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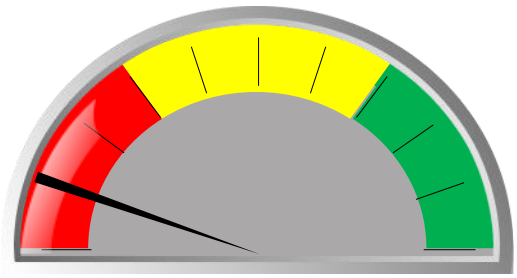
NWISE

Name: **John Sample** Sample: **Sample** Analysis no.: **0-0** Date: **1/01/2000**

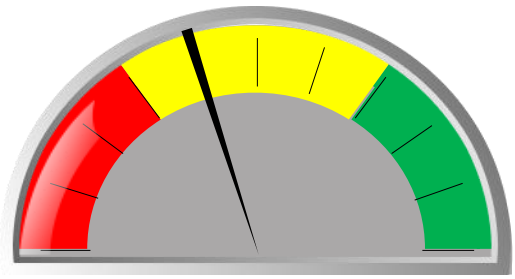
Customer name	John Sample	**Date received**	1/01/2000
Client name	J Sample	**Agent**	1/01/2000
Sample name	Sample	**Advisor**	John Sample & Sons
Crop	Sample	**Authorised by**	Dr Ash Martin
Date sampled	8	**Analysis no.**	0-0

Soil Nitrogen (N) Indicators

N Fixation



$NH_4 \rightarrow NO_3$ Conversion Rate



Soil Nitrogen (N) Data

		Yours	
Ammonium (NH_4^+) N	**(mg/kg)**	**10.0**	
Nitrate (NO_3^-) N	**(mg/kg)**	**15.0**	
Labile N	**(mg/kg)**		
Easily Available N	**(mg/kg)**	**25.0**	
	(kg/ha)*	**30.0**	
Total N	**(%)**	**2.5**	
	(kg/ha)*	**30,000**	

		Yours	Guide
N fixation @ 28°C & 30% MC see reckoner p2 for other values	**(mg/kg/month)**	**21.4**	50.0
	(kg/ha/month)*	**25.7**	60.0
N Release on Rewetting	**(mg/kg)**	**64.2**	35.4
	(kg/ha)*	**77.0**	42.5
NH_4 to NO_3 conversion (%/wk)		**40.0**	30.0

Key

Poor **Fair** **Good**

* Assumes a sampling depth of 10 cm and a bulk density (BD) of 1.2 kg/L. For other depths and densities use mg/kg × (depth (cm) ÷ 10) · BD (kg/L).

Calculation Table to Help Optimise N Fertilisation

Variable		Formula	Result
Average soil temperature (°C)	*a*		
Average soil moisture content (%)	*b*		
N fixed/°C/%MC (mg/kg/month)	*c*		0.026
N fixed (kg/ha)* [10 cm depth & 1.2 BD]	*d*	*a* × *b* × *c* × 1.2 × *n*	
Easily Available N (kg/ha)	*e*		30.0
Crop N requirement (kg/ha)	*f*		
N requirement from fertiliser (kg/ha)	*g*	*f* − *e* − *d*	

Instructions

1. Write the average soil temperature and moisture content over the growth period of your crop next to cells *a* nd *b* . **2.** Write the result of the formula *d* , where *n* = the growth period in months. **3.** Write the crop N requirement next to cell *f* . **4.** Subtract the values for rows *d* and *e* from *f* . This is the amount of fertiliser N required for the crop.

