Soil Sampling

How Many Samples Do I Need to Take?

Aim to take at least five sub-samples (see What is a Sub-sample, below) from each area you want to sample (for example, each paddock, glasshouse or compost pile) and mix them into one combined sample. To sample areas:

- greater than 50 ha, such as broad-acre paddocks, aim to take at least one sub-sample per 10 ha
- less than 50 ha, such as vegetable plots and glasshouses, aim to take at least one sub-sample per hectare, with a minimum of five sub-samples

To sample compost, aim to take:

- at least one sub-sample per 10 m row length or 10 m^3, with a minimum of five sub-samples

Always Take a Control Sample

We recommend that you always take a control sample from the same untreated or 'normal' area every time you sample. Microbiology changes relatively rapidly in response to temperature, moisture, humidity, fertiliser applications, crops, and other factors. Microbiology also differs between soil types, pH, and other edaphic factors. This means that it is impossible to devise absolute ideal levels for your particular situation or to compare results over time without a relatively stable reference point – a control. Good places to locate control sample areas are next to fence lines (provided there are no chemical residues, e.g., from treated posts), inside fenced off areas, or in corners not subject to traffic.

Having a control sample means that next time you sample you have a reference result for comparison between controls, and can determine whether your other results have moved up or down in comparison. For example, hypothetically, if both your control and field sample were '10' before sowing and, your control was '20' and your field sample was '30' mid-way through the season, you could conclude that your field sample had increased more than the control, and therefore more than was due to the normal influences of temperature, moisture etc. affecting both sample areas. Conversely, if both your control and field sample were '20' mid-way through the season, you could conclude that the microbiology in your field sample had not increased more than was due to temperature, moisture etc. The ability to make such comparisons will assist you greatly when interpreting your results.

PO Box 230 Melrose Park DC SA 5039 Tel 08 7127 8982 Fax 08 8277 1548 Email info@microbelabs.com.au