## The sky's the limit with liquids

WA farmer Don Nairn has increased yields and rectified pH levels on his 3000ha property since adopting Liquid Systems (SA) equipment in 2015.

The mixed enterprise farmer located at Binnu, in WA's midwest region, purchased Liquid Systems' (SA) GEN 4 Module to increase the amount of nitrogen available to his wheat, canola and white lupin crops.

"Accuracy is spot on with the Liquid Systems (SA) GEN 4 module," said Don. "You can place nitrogen exactly where you want it, which means seed safety is good.

"It allows us to apply a lot more nitrogen up front and that takes the pressure off your compound fertiliser. I think it's a lot easier to use than granulated.

"And the bottom line is that we've seen a yield response to it. It might not be huge, but any yield increase is good."

Don, who is supported by his son Leigh, an agronomist for Landmark Northampton, has also seen the impact on pH levels from adding liquid lime to the mix and expects to test a range of other liquid products in the future.

"Liquids are the way to go," said Don. "I see lots of opportunities for expanding the use of our Liquid Systems (SA) equipment at seeding time. It's unlimited what you can do.

"Down the track, we'll look to apply different liquid products like minerals, wetting agents and fungicides."

Mixing Calbud, a liquid dolomite formulation with the liquid nitrogen has allowed the Nairn family to address low pH on sand plain soils across nearly half of their property.

Who:	Don & Leigh Nairn
Where:	Binnu, WA
Crop:	3000ha (wheat, lupins, canola)
Equipment:	Liquid Systems (SA) Morris GEN 4 module and Stacker Distribution Kit with Terminal Assembly
Outcomes:	<ul> <