

Soil wealth project update, April 2015

The soil wealth project is now gaining momentum, and beginning to have an impact by communicating good soil management information to Australian vegetable growers.

The project aims to communicate the main principles of maintaining and improving soil health for a better economic outcome, ie:

- Build up soil organic matter and soil biology
- Cover the soil (mulches, cover crops)
- Less tillage (controlled traffic, reduced till, GPS guidance)
- Correct nutrition

The main activities over the six months to April 2015 have focused on:

1. Demonstration and reference sites
2. The Soil Wealth test
3. Fact sheets
4. Website and Facebook sites
5. Videos
6. Training

One important aim of the project is to demonstrate the economic benefit of changing practices to look after soil conditions.

Demonstration and reference sites

Project demonstration sites are underway in the following areas (site themes noted):

- Bowen (N Qld) – Compost
- Kalbar (SE Qld) – Compost, cover crops, controlled traffic, soil borne disease
- Cowra (NSW) – Reduced tillage, controlled traffic, biofumigation, compost
- East Gippsland (Vic) – Reduced tillage, controlled traffic
- Kooweerup (Vic) – Biofumigation / cover crops, soil borne disease control
- Virginia (SA – in progress) – Soil borne diseases, nutrient management
- Sorrell (Tas) – Nutrient management, subsurface

irrigation, cover crops

- Manjimup (WA) – Soil borne disease, biofumigation, nutrient management

The demonstration sites will be used to show soil improvements in a real-life, practical way and will be the focus of field days, training and other communication activities.

Reference sites focus on helping growers to try new approaches to soil management. The project team will provide support to growers and their advisers in defining their main goals for soil improvement and from that, their choice of new practices and some monitoring.

The project team will assess the current soil condition on a reference site block, and develop a soil improvement plan, which the grower then implements. The team will then assess the effectiveness of the improvements, usually with the help of regionally based commercial agronomists allied to the project.

If you would like to be a reference grower, please register your interest by completing the survey at: https://www.surveymonkey.com/s/soilwealth_ICP_Eoi

Being a reference grower means you agree to tell your soil management story or are happy with the team preparing a case study about progress made.

Soil Wealth check

The Soil Wealth check is based on the extensive soil health RD&E conducted in Australia and the Cornell University soil health test adapted to Australian

Root nodules on Morgan Field peas which are converting nitrogen from the air into a form plants can use



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conditions—with one essential addition—a measure of the financial viability of soil improvements.

The soil report itself will be a single page document, which uses a red/yellow/green traffic light approach to identifying which aspect of your soil health needs attention.

The economic assessment will be reported separately.

The categories and tests are:

Economic: Assessment of the economic benefits in the medium term

Chemical: Soil pH, EC, nutrient levels including total N, sodium and chloride

Physical: Texture and appearance, aggregate stability, structure/compaction

Biological: Organic matter, labile carbon, visual assessment

Fact sheets

We are summarising information into a series of fact sheets that are available to growers and advisers via the AUSVEG weekly updates. Fact sheets have so far been produced for:

- Reduced till vegetable production – WHY
- Winter cover crops
- Managing nitrogen
- Biofumigation

We will follow up with brief summaries about:

- Managing organic matter
- Managing crop residues from cover and cash crops
- A quick guide to interpreting soil test results
- Soil amendments
- Equipment for reduced tillage

Website and Facebook sites

A project website is being constructed jointly with the Integrated Crop Protection (ICP) extension project and will be live in April 2015. The website will be a repository for information materials produced, host information about training, field days and other upcoming events and will be used for general communication and blogs.

The web address is www.soilwealth.com.au

The Soil Wealth Facebook sites follow activities at these demonstration sites:

1. Cowra
2. Bathurst

3. Gippsland

Follow us on Twitter: @Soilwealth

Remember! You do not need to join Facebook to view these sites—just Google the names and they will come up.

Videos

The project has produced one video to date called *Reduced till vegetable production – WHY?* which is available on YouTube at:

<https://www.youtube.com/watch?v=RfbhOxnULyI>

A follow up video called *Reduced till vegetable production – HOW?* is being produced and will be available in May 2015.

We will also bring you videos on biofumigation from a seminar by the US farmers and pioneer of biofumigation Dale Gies. He explains how he uses these special cover crops to turn around his soils.

Training

One soil master class was held in Western Sydney in 2014 and a second one on *Soil borne disease management – now and in the future*, is being planned. It will be conducted on 4–5 August 2015.

A series of focused regional training activities are planned. For these we are working in with other programs and initiatives by local grower associations, departments, NRM bodies, agronomy providers and other extension services.

The project team has presented or will present at regional EnviroVeg workshops in Darwin, Gippsland, Virginia and Tasmania.

Working with others

We are cooperating with other organisations who are already doing great work in soil health management for vegetables. This may be NRM bodies, universities or grower associations and groups. Please contact us if you are interested.

We are keen to hear your success stories or challenges about changing soil management. Please contact us:

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or, catch up with us at our stand at the AUSVEG convention.