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N WISE

Name: **John Sample** Sample: **Sample** Analysis no.: **0-0** Date: **1/01/2000**

Ready Reckoner

N fixation at different soil temperatures and moisture contents (mg/kg/month)

Soil Temperature (°C)	Soil Moisture (% w/w)							
	<5	5	10	15	20	25	30	>30
<10	limited	<1.3	<2.6	<3.8	<5.1	<6.4	<7.7	<7.7
10	limited	1.3	2.6	3.8	5.1	6.4	7.7	<7.7
15	limited	1.9	3.8	5.7	7.7	9.6	11.5	<11.5
20	limited	2.6	5.1	7.7	10.2	12.8	15.3	<15.3
25	limited	3.2	6.4	9.6	12.8	15.9	19.1	<19.1
28	limited	3.6	7.1	10.7	14.3	17.9	21.4	<21.4
30	limited	3.8	7.7	11.5	15.3	19.1	23.0	<23.0
35	limited	4.5	8.9	13.4	17.9	22.3	26.8	<26.8
>35	limited	<4.5	<8.9	<13.4	<17.9	<22.3	<26.8	<26.8

*To convert mg/kg/month to kg/ha/month use: mg/kg/month × (sampling depth (cm) ÷ 10) × soil bulk density (kg/L)

Comments **(Detailed Custom Report available - see Order Form)**

N fixation rate was [insert key level]. Ammonia to nitrate conversion rate was [insert key level]. These results suggest that nitrogen fixation and cycling process are working very well in this soil. Management actions should aim to build soil N fixation by microbial action and the Ammonia to nitrate conversion rate further to help minimise N fertiliser requirements and increase gross returns per hectare. N fertiliser applications should be optimised (see Calculation Table).

Explanations

N Wise is a unique, advanced analysis that helps you manage N fertilisation better to help save you money and improve soil health. It takes into account **Labile N** (N that is readily available from the organic and microbial N pools), and N fixation by soil microbes over time and under a simulated crop. This gives users the ability to optimise N fertility management to minimise inputs, maximise outputs and increase gross returns, while improving soil health by avoiding over-fertilisation. **N fixation** is the amount of N fixed from atmospheric N, predominantly by microbial action. **NH_4 to NO_3 conversion** is the percentage of ammonium N (NH_4) converted to nitrate N (NO_3) by microbial action after one week. Use the **Calculation Table** to optimise the N fertilisation required for your crop. Use records or best estimations of soil temperatures and moisture contents and enter them into the Calculation Table, along with the crop N requirement (average if no specific data available). The **Ready Reckoner** helps you to calculate N fixation for a given set of soil temperature and moisture conditions. The **Calculation Table** and **Ready Reckoner** make the assumption that N fixation, soil temperature and soil moisture content are correlated linearly.

Microbiology Tests
How to Take and Send Samples

☑ Summary Checklist

Detailed information on each of the steps below can be found further on in this document.

- ☐ 1. Plan how many samples you need to take (see Sampling, below).
- ☐ 2. Order a Sampling Kit (available from Microbiology Laboratories Australia or agents).
- ☐ 3. When sampling, the idea is to keep the samples as cold as possible after sampling. Take an esky containing some ice bricks with you when you sample (see How to Prepare Samples, below).
- ☐ 4. For soil, compost and other solid materials, fill the supplied sampling jars level to the top, tapping gently to settle the material into the container. For liquids, half fill jars only. Do not pack materials into the container, or try to over- or under- fill the containers (see How to Prepare Samples, below).
- ☐ 5. For roots, collect sub-samples in the field into the disposable sampling bags before washing later. Only 10 mL of roots are needed for the final sample sent into the lab so it is not necessary to collect large quantities. (See How to Prepare Samples, below.)
- ☐ 6. Wash as much soil as possible of root samples in the disposable root sampling bags before placing a 10 mL sample of roots into the supplied vials, and refrigerate (do not freeze) root samples before sending to the lab. (See How to Prepare Samples, below.)
- ☐ 6. After sampling, freeze all solid and liquid samples (not roots) at -18°C for at least 24 hours before sending to the lab. The freezer compartment of a domestic refrigerator should achieve this.
- ☐ 7. Freeze the supplied ice brick(s) along with your sample(s).
- ☐ 9. Place sample containers into the supplied insulated bag along with the supplied ice brick (see Posting Your Samples, below).
- ☐ 10. Complete an Order Form (supplied or downloadable from www.microbelabs.com.au).
- ☐ 11. Place the insulated bag and the completed forms into the supplied Express Post envelope. **Sign the declaration on the front** and complete your contact details on the back.
- ☐ 12. Post the Express Post envelope in the yellow Express Post boxes, or lodge over the counter at a post office (see Posting Your Samples, below). Avoid Star Track and Toll courier services as these often try to deliver outside hours, which results in at least one day delay. **Post no later than Wednesday** to avoid weekend delays.

