

Leaves

Leaves are attached to the stems at the nodes. Leaves are usually flat and green so that they catch the light for photosynthesis. Leaves are usually spaced along the stems either singly in open spirals or in opposite pairs. Leaves take in carbon dioxide from the air for photosynthesis and release water vapour and oxygen back into the air after photosynthesis. The shape, size and arrangement of leaves is used in plant identification.

Most plants have hundreds or even thousands of leaves. Lost leaves are rapidly replaced by the plant, so destroying leaves is not an effective method of weed control.

Buds

If you want to kill a weed you must kill all of its buds, because it is only from buds that new shoot growth can occur.

Buds occur both at the ends of stems and in the angle just above and between each leaf and the internode above. This includes the cotyledons or seed leaves, the first small and temporary leaves that emerge from the seed whilst the plant is germinating. When the leaves die and fall off the buds remain alive but dormant, and generally do not grow out until the stem above them is cut off.