

# VSA Visual Soil Assessment

## VSA: A farmer 'Self-help' tool

VSA is a no-fuss, low cost and reliable way to assess soil quality. The information gained from using VSA allows farmers to understand the secrets of their soil. This will help farmers make management decisions that have long-term benefits for enterprise profitability and the health of the environment. When farmers are considering leasing or purchasing land, using VSA can help identify land that has better production potential or land that can complement the soil mix already being farmed.



Landcare Research

*Compare soil under different management practices.*

## How can you find out about VSA?

Workshops will be run at different locations in the Region. Contact your nearest **horizons.mw** office to find out when the next VSA workshop will be held near you.



Guy Vickers

*VSA - a simple procedure using simple tools. This photo shows the "drop-shatter" test.*

## What will happen at a VSA workshop?

Through hands on involvement farmers will learn how to use VSA. On completing the workshop, farmers will be able to carry out VSA assessments on their own property and use the information to make good management decisions.

## VSA is no-fuss and simple - how can you be sure it is reliable?

VSA is backed by internationally recognised science in soil chemistry, soil physics and soil biology. A lot of work has gone into packaging and presenting this scientific knowledge so that it is easy to understand and use with a minimum of training.

## Unlocking secrets of the soil

*"There is more to soil quality than fertility status."* Most farmers carry out regular soil tests and base their fertiliser programme on the results. But soil fertility or nutrient status is only one of many factors that affect soil productivity. Pugging, poor timing of cultivation and excessive cultivation act on (or degrade) the soil in two critical ways that can seriously affect farm production. They can:

- 1 Reduce soil organic matter. Soil organic matter is vital for storing nutrients and providing resistance to compaction and structural breakdown.

- 1 Degrade soil structure. This reduces soil aeration (the ability of the soil to breathe and drain effectively). Soil aeration has a strong influence over whether high producing crop and pasture species deliver to their potential.

Degraded soils translate into reduced profitability, with flow-on implications for individual farmers, the wider economy and for the environment.



Craig Ross, Landcare Research

Workshops provide opportunities for farmers and specialists to talk and learn.

## The management connection: how it works in practice

Farmers already know a lot about their soils, knowledge built up as they go about routine farming activities. For example, digging post holes, cultivating paddocks, and maintaining or installing drainage and water supply systems. With VSA farmers have a tool that can help them connect the effects of activities on or in the soil (like grazing or cultivation) with the impacts of those activities on the soil itself. VSA enables farmers to predict how changed soil characteristics or quality will influence future crop or pasture performance.



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Conventional cultivation.

## Want to go on a workshop?

Please call your nearest **horizons.mw** office to find out when and where VSA workshops are planned.

## Do you have other questions about VSA?

Please call your local **horizons.mw** soil conservator or contact Lou Bird at our Palmerston North office on 06-952 2800.



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