# OMNIBIO™ ANALYSIS PROTOCOL

The updated OmniBio™ Index report now includes additional soil measurements, and reports are available directly via the OAP system. An increased sample size is now required.

**Sample requirements**

- Sample container: Clean plastic bag
- Sample type: Soil/and roots
- Preferable sample quantity: Soil (composite sample), ±600g and Roots, ±100g (two handfuls)
- Soil samples less than 200ml and root samples less than 5g will not be analyzed.
- Transport samples in cooler boxes or other insulated containers, preferably among ice-packs while collecting.

**Sampling pattern: guidelines**

- Divide large fields into units of 1 hectare.
- Collect soil samples systematically at equally-spaced points according to a grid pattern that covers an entire field, the length of the intervals between sampling points will depend on the sampling precision required. Eg. 2 x 2 grid pattern by which samples are collected two paces apart along parallel rows also two paces apart will reflect the nematode distribution more precisely than a 10 x 10 pattern.
- Samples can also be collected at equally-spaced points along a line running diagonally across a field.
- Sample annual row crops along the rows in small plots and across the rows in larger plots, 10-30cm from the stem, in the root zone.
- Sample patches of poor plant growth along the borders of the patches.
- Sample tree crops in the drip line, on alternate sides of the trunks, and include feeder roots.
- To increase probability of detecting nematode infestations, roots of weeds and volunteer crop plants should be collected when bare soil is sampled.
- Take a minimum of 15 samples per Ha, in a similar pattern to soil nutrient testing for best comparison.
- Geo reference the sample positions to enable return to the same sampling locations to ensure accurate test comparison.

**Sampling depth: guidelines**

- Soil samples collected to a depth of 15-20cm are adequate for most crops.
- Sample to different depths around deep-rooted perennials eg. 15, 30 and 60-100cm.
- Sample shallow-rooted perennials to a depth of 8-12 cm.
- In regions with hot, dry summers, collect samples 30-45cm deep to allow for vertical migration of nematodes.

**Sampling time: guidelines**

- In agricultural soils, samples should be collected close to planting time, as the nematodes present at this time can generally be related to yield in annual crops.
- Samples can also be collected between mid-season and harvest as nematode numbers increase towards harvest.
- Samples can be collected in spring for tropical crops.

**Care of samples: guidelines**

- Handle bags containing samples very carefully and especially do not drop or expose to direct sunlight or other sources of heat.
- Place roots together with soil in the same bag and cover with soil.
- Do not moisten soil samples collected in dry soils.
- NB* Dry soils are expected to have low numbers of nematodes.

**Labeling of samples: guidelines**

- Attach sample number stickers (barcodes) to the outside of the bagged samples.
- Mark soil bag "OmniBio".
- The sample should be accompanied by an OmniBio Recording Form (available www.omnia.com.au), and a copy of the Recording Form should be faxed or emailed to Omnia as per instructions on Form. OR the sample can be logged directly into the OAP.
- Ideally collect samples early in the week (Monday or Tuesday) to reduce transit times to lab.
- Post samples to APAL, PO Box 155, Welland SA 5007
    - Courier Address: Unit 3, 11 Ridley St, Hindmarsh SA 5007
- Samples are then prepared for transit to the Chemtech Laboratories in South Africa.
- Expected total turnaround time for samples is 3-4 weeks.

**Timing of Sampling**

- 10 or more samples can be sent in at any time
- If less than 10 samples, then please take the samples in the weeks beginning:

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|---|---|
| Nov 11, 2019 | May 25, 2020 |
| Dec 9, 2019 | June 22, 2020 |
| Jan 6, 2020 | July 20, 2020 |
| Feb 3, 2020 | Aug 17, 2020 |
| Mar 2, 2020 | Sep 14, 2020 |
| Mar 30, 2020 | Oct 12, 2020 |
| Apr 27, 2020 | Nov 9, 2020 |
| | Dec 7, 2020 |

**ANY QUESTIONS, PLEASE CONTACT YOUR LOCAL AGRONOMIST OR OMNIA HEAD OFFICE 03 5133 9118**