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Overview

Taking samples for Microbe Labs microbiology tests is much the same as taking samples for nutrient and other types of tests in that the aim is to obtain representative samples that, once analysed, tell you what you want to know. You should also decide whether you want to test broadly across a wide area (general sampling) or investigate specific areas, such as soil types, 'problem zones', areas with different fertiliser, crop rotation or soil biology treatments (specific sampling). The information below will help you to follow a sampling pattern and to decide whether you want to undertake general or specific testing. Information on what and how much you need to sample is also provided, along with a general description of each test, what it is used for, and examples of why you may want to use it.

One difference between soil and microbiology samples is that in most cases **microbiology samples need to be kept cold or in most cases frozen (not roots)** as soon as possible after sampling (see How to Prepare Samples, below).

Labelling

Work out in advance how you are going to identify your samples (for example, by paddock name, soil type, variety, etc.) and stick to it. Remember to label every container with your name and sample identification. This is the only way you will know which results belong to which sample.

When is the Best Time to Sample?

Use **Table 1**, below, to work out the best time to sample. You can sample at any time, depending on what 'question' you are asking. Otherwise, the best times to sample for each type of test are shown in **Table 1**. Try to avoid weather extremes (for example, very hot, cold or wet). Try to sample on a Monday so that the samples will arrive at the laboratory the same week. If you intend to sample periodically over time try to sample at regular intervals (e.g., the same time each year) and for samples that are best taken during the growth of crops try to sample at the same growth stage each time.

How Much Material Do You Need?

Use **Table 2**, below, to work out how much material you need to sample.

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Table 1 – The best time to take samples for different Microbe Labs microbiology tests.

Test	Best time to sample
Microbe Activity Wise	At any time.
Activity Wise Plus CropSaver N Burst & P Burst N Wise & P Wise VAM Forecasta Pre-Plant VAM Wise for Soil	Before planting. Allow enough time to receive the results and use them to make management decisions.
VAM Forecasta 3 week	Three (3) weeks after plant emergence.
VAM Wise for Plants	When plants have been actively growing for between 4-12 weeks. Record the number of weeks on the order form.
Microbe Wise	When the crop is at its maximum growth/activity rate. For example, for cereals, early boot stage. **Important: Sample from the root zone.**
All other agriculture tests	
Residue Wise	Post-harvest. Allow enough time to receive the results and use them to make management decisions.
Compost, fertilisers and liquids	When it best suits the information you need
All other tests	When it best suits the information you need

Table 2 – Quantities of sample materials needed for Microbe Labs microbiology tests.

Sample material	What	How much
Soil	N Wise, P Wise & Residue Wise	2 × 70 mL sample jars (freeze)
	Nem Wise	500 g bag (freeze)
	All other tests	1 × 70 mL sample jar (freeze)
Compost	Microbe Wise	1 × 70 mL sample jar (freeze)
	Maturity Wise	2 × 70 mL sample jars (freeze)
Liquids	All	≈ 50 mL in 1 × 70 mL sample jar (freeze)
Roots	All	Half of 1 × 25 ml root vial (do not freeze)
Other materials	All	Please contact us to discuss

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How to Prepare Samples

Sampling Kits

We strongly recommend the use of Microbiology Laboratories Australia Sampling Kits. The sampling kits contain everything necessary to take and send up to five complete samples, including:

- 70 mL soil, compost and liquid sample jars (5)
- 25 mL root sample vials (5)
- Field root sample bags (5)
- Gloves (5)
- Order form (1)
- Express Post back to the lab (3 kg) (1)
- Quarantine Certificate (1)
- Ice brick (1)
- Insulated bag (1)
- Insulated bag liner (1)

Note: extra sampling jars & vials can be ordered for kits (up to 10 will fit in each kit).

