



Finding Host Plants

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Science Experiment

- In this investigation you are going to see whether pesticides affect the ability of Squinting Bush Brown butterfly caterpillars to find a food plant
- In the laboratory the scientist has set-up 2 treatment groups of caterpillars:
 - ❖ 1. A **'no pesticide' treatment group**. These are called 'controls' – no pesticide has been added to the caterpillars body and they should behave 'normally'
 - ❖ 2. A **'pesticide treated' group**. In the pesticide treatment group a very small amount of pesticide has been added to the outside of the caterpillars body – not enough to kill it, but enough to test whether pesticides affect caterpillar behaviour



Science Experiment

- In the laboratory, several large sheets of white paper were laid over a table to create a nice smooth, even-coloured, surface
- The laboratory was warm, and light, with natural light coming-in from windows along 3-sides of the room
- Four Maize plants (the favourite food of these caterpillars) were placed on top of the white paper in a square-shaped arrangement, with one plant in each corner of the square. Each side of the square had equal-sized lengths



Science Experiment

- In the video, you will shortly be looking at one of the Control (no pesticide) caterpillars from this experiment
- You will see the gloved hand of the scientist carefully place the caterpillar in the centre of the square. The caterpillar is positioned in the centre so that whichever direction it chooses to move, it is the same distance to travel to each of the 4 plants
- Watch the caterpillar move to search for a food plant.
- If you have a stop watch, once the scientist's hand has moved out of sight, start the timer. If the caterpillar reaches a plant, stop the timer once the caterpillar touches one of the leaves of the plant. Record the amount of time it took for the caterpillar to reach the leaf (find the plant)
- At the end of the video, complete the Science Activity Work sheet

