

MEDIA RELEASE

FARMERS EMBRACE TECHNOLOGY

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Over recent years, farmers on KI have taken advantage of modern technology to assist them in their work – making life a bit easier, saving time and more importantly, money.

The use of GPS and satellite technology has come a long way, and recent developments in precision technology now make mapping of pH and soil nutrients across paddocks not only accessible but also affordable.

The first trial work with PrecisionAg on Rick and Annie Morris's property in 2013 showed the potential for mapping the variability in soil pH across a paddock.

In just over four years, technology has improved and the company is now able to precisely map and monitor not just pH but any other soil nutrients that landholders want tested. The results have been excellent and the farmers involved have been impressed with the technology.

The aim of the paddock mapping is to utilise the pH and nutrient test results to reduce the need of blanket applications, which are both time-consuming and expensive.

Andrew (Aphid) and Jamie Heinrich had their entire property mapped earlier this year.

"We started liming the farm back in the 1990s when most paddocks had very low pH," Aphid said.

"After we had limed every paddock once we then set up a rotation to lime about 10 per cent a year. Most paddocks have now been limed at least twice," he said.

"Now we have had the whole farm mapped, we can see which parts need liming and which don't. Many parts of paddocks will only need a maintenance rate of 1t/ha to be applied, not the 2.5t/ha we had budgeted on. This will be a significant cost saving for us."

"The mapping cost us just over \$18.50/ha and the lime saving alone equates to almost \$60/ha. The phosphorus (P) mapping also showed that almost half the property had P levels greater than 50ppm. Adequate soil P levels for our property are between 35-45ppm. This means we can dramatically reduce our fertiliser application rates on those areas, resulting in further cost savings," he said.

The great advantage of this new technology is that it is an actual soil sample that is collected from the paddock. Depending on the degree of accuracy, and what you want to spend, samples can be collected from a grid size as small as 0.5 ha. The dozen or so KI farmers who have been involved so far have had their paddocks mapped on a 1.5 to 2 ha grid. The soil is then sent to a lab for analysis meaning the final map is very accurate. As all the samples are GPSd farmers receive back a map of the pH and/or nutrient ranges across the paddock combined with a variable rate application map.

So you can easily see which parts of the paddock require what rate of lime or fertiliser. With the magic of modern technology, the data can then be feed directly into a variable rate spreader.

“The great advantage of this technology is that it takes the guess work out of determining how much lime and fertiliser to apply within each paddock. Having soil tested numerous paddocks on KI the old fashioned way walking with a bucket and soil auger, this technology certainly makes life much easier,” Lyn Dohle of Primary Industry & Regions SA said.

For more information about the value of mapping pH and nutrients on your property and if it might be the right technique for you to adopt, please contact Lyn Dohle at PIRSA on 0419 846 204.

While the individual farmers paid for the mapping on their own properties, funding for the overall project came from Agriculture Kangaroo Island via the Australian Government National Landcare Program. Lyn Dohle also thanked Natural Resources KI for covering the costs of bringing the mapping machinery to the Island.



Andrew Heinrich on his property Ellamatta

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