By using the sampling kit and following the instructions you will take the samples correctly and they will arrive at the lab in the best possible condition. This will ensure that you get the most accurate results. It will also help to ensure that you are compliant with interstate quarantine regulations. Samples received in containers other than those in the sampling kit will incur an additional fee to cover extra preparation time.

Quarantine

Quarantine is a serious matter and all clients must abide by the relevant State quarantine regulations. A Quarantine Certificate is included in the Microbe Labs Sampling Kits, which allows you to send sample materials to the lab in accordance with the quarantine regulations. Microbe Labs Test Agents outside of South Australia know how to export soil and plant matter from their State to Microbe Labs. If you are unsure of the regulations that apply to you or find it difficult to comply with them, please contact a Microbe Labs Microbiology Test Agent that services your area who can assist you to send your samples. A list of Microbe Labs Microbiology Test Agents can be found on the Microbe Labs website www.microbelabs.com.au. Alternatively, please contact Microbe Labs directly: info@microbelabs.com.au or 08 7127 8982. It is the responsibility of the sender of soil and plant matter to ensure that quarantine regulations are followed.

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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.

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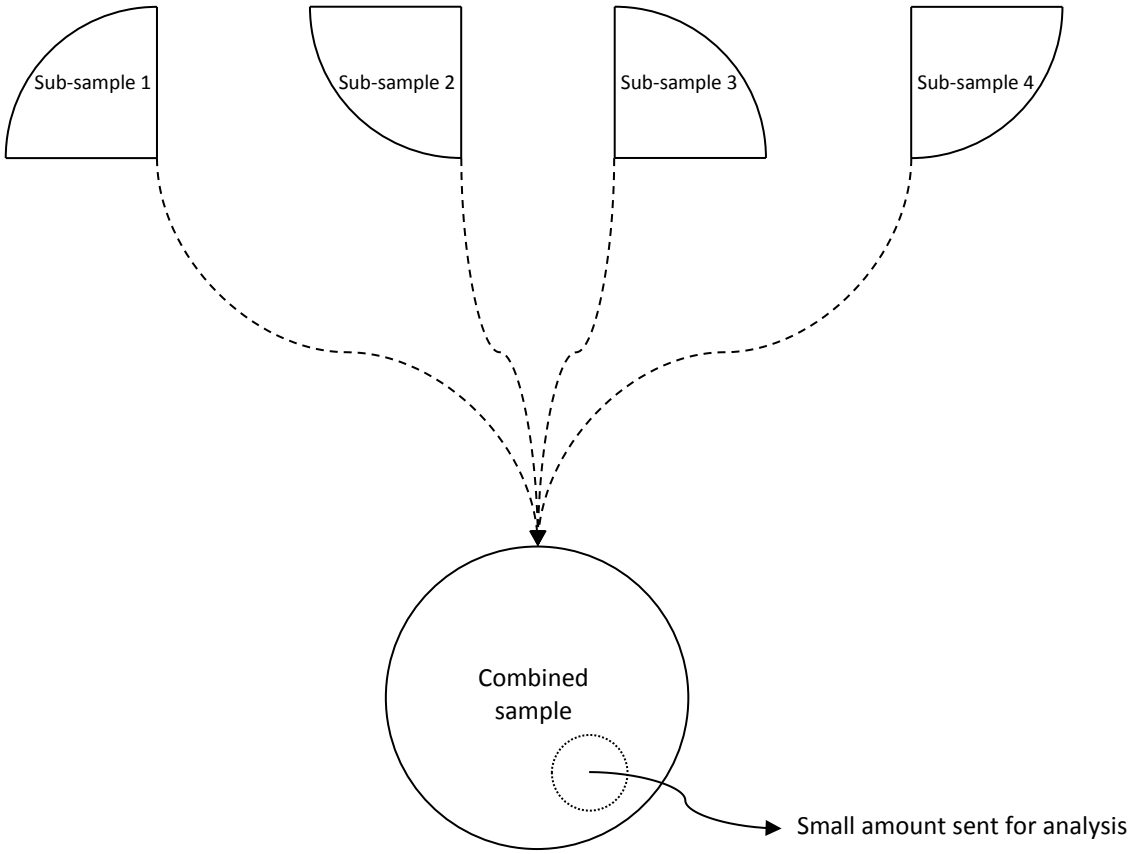
What is a Sub-Sample?

