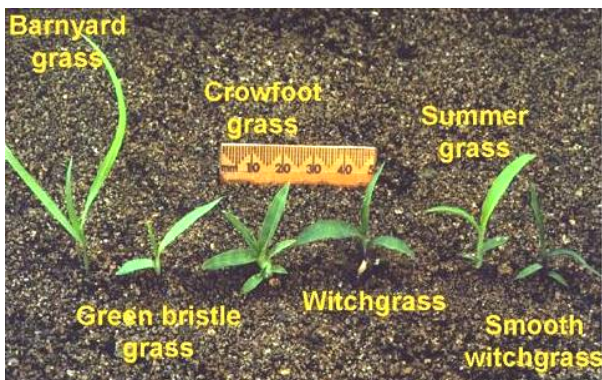


Correct Identification of Weeds

The first step to solving weed problems is correct identification. This is so better management practices may be used to eradicate or minimise the effects of particular weeds you have on your property, in your crop or where ever.

Some weeds are easily mistaken for others. The pictures below show some very similar looking weeds that are sometimes incorrectly identified.



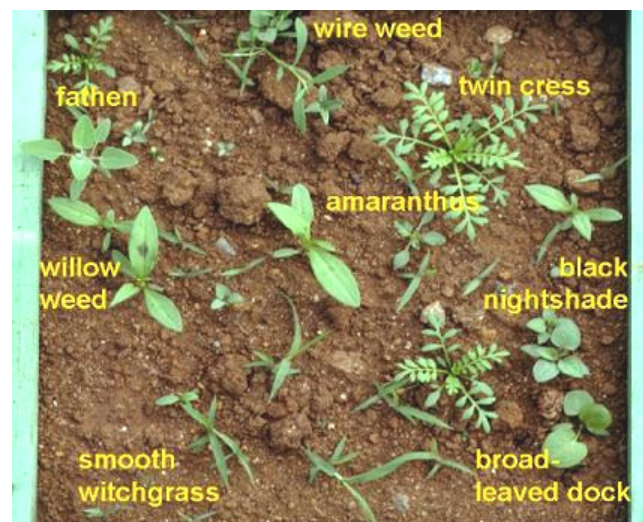
Identifying Characteristics

When identifying a weed several factors need to be considered. These are:

- Age of weed - seedling or mature plant?
- Type of leaves- spread, broad, thin, veins, hairs, shape?
- Where it is growing - is it a wet area throughout most parts of the year, a very dry area, sheltered area?
- Type of root system - does it have stolons (creeping roots) or a tap root?
- Is it a creeping or upright plant?
- Does it have flowers, nuts or berries?

- What is the main stem like?

These factors are easier to view with broadleaves compared to grasses, particularly at a seedling stage. Look for example at the twin cress compared to the wire weed in the picture below. Notice how each individual leaf is long, skinny and fairly oval - compared to the leaves of willow weed and fathen.



Helpful Resources

There are many books that have been published to help with the identification of weeds. We have found these useful.

"A guide to the identification of New Zealand common weeds in colour" compiled by E.A. Uprichard for the New Zealand Weed and Pest Control Society (Inc.).

This is a good book that is reasonably priced, has many pictures in colour and includes grasses which many do not. The pictures are small and where attention to detail is required it can be difficult to figure out whether the weed you are looking at is what you think it might be at all. A bonus is that it can fit almost anywhere as it is small and compact -

particularly handy when you need a quick reminder of a particular weed type. Also it has useful hints to help you identify what you may be looking at.

"An illustrated guide to common weeds of New Zealand" (2nd ed.) by Bruce Roy, Ian Popay, Paul Champion, Trevor James and Anis Rahman published by the New Zealand Plant Protection Society.

This book is even more useful as it has more detail about each individual weed and much bigger pictures. For each weed there is a physical description and clear pictures of particular plant parts for easier identification.

Computer Identification Program

Soon to be released is a computer software program currently being developed by the New Zealand Plant Protection Society to help with the identification of weeds. It is a weed identification key developed on "Lucid" software. It will allow you to start at a number of different places to identify your plant - leaves, flowers, site etc. At present this program separates more than 600 different weed species from one another and is still growing!

Identifying broadleaf weeds

Broadleaf weeds vary in many ways. These differences allow us to separate one genus and species from the next. It's a combination of these different characteristics that confirms our identification.

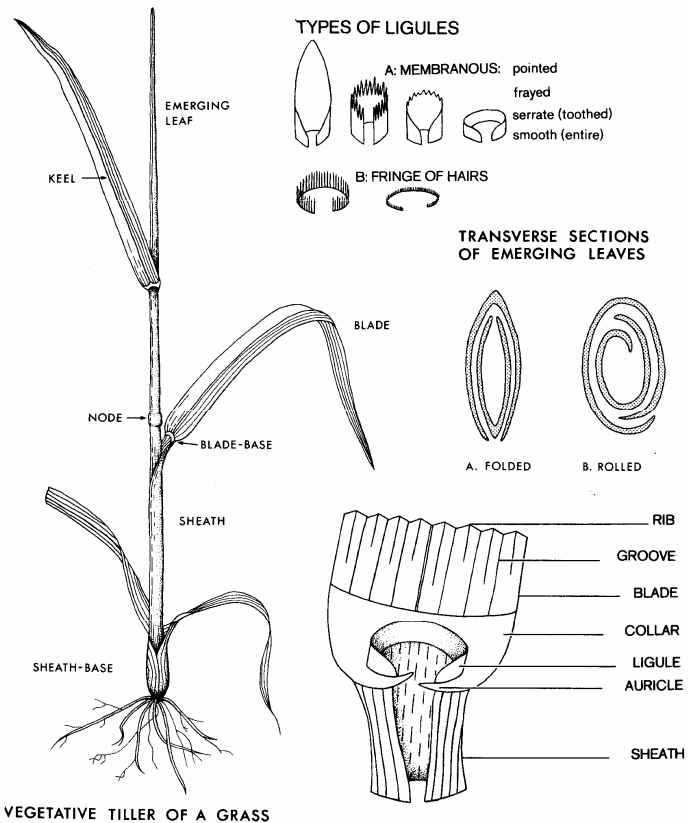
Leaf shape is one of the key factors in identifying plants. The East Coast weed identification chart shows 12 different leaf shapes. Like leaf shape there are also 11 different cotyledon (otherwise known as the first leaf) shapes with some plants having no obvious cotyledons at all. Obviously not all weeds are shown on the diagram, but it does help us sort out the ones that are most commonly seen in East Coast cropping fields. Once you can use this identification chart, you will find it much easier

to follow more complicated ones.

Identifying grasses

Grass seed has a life of up to two years in the soil. Unlike broadleaf weeds grasses have a limited variety of leaf shapes, which makes identifying them more difficult.

The diagram below illustrates some of the parts of a grass which are commonly used to identify it.



VEGETATIVE TILLER OF A GRASS
Lambrechtsen NC.1972. *What grass is that.* NZ DSIR Information Series 87,152

See also:

- "Grass identification key"
- "Broadleaf identification chart"

Both are provided by Trevor James (AgResearch) and are available on the website www.panui.org.nz.

'Te Pānui Tips' are simple fact sheets that cover topics designing organic crop production systems on the East Coast.

Te Pānui is edited and produced by Page Bloomer Associates for Crop & Food Research under FRST Funded Project C02X0305 Science for Community Change.

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