

Organic in drought,

By JAIME NEWBORN

IT'S A DIFFICULT TIME TO BE A farmer in the Coleambally region of Southern NSW. Harsh conditions and limited water resources over the past five years have left farmers in the area – known for its irrigated production – wondering where they'll be next year without rain.

Despite the challenges, growers have buckled in for the battle. Neill and Gina Wiseman from Keillna, who own and manage a 400-hectare certified organic onion and soybean property in Coleambally, are one example.

And come rain, hail or shine, they say they wouldn't farm any other way but organic.

Over the past decade the Wisemans have turned a once conventional farm into an organic enterprise to be reckoned with. Trading as Wisemans Organic Produce the farm sells organic onions to metropolitan markets via wholesalers and soybeans to well recognised brands such as Vitasoy.

"We started our process towards organic in 1998," Neill said.

"Prior to that, we had been farming corn, soy bean, wheat and barley conventionally and working the land pretty hard. Because it was easy to irrigate, we were growing two crops a year, applying a very high rate of fertiliser, and laser levelling the land.

"However, we also had increasing disease problems and our soil was in an extremely poor condition – it was fragile, and would set like concrete after being wet so needed constant watering. Our yields were dropping with increased input use."

The crunch came when their last conventional crop developed an extreme case of rhizoctonia and was lost to strong winds – "the root system was almost non-existent and would not support it", says Neill, and the couple began looking for alternatives.

"We had a friend that was farming organically, but we couldn't get our heads around it until we went to hear a talk in Adelaide by Philip Wheeler (author of *The Non-Toxic Farming Handbook*). He explained the foundations of soil science in organic farming and restoring soil health. It made the process seem real and manageable."



ABOVE: An organic soybean crop at Keillna in Coleambally, NSW.



LEFT: Neill and Gina Wiseman, Keillna.

Starting with onions – a high premium crop selected to earn more from a smaller area – the Wisemans tried keeping half the farm organic while using conventional methods on the other half.

"After our first crop, we realised that wasn't really going to work," says Gina. "Paperwork and certification-wise, it is very difficult to have the two systems side by side. So we went all-in organic."

Now faced with new climate hurdles Neill says the dramatic changes they've seen on their land since their transition has kept them hopeful for the farm's future.

"From the start, we focused on green manuring (ploughing a growing crop back into the ground to enrich the soil). We grew three green manure crops in a row and the change to our soil back then was incredible.

"We developed our clay soil into an earth that was friable and full of life."

Green manure crops planted before each vegetable crop consisted of laba beans, vetch, lupins, lab lab or cow peas.

Neill says the farm's soil program – "we do soil testing on major crop fields annually to identify any mineral deficiencies" – has also resulted in stronger plants, more beneficial predatory insects including ladybirds and wasps, and less pest problems.

Other methods used include foliar sprays, lime for phosphate needs, rock phosphate and the occasional application of manure as a fertiliser. A spray of water mixed with sugar and molasses was also originally trialled to aid soil biology and bacteria.

Neill and Gina say their water efficiencies have also improved under these methods.

not doubt

“We were able to extend the period of time between irrigating – we used to irrigate every five to six days and eventually found we could go without irrigating for around 10-12 days. The soil retained moisture for longer,” says Neill.

But he says parts of the organic system have been very hard to keep in drought times.

“The green manure crops at the core of our program are grown in addition to our regular crops. The decision to expend water on them can be financially difficult – particularly with the option to sell water (under the Government’s buyback scheme).

“We’ve shut down large areas of the farm and are concentrating on smaller sections to keep ourselves afloat.”

The couple have also looked at water distribution, shifting from a furrow irrigated

system to spray irrigation. Drip irrigation was considered but the cost over a large area was restrictive.

The farms future will rely on rain this year more than ever. “Every day we hope the drought will break,” says Neill. “We have enough water to make it to the end of the year, and then we will face some tough decisions.”

But he says one thing is clear: “I won’t go back to conventional farming again. Whatever the challenges we face are now, if we’d stuck to a conventional system we would have been out long ago. Organic farming has been a good move for us.”

RIGHT: Green manure crops are at the core of Keillna’s organic operations in Coleambally.



ADVERTORIAL

Premier Shield success on Liverpool plains

PETRIK PACIFIC CONGRATULATES MERRIVALE PARTNERSHIP at Tambar Springs for winning the 2008 Premier Shield with a sorghum crop planted with HeadStart.

The Petrik system has been in use for more than 10 years on the Liverpool plains.

Recent advances in harvest mapping technology and increased adoption of water injection at planting have expanded the use of the system.

GPS yield mapping is demonstrating results of products that have been previously overlooked.

The system’s biggest-selling product is HeadStart, a mixture of microbially produced plant stimulants which help germination and encourage root development.

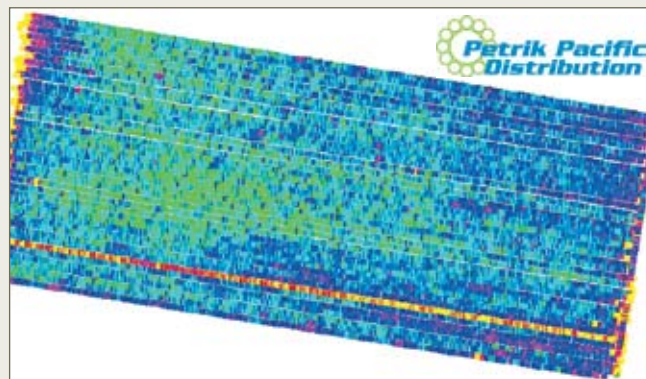
HeadStart is often applied with the microbe cultures Evergreen or Bxd to increase nitrogen use, release phosphorus and stimulate humus production.

This combined approach can significantly improve soil structure while also producing the intermediate products Fulvic and Humic acid.

Interest in these products dramatically increased when the results of an omission trial at Wombalong in Quirindi, NSW, were measured, revealing yields were significantly higher where HeadStart was applied.

The yield map at right is an irrigated sorghum crop which averaged over 12t/ha. It was planted on sheet composted cow manure and planted with HeadStart. The yellow strip is a row where HeadStart was removed. The yield here dropped by 3.5ton/ha.

Petrik Pacific Distributions are BFA Registered 454AI.



A yield map of an omission trial Wombalong, Quirindi. The yellow strip indicates a row where HeadStart was removed, dropping yields by 3.5 tonnes a hectare.

HeadStart stock is now available in NSW for summer crop planting.

For more information on using HeadStart contact:

- NSW - Ben Nichols, phone: 0428 694 339, email: ben@passag.com.au;
- Qld – Colin Rick, Total Grower services, phone: (07) 4068 5063 email: colin@totalgs.com.au;
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