



*“Where Science, Art, Language, Technology,  
Maths and Civics collide”*

## What bugs live in what shrubs?

In this experiment, you will survey bugs living in shrubs around your home garden. Shrubs are small to medium sized woody stemmed plants. You will need to survey at least two different plants to compare. Certain plants attract certain types of bugs. Find out which shrubs or plants are popular bug habitat in your garden?

### Materials needed

- A large white container (ice-cream tub)
- A solid stick for beating the shrubs
- Magnifying glass (optional)
- 2-5 small lidded plastic containers
- Mobile phone camera or an iPad, to take bug photos (digital SLR camera or better still an SLR with a macro-lens).

**SAFETY!!!** As you know, some invertebrates can bite, sting or both. Some have prickly hairs and some have venomous spikes. We recommend not to pick bugs up with your bare hands! Use the lid of a small container to catch bugs, trying not to hurt them. Release them back on the shrub they were found in after you have studied and photographed some.

### Procedure

**STEP 1.** Select the first shrub to survey. Ask your parents if they know the type or name of the shrub. Record the name of the plant E.g. **Grevillea** or just call it **Plant 1**. if you don't know the type.

**STEP 2.** Place your collection tub under a clump of the shrub's leafy branches. Using the beating stick, hit the branches with enough force to jolt any bugs out of the plant and into your collection tub. NB We want to hit the branches with a jolt but the aim is not to break any branches.

**STEP 3.** Examine what's in your collection tub. Look closely, as some creatures will be microscopic (that small you will only just be able to see them with the naked eye). Aim to photograph five of the different bugs or spiders that you find. Choose the largest ones to photograph.

**STEP 4.** Conduct a rough count of the different creatures for each plant E.g. **PLANT 1**. 4 spiders, 3 flies, 5 beetles, 2 mites, 6 ants. Record your count on the data collection sheet, which will be matched with the plants you surveyed.

**STEP 5.** Repeat the process by selecting another plant to survey. If you survey a plant and there are no bugs on it, you still need to record the plant as E.g. Cyprus Pine or Plant 2 (whatever you call it) as having zero bugs on it. This will tell you if any plants are unpopular with bugs.

*Which plant had the greatest number of bugs?*

*What types of bugs did you find?*

*Why do you think they were on particular plants?*



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