



## What is the Soil Response<sup>®</sup> test ?

AgVita Analytical has a well-earned reputation for innovative, reliable and rapid accredited soil and plant analysis. We have pioneered the Mehlich-3 soil test in Australia (expressSoil<sup>®</sup>) and this method of rapid soil analysis has been used successfully in varied horticultural and broad-acre cropping for many years.

There are, however, a large number of growers and advisors who are more familiar with, and prefer the more 'traditional' types of analytical soil tests. This is due to valid reasons such as familiarity and experience with results over many seasons, specific trials data, regional calibrations, published benchmarks and so on.

AgVita has heard time and again of the frustration people feel as they wait several weeks for results of their soil tests to be reported. In response to this, we have much pleasure in announcing that AgVita can now offer the same soil test but with the AgVita turn-around times you expect.

**This is Soil Response<sup>®</sup>!**

## Which components make up the test?

Various combinations of Soil Response<sup>®</sup> analytes have been grouped to satisfy the most commonly used soil test for any crop types from all parts of Australia in any farming enterprise. Techniques of extraction are commonly used ASPAC accredited methods. These analytes include:

- pH (1:5 in H<sub>2</sub>O & CaCl<sub>2</sub>)
- EC (dS/m)
- N-NO<sub>3</sub>, N-NH<sub>4</sub> (in mg/kg)
- Chloride (in mg/kg)
- Organic Carbon (%)
- Olsen-P (in mg/kg)
- Colwell-P (in mg/kg)
- PBI (calculation)
- Colwell-K (in mg/kg)
- Macro's Ca, Mg, K, Na (in meq/100g)
- Micro's Cu, Fe, Zn, Mn (in mg/kg)
- Sulphur by MCP or KCl-40 (mg/kg)
- Boron (hot water, in mg/kg)
- Aluminium (by KCl in meq/100g)
- Total Nitrogen (%)
- Total Phosphorus (mg/kg)
- CEC (calculation)

Full details of additional analytes and new tests will be listed on our website, along with the lab codes for the set combinations of tests AgVita offer. Please see [www.agvita.com.au](http://www.agvita.com.au) for more information.

## When and how is data reported?

Analytical results are reported by email to all recipients in a simple to read reporting template. This template reports your results against established benchmarks, and has sections for agronomists and consultants to add their interpretations & recommendations. Please contact AgVita if you would like us to send an example of this reporting format to you.

**Soil Response<sup>®</sup>** results will be reported within 6 working days of samples arriving at our Laboratory. ... every time, regardless of the time of year.

**We guarantee it!**





## Sampling information

### When to sample?

The soil nutrient status should be assessed prior to intended fertiliser applications. We recommend paddocks be tested at least once every 3 years, as soil nutrient status can change significantly over time.

- Pre-cropping to determine base fertilisers and applications at planting
- In-crop to assess nutrient availability
- As a basis for nutrient management plans and budgets.

### Sampling depth

The soil test should be representative of rootzone conditions. If the soil has not been worked (i.e. mixed) the sampling depth should represent the main rootzone depth (80-90% of roots). This applies especially to perennial horticulture and no-till or minimum tillage crops to avoid errors due to nutrient stratification. Consider collecting a shallow and deep sample if sub-rootzone nutrition is important. Different crops require sampling to different depths – if unsure, please contact AgVita for advice.

### Postage and packaging hints

Samples should be kept cold after collection. All soil samples must be double bagged prior to sending. This helps to maintain the samples integrity and ensures they pass Quarantine inspection. Do not overfill individual soil bags, as they may burst open during postage.

Send the samples via overnight express to:

**AgVita Analytical**

**PO Box 188, Devonport, TAS 7310**

**Ph: (03) 6420 9600**

**Fax: (03) 6427 0230**

**Email: [info@agvita.com.au](mailto:info@agvita.com.au)**

For more information and to obtain a sample label visit:

**[www.agvita.com.au](http://www.agvita.com.au)**

### Sampling procedure

1. Select a paddock or portion of a block with uniform soil conditions that represents a single management unit. Within that area, follow a W or S pattern or use a random transect when collecting samples.
2. Avoid irrigation and spray runs, headlands and compacted or other non-typical areas. They may have to be sampled separately if significant.
3. Remove the first 1-2cm of topsoil to eliminate any surface applied fertilizer.
4. Take 15-20 sub samples with an auger to a depth of 15cm, or to the main root zone depth. Record the depth on the Customer Request Form (sample label).
5. Empty the contents of each sub-sample into a clean bucket, mix and transfer into a plastic zip lock bag. If more than 500g have been collected, take a well-mixed 300-500g sub-sample from the bucket. Tests with fewer analytes require less soil to be sent.
6. Samples are to be double bagged prior to sending. Place inside two plastic ziplock bags.
7. Chill the sample immediately after sampling by placing it into an esky with a frozen ice pack or a fridge. The samples may be stored, provided they are kept chilled or are immediately air-dried.
8. Complete a Customer Request Form, giving complete details for each sample. See [www.agvita.com.au](http://www.agvita.com.au) to download labels or call us for complimentary hard bound books.

Member of ASPAC,  
Australasian Soil and  
Plant Analysis Council

