

## Why A Microscope Is An Essential Tool For Many Growers

Often the use of a microscope is overlooked. It is not considered an essential tool like a spade or fork. But nevertheless, for those making your own fertilisers and buying in organic composts, maybe it is time to consider their value.

These days with the cost or unavailability of conventional fertilisers, and with the growth in regenerative farming, the need to know and understand your soil is gaining necessary attention. Biological farming is an exciting 'new' approach based on the science of the soil.

I still vividly recall my very 1st exposure to these microorganisms was when one of our Vitec consultants, Larry Palmer showed us a Japanese film showing nutrients moving into the roots of plants, of the roots growing. It changed the whole way that I saw the soil; it was like an underground city constantly on the move.

Perhaps you are still to look down the lens of a microscope and to see these wonders in your own precious soil but I can assure you that you when you do you will be hooked and maybe, like many, will become obsessed about making sure that your soil functions optimally. For as we know, the soils are the basis to grow nutritionally dense food and when you get this right then many good results follow easily. Moisture retention, no run off, carbon storage, exchange of minerals, recycling of waste leading to strong, pest and disease resistant plants hence animals.

In many ways using a microscope is still in its infancy as a tool for assessing soil life but if you really want to dig deep into your soils, don't get your hands dirty but rather feast your eyes on your soils under a microscope. I promise you will never go backwards in your quest for knowing and building a rich, nutrient dense soil.

From the late 1990's through to 2020 Farming Secrets was forever visiting and filming innovative farmers who'd chosen not to use harmful chemical products. They had stopped using NPK fertilisers and instead had turned to using their own composts and compost teas as well as using many other natural products such as fish and seaweeds, rock dusts, biochar, fulfil and humid acids, microbes and a variety of mineral inputs. We noticed that many of these early adopters were also using a microscope to keep track of the quality of these inputs - both homemade and commercially made ones. It wasn't infrequent to for them to put a product under the microscope to find it was imbalanced, even toxic. This discovery alone saved costly mistakes out on the farm but overall the results were very positive with users save a heap of money and farming with far more confidence and increased production. The 'good' samples displayed a balanced array of microbes living and working in soils living in symbiosis with the plants leading to ongoingly better results and to building a healthy, functional soil.

## Soil Lovers say: Soil Is Biology And To Know Your Biology You Need A Microscope

Ref: It Is A Good Idea For Every Farmer To Have A Microscope – <u>https://farmingsecrets.s3.ap-northeast-1.amazonaws.com/PDF/BFA+-+Microscope.pdf</u>