

WORKSHOP AIMS:

- To recognise the critters that are found in teas. You will see different kinds of bacteria, fungi, protozoa, and nematodes. Whilst it is difficult to ID the species or genus level, it is possible to get an idea of how much the KINDS of bacteria or fungi or protozoa, etc. are changing in your tea. You can monitor your tea brew hourly if you want to see the changes in critters as the tea matures.
- You will do a compost prep as well, so you can see why these microscopes don't work really well with compost and soil.
- To provide information on shadowing techniques using inexpensive compound microscopes. This is critical. The microscopes used at the SFI Laboratory use DIC, which is a shadowing technique, and allows you to clearly see things that have the same refractive index as water. You will learn how to mimic this.
- You will learn to see WHEN your tea is "ready" to use. We will help you learn the cues you need to develop for your own system, to know whether the tea is growing enough of the right organisms at the right time.
- You will go through the qualitative assay for determining good tea with adequate or even outstanding organisms biomass, or determining "bad" tea that lacks the proper set, or kinds, of organisms.
- To investigate strategies for "fixing" bad tea. Sometimes it should be thrown on some weeds, sometimes you can add more compost, or more foods, and bring the tea up to par. We will go over how you know those situations.

WHO SHOULD ATTEND?

- People wanting to gain a greater insight and instruction on what is seen through their microscope and how to use this information to immediate effect.
- People who need to monitor and manage their micro-life whilst building soils and growing systems into biologically active complexes.

MICROSCOPES: Microscopes can be ordered from AgriSolutions before the course so they can be supplied on or before the day. It is preferred that participants use their own microscopes in order to gain individual training on their equipment, but this is not essential. If however you already have a microscope, please notify this office with the specifications so that its suitability can be ascertained for this course and future use in the field. Please contact Agrisolutions on 03 5627 8663 for more details. Microscopes are not held in stock and need to be ordered, so please place orders promptly to avoid disappointment. *Please note that a small number of microscopes are available for use during the course in the event you were without one, and a range will be available for trial if you want to 'try before you buy'.*

MICROSCOPE SPECIFICATIONS

It is important that the microscope you use can "do the job" adequately to provide you with accurate readings. Minimum specifications for microscopes deemed suitable by the SFI team are as follows:

- 4x, 10x and 40x objective lenses
- 10x wide field eye pieces
- Binocular microscopes are easier to see through but more expensive than a monocular scope. *If you intend using your microscope frequently a binocular is strongly recommended.*
- Excellent resolution—cheap microscopes generally provide cheap resolution and limit the number of organisms that can be viewed. *High magnification does not always guarantee adequate ability to see very small organisms—it must be coupled with high resolution for clear and unhindered viewing.*

WHAT TO BRING?

These are items you will need outside the course so are worth purchasing and will be available on the day:

- Microscope slides and cover slips (18x18mm)
- Cotton Swabs for cleaning lenses
- Small labels
- Transfer Pipettes (approx 1 ml volume)
- Small, clean containers for sample collection
- A compost tea sample



Soil Foodweb International
*The Laboratory Measuring
the Life in Your Soil*

The Soil Foodweb International Laboratory in Lismore, NSW has been testing soil, compost and compost tea in Australia since 2001 and conducted well over 10,000 analyses servicing soil manager needs from all walks of life. Soil foods, biological inoculants and equipment are also tested to ensure they meet the microbiologically compatible conditions required to support and grow soil life.

For more details, contact:

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MICROSCOPES AVAILABLE

AgriSolutions has taken much time and effort to find the best range of equipment with the right specifications and price ranges to suit your applications. We stock a small number of outfits, cameras and consumables and source some items on order to custom fit your needs. Please contact our office to find out what we can do for you in making the best possible purchase. We have done the legwork and well know the business of getting the best equipment to match your requirements and budget. As a specialist distributor for Leica, we have access to world-leaders in optics and their training and support. Other brands can be sourced as are consumables kits specific to small microscope use.

FARM READY APPROVED
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