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SOIL TESTS – Time for a rethink?

The term “soil test” means different things to different people. To some, it describes an inexpensive tool which determines how much phosphorus fertiliser is required and whether lime needs to be applied. At the other end of the spectrum are those who see a “soil test” as a valuable resource; an excellent way to monitor soil function. For the latter group, soil testing is an investment which gives them valuable data, which in turn gives them greater confidence to both optimise their soil, and to identify which fertiliser components are required and in what quantity. Between these two poles, there are also other people who fit at different places along the spectrum.

Before undertaking a soil test, it is helpful to ask yourself some basic questions – “Why do I want a soil test?” “What information do I want to obtain?” and “How will the information collected help me to improve production?”

Because everything produced from the land comes either directly or indirectly from the soil, it is vital to understand your soil resource. This involves much more than having a print out of the status of a handful of nutrients - although this is a good place to start – it also involves building an appreciation of the biological and physical status of the soil, because soil fertility is the result of the interaction of everything that is happening in the soil. Good nutrient status alone does not guarantee that a soil will perform well.

Climate aside, soil biology is perhaps the key driver of soil fertility and thus productivity. Yet most of the time, it is completely overlooked. How can production be improved if such an important component is neglected? Soil biology, and thus soil health, can be quantified through a variety of tests. But it is also possible to draw conclusions about soil health based on a visual examination of the soil, presuming of course that the examiner has the knowledge and expertise to understand what is being observed!

When a soil is functioning well, generally the plants growing in that soil will also do well, and if the plants are healthy and their needs are supplied, then animals grazing the plants will also do well.

Clearly then, if you want your operation to really “hum” along, get the data you really need, not just a handful of chemical parameters. Once you are resourced with this information, then you can begin to build on your soil foundation and make whatever management decisions become apparent to help you optimise productivity.