A sub-sample is one part of a combined sample. A number of sub-samples are taken and mixed together to make a combined sample. A small amount of the combined sample is then sent for analysis (**Figure 1**).

Figure 1 – Diagram showing how a number of sub-samples make up a combined sample. A small amount of the combined sample is then sent for analysis.



What Sampling Pattern Should I use?

Try to take sub-samples in either a random, zigzag or systematic diagonal pattern across the sample area (Figure 2). Avoid taking sub-samples in concentrated clusters and along bed lines.

What Type of Sampling Do I Want to Do - General or Specific?

General sampling

When you want to test across a wide area, such as an entire field, glasshouse or batch of compost, try to take sub-samples from different areas, such as different soil types (**Figure 3**). Try to distribute the number of sub-samples from each different area according to the proportion that each different area makes up of the total area. For

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example, if 20 % of your 100 ha paddock is black soil and 80% red soil, aim to take two sub-samples from the black soil and eight sub-samples from the red soil.

Figure 2 – Examples of sub-sampling patterns that will help to produce a representative sample: random (a), zigzag (b) and systematic diagonal (c). Crossed circles represent sub-sample locations. Black dashed lines represent a suggested pattern of travel while sampling. Grey dashed lines represent crop rows.

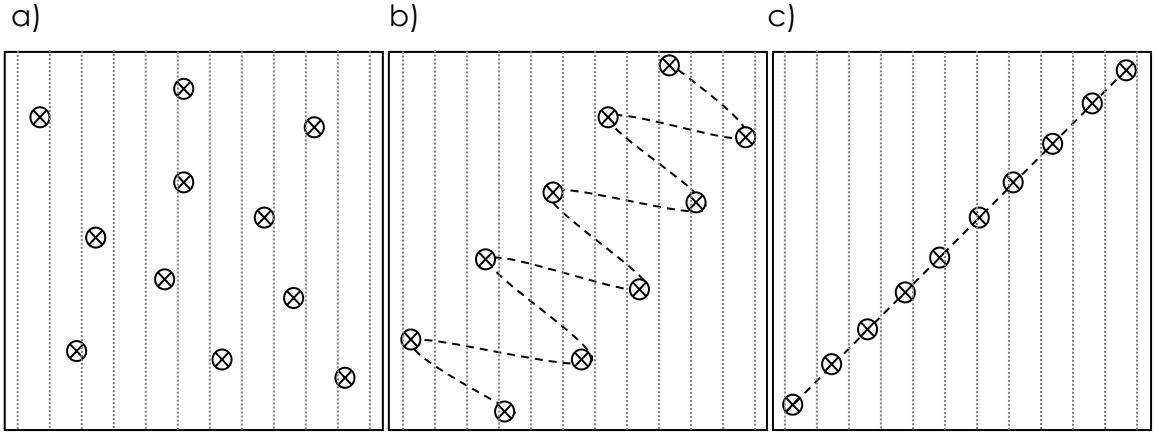
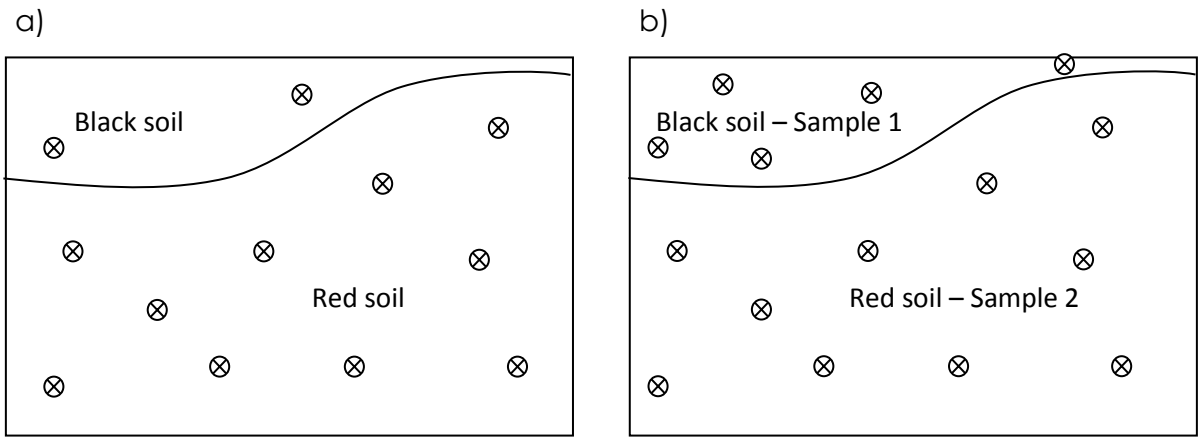


