



Increase fertiliser efficiency with whole farm soil sampling

Why use whole farm soil sampling?

To manage and monitor dairy farm soil and nutrient levels to maximise efficiency and production

Reduce nutrient loads in to the environment

Kym and Leanne Willsmore, Wandillo, participated in the Dairying for Tomorrow SE's soil nutrient project. Here we find out what happened in the project on their farm.

How is it done?

Start with farm map and identify transects.

Soil samples (0–10cm) are collected from each paddock along the transect and sent for analysis

What do the maps show?

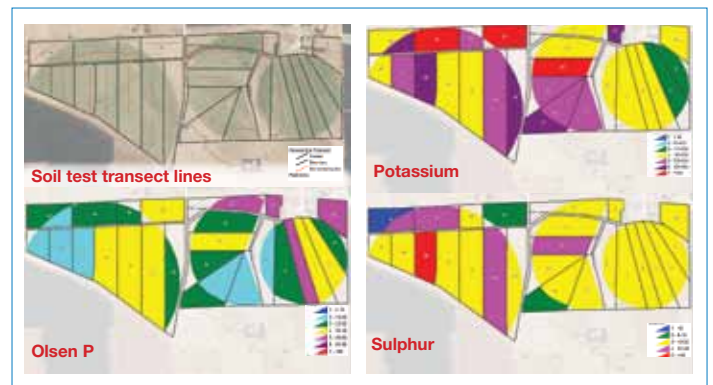
	Average	Range	Optimal
Phosphorus (Olsen) mg/Kg	28.8	12.1–55.6	30
Potassium (Colwell) mg/Kg	312	127–619	200
Sulphur mg/Kg	27.3	7.65–50.2	20

What's the cost?

Twenty-seven paddocks including sampling, testing and nutrient maps = \$2360

What do we save?

Knowing the soil nutrient levels of every paddock has allowed this farm to increase its fertiliser efficiency. This is achieved by redistributing fertiliser to areas of low soil nutrient levels, while fertiliser can be reduced on areas of high soil nutrient levels.



An example of the phosphorus fertility mapping and phosphorus loss risk mapping from one farm.



Daniel Willsmore and Phil Robertson on the Willsmore's Wandillo farm



Daniel and Phil collecting soil samples

- I can't believe such a simple test in each a paddock can give me so much information, it has taken the guess work out of the fertiliser decision making process. •

–Kym Willsmore

For further information about use of soil samples and nutrient budgeting contact DairySA, Verity Ingham 0428 660 127 or Monique White 0400 972 206.