Make sure that every member of the group is confident that they can explain the argument to students who are not members of the group.
4. Rearrange the class groupings so that each of the new groups has at least one student from each of the initial groups.
5. Present the arguments prepared by the initial groups to the members of the new group. Each speaker may need to answer question from others in the group in order to make their argument clear.
6. When all the arguments have been heard and discussed, work by yourself or with one other student to decide on your opinion about growing GM crops in Australia in the future.
7. Come back into a class group and discuss how these differing opinions can be balanced. Will everyone be happy if the new crop is grown? Will everyone be happy if it is not? Is there middle ground?