Figure 3 – Examples of a sub-sampling distributions for general (a) and specific (b) sampling. a) General sampling: Two sub-samples are taken in the black soil area (20% of total area) and eight sub-samples in the red soil area (80% of total area) to make *one* combined sample. b) Specific sampling: Five sub-samples are taken in the black soil area to make *one* combined sample and eight sub-samples are taken in the red soil area to make *another* combined sample, resulting in *two*, separate combined samples. Crossed circles represent sub-sample locations.



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Specific Sampling

When you want to test specific areas, such as problem zones, areas with different fertiliser, crop rotation or soil biology treatments, or different soil types, identify these specific areas and test them separately (**Figure 3**). This can help you to answer specific questions, such as:

- Is a problem zone caused by poor soil biology?
- Have different fertiliser applications improved soil biology?
- Do I need different strategies to improve soil biology on different soil types?

For example, if 20 % of your 100 ha paddock is black soil and 80% red soil; take five sub-samples from black soil areas, and, separately, eight sub-samples from the red soil areas. Mix the black soil sub-samples together into one combined sample, and the mix the red soil sub-samples into another combined sample.

Taking the soil sample

If you are testing the soil in a crop it is crucial that you sample soil from the root zone.

For field crops the best location is within a few centimetres of where the main stem enters the soil. For vine and tree crops it will generally be underneath the canopy or around the canopy drip line (you may need to test with a spade). Be consistent across sub-samples and over time. You should see some roots in your soil sample, if not you are probably not sampling in the root zone and need to try another spot.

Use a soil auger, spade or trowel to scrape off the top few cm of soil and dig a 15 cm (6 inch) deep hole. If using a soil auger the captured soil is your sub-sample. If using a shovel or trowel take a sub-sample from one face of the hole, from top to bottom. Place the sub-sample in a clean container large enough to hold all the sub-samples for the combined sample. Repeat at each sub-sample location until you have taken enough sub-samples. Mix the combined sub-samples thoroughly (for about 2 minutes).

Completely fill a supplied 70 mL soil sample jar with the mixed soil, tapping gently to settle the soil into the jar. The soil volume should be level with the top of the jar before applying the cap. Do not over- or under- fill the jar. Do not pack soil into the jars.

Always wear clean gloves (such as those provided in the sampling kit) when taking or mixing soil samples to avoid sample contamination. Your test may not be accurate if you do not wear gloves.

Once you have entirely completed your sampling freeze all soil samples at -18°C with the ice brick for at least 24 hours before sending to the lab. The freezer compartment of a properly functioning domestic refrigerator should achieve this. Ensure the samples are separated from food and out of the reach of children.

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Plant Roots Sampling

Depending on plant type, plant roots can be sampled in two ways:

1. Annual plants - remove each sub-sample plant from the ground and shake as much soil as possible from the root system. Remove several pinches of roots from random locations within the root system. This can be done by hand or using a cutting implement. Place the sub-samples in the root sample bag.
2. Annual and Perennial plants, and trees (can also be used for crops) – a soil sample containing roots can be collected from the root zone of the plants by digging down to a depth of 20 cm using, e.g., a trowel or spade, or by using a soil corer. Pick pinches of root sub-samples from the soil and place them in the root sample bag.

