



The Perfect Leaf

1. Go to a place where native trees grow and find a perfect adult leaf. It must be totally free of blemishes or insect attack on the edge or the surface.

Can you find perfect adult leaves easily? _____

What kinds of blemishes are on the leaves? _____

2. Now find some introduced trees like Eucalypts and find a perfect leaf.

Is it easier to find perfect adult leaves on introduced trees? _____

Leaves on introduced trees like Eucalypts generally have less blemishes because local insects and animals do not like to eat them or nest in them. Providing insects and animals with habitat is very important for the health of the environment. Without insects, bigger animals such as birds and fish in the rivers have less food to eat. When large areas of natural vegetation are cleared, biodiversity severely decreases.

To prove the above experiment, you need to take a lot more samples.

3. As a class, randomly take one hundred mature leaves from a native tree and an introduced tree. Examine each leaf in detail and record the number of different types of blemishes on each leaf. Tally your results on a chart (like the one below). You could do this for a number of native trees and introduced trees and compare the results for different species.
4. Make a line graph of the results, using a different colour for the native and introduced trees. Place number of leaves (or percentage of total) along the vertical axis and number of blemishes along the horizontal axis.

What does the graph show? _____

From this study, which trees provide better habitat for local biodiversity? _____

You should find that native trees have more blemishes. If you found that introduced leaves have more blemishes, why do you think this might be? _____

| | 100 mature leaves | Perfect leaf | 1 type of blemish | 2 types of blemish | 3 types of blemish | 4 types of blemish |
|-----------------------|-------------------|--------------|-------------------|--------------------|--------------------|--------------------|
| Native tree NAME: | | | | | | |
| Introduced tree NAME: | | | | | | |

