

Classroom Activity

10 Big Question: How can we feed the world sustainably?

Pesticide use and pollination

Neonicotinoids are a class of insecticides that were developed 30 years ago. They block the receptors in the central nervous system of insects, which leads to paralysis and death. They are a systemic insecticide, which means that they are taken up by the plant and can remain effective for a period of time. Thus, toxins taken up by the plant can be present in the nectar. The European Union has recently put a moratorium on the use of neonicotinoids in crop farming, because it is feared that they harm bees. In Australia, no such moratorium exists, and neonicotinoids are used as seed dressing, plant drenches and sprays both by farmers and gardeners. The manufacturers of neonicotinoids claim that their use as seed dressing is not harmful to bees and the products are sold over the counter in hardware stores and gardening centres.

In this role play, the Australian Pesticides and Veterinary Medicines Authority needs to assess whether it needs to revise its position on neonicotinoids, and should decide which uses should and should not be allowed. It will do so by consulting stakeholder groups.

Divide the classroom into the following groups:

- Beekeepers
- Conservationists
- Gardeners
- Farmers
- Vegetable seed producers
- Representatives of the chemical company
- A representative from the Australian Pesticides and Veterinary Medicines Authority (the teacher can perform this role)

Allow each group time to research their interest and to establish their position. Ask each group to present their position and provide a written 'submission' (as a group or individually).

Following the presentations have a class discussion and try to reach a consensus.