Use whichever method you find most convenient. Remember that only about 10 mL of roots are needed for the final sample sent to the lab so it is not necessary to collect large quantities of roots.

Once you have entirely completed your sampling, remove the root sub-samples from the root sample bag and wash off as much of the remaining soil as possible. Mix the sub-samples well. Take a 10 mL sample of the mixed roots and place it in a supplied plant root vial containing 10 mL 24% ethanol. Apply the cap firmly (do not over-tighten) and test that it is properly sealed by shaking vigorously for a few seconds.

Place the filled vials in hot (54° – a properly functioning domestic hot water service should deliver water at this temperature) water for 5 mins, then refrigerate them away from food and children until you send them to the lab. Do not freeze plant root samples.

Compost Sampling

Compost is best sampled using the procedure described in the Australian Standard 4454-2012 for compost, mulches and soil conditioners. If you are unfamiliar with this procedure please contact us at Microbe Labs to receive a free copy of our user-friendly guide for the AS 4454-2012 sampling procedure.

Water and Liquids Sampling

Taking liquid samples for Microbe Labs microbiology tests is much the same as taking samples for other water and liquids tests in that the aim is to obtain representative samples that, once analysed, tell you what you want to know.

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Approximately half fill a supplied 70 mL sample jar with the liquid (to allow room for liquid expansion during freezing). Do not over-fill the jar. Always wear clean gloves (such as those provided in the sampling kit) when taking or mixing liquid samples to avoid sample contamination. Your test may not be accurate if you do not wear gloves.

Once you have entirely completed your sampling freeze all liquid samples at -18°C with the ice brick for at least 24 hours before sending to the lab. The freezer compartment of a properly functioning domestic refrigerator should achieve this. Ensure the samples are separated from food and out of the reach of children.

Posting Your Samples

Complete the order form included in the test kit. Place the samples into the bag liner inside the insulated bag. Seal the bag liner and insulated bag. Place the order form in the front pocket of the insulated bag. For non-account holders remember to also enclose your cheque or money order made payable to Microbiology Laboratories Australia. Place the bag in the Express Post satchel provided. Complete the sender's contact details on satchel. Remember to sign the 'No Dangerous Goods' declaration on the front of the satchel before posting or your samples may not arrive. Seal the satchel and post it in the special 'Gold' (yellow) Express Post boxes. If Express Post is not available in your area lodge the satchel in person over the counter at the Post Office to ensure that it arrives as soon as possible. Post the samples early in the week to help ensure they arrive at the laboratory the same week.

Remember

If you get stuck, help is only a phone call away. Call your local Agent (the person who supplied you with these sampling instructions) or contact Microbiology Laboratories Australia using the contact details below. Contact details for Agents and Microbe Labs can also be found on our website www.microbelabs.com.au.

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microbiology laboratories australia
agriculture • forestry • environmental
ABN 66 145 073 481

Microbiology Tests Order Form

Nov 2015

Send samples to
Microbiology Laboratories Australia
PO Box 230 MELROSE PARK DC SA 5039
- *Check sampling instructions before sending*
- We recommend Express Post
- Avoid Star Track and Toll where possible

1 Complete the fields below in order (1, 2 & 3) and return form with samples. Use multiple pages if necessary and record the page no.→ ____ of ____

Name:	
Address:	
	State: **P'code*:**
Telephone:	
Fax:	
Mobile:	
Email:	
Agent:	

3 **Amount Payable** (If using multiple pages, complete once for all tests on 1st page only)

Test/Item Code (from below & over)	**No.**	**Price ea.** (see reverse)	**Total Price** (No. × Price ea.)	**Lab use**

Sub total (incl. GST):	
If over $2,000, 5% discount*:	
Total (incl. GST):	

*Retail sales only

* Important for quarantine purposes

Convenient payment options available on invoice

• Mimimum tests total order $150 (incl. GST) •

2 Complete the table below for each sample.

Sample no.	Client/Treatment	Sample /Replicate	Test Code (see reverse)	Sample Date	Crop or Type	Weeks After Emergence	Comments	Lab use

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ABN 66 145 073 481

Microbiology Tests Order Form

Nov 2015

Send samples to
Microbiology Laboratories Australia
PO Box 230 MELROSE PARK DC SA 5039
• *Check sampling instructions before sending*

* All prices include GST *

Soil Saver Bundles

Value Packs	Code	Includes tests	Save!	Price
Soil Master	**SOIM**	MWSE + MAWS + VWSS + VWSA/P + GWSE + NWSE + PWSE + RWSE + CSVR	**106**	1444
Soil Accountant	**SOIA**	MWSE + MAWS + VWSS + VWSA/P + GWSE + NWSE + PWSE	**75**	1097
Soil Economist	**SOIE**	MWSE + NWSE + PWSE	**40**	676
Soil Saver	**SOIS**	MWSE + MAWS	**20**	297

Compost Saver Bundles

Value Packs	Code	Includes tests	Save!	Price
Compost Master	**COMM**	MWSC + MAWC + HWSE + AS4454-2012	**70**	1176
Compost Suite	**COMS**	MWSC + MAWC + AS4454-2012	**60**	1037
Compost Basic	**COMB**	MWSC + AS4454-2012	**50**	948

*** All Soil & Compost Saver Bundles include a FREE 'Fill n Go' Sampling Kit valued at over $60! ***

Individual Tests

Test	Code	For	Price
Soil			
Microbe Wise (large suite of fungi, bacteria, etc.)	**MWSE**	Soil	229
Microbe Activity Wise	**MAWS**	Soil	59
Soil hybrid microbe-nutrient tests			
Microbe Activity Wise *Plus*	**MAWP**	Soil	79
N Wise	**NWSE**	Soil	229
P Wise	**PWSE**	Soil	229
Residue Wise (Carbon)	**RWSE**	Soil	149
Humus Wise (Humic & Fulvic Acids)	**HWSE**	Soil & Compost	149
Soil mycorrhizal tests (including VAM)			
VAM Wise (Roots) - for VAM host plants	**VWSA**	Annuals	59
	VWSP	Perennials	99
VAM Wise (Soil)	**VWSS**	Soil	149
VAM Wise Forecasta - Pre-plant (Soil)	**VWFP**	Cotton	169
VAM Wise Forecasta - 3 week (Roots)	**VWF3**	Cotton	99
Glomalin Wise	**GWSE**	Soil	149
Soilborne disease			
CropSaver (Phytophthora, Pythium & Rhizoctonia)	**CSVR**	Soil	229
Other soil biology tests			
Worm Wise	**WWSE**	Soil	129
Nem Wise	**NEMW**	Soil	229

Test	Code	For	Price
Compost and other materials (fertilisers, waters, etc.)			
Microbe Wise for Compost	**MWSC**	Compost or other	229
Maturity Wise for Compost	**MAWC**	Compost or other	99
Humus Wise (Humic & Fulvic Acids)	**HWSE**	Compost or other	149
AS4454-2012 - Full test, **no hidden costs**	**AS44**	Compost	769
Other tests			
E. coli, Coliforms & Salmonella	**ECCS**	All samples	99
Algae	**ALGA**	All samples	249
Microbe ID Wise (you specify in comments)	**IDWS**	Soil	299
Sulphur reducing bacteria ('rust' on bores, pipes)	**SRBA**	Water/residue	249
Vegetable oil & quality (Omega 3 & 6, etc.)	**VOQL**	Fruits, nuts and oils	229
Nutrient analysis	**NANS**	Soil	129
	NANC	Compost, waters, etc.	249
Custom tests designed for your needs	**CUST**	Special purposes	POA
Sampling kits			
Saver Bundle kits - **FREE** with bundle*	**SKT 2 & 3**	Soil & Compost	FREE*
Soil & Compost (non-bundle, non-AS4454 tests)	**SKT1**	Soil & Compost	29*
*Kits invoiced at $60 soil & $75 compost if not returned with samples within one month			
Postage and handling for Sampling Kits	**PS&H**	Kits & components	20
Extra charges for sample preparation, outside specifications and Priority Service			
Sample prep. (eg, washing, incomplete form, split sample)	**SPRP**	Per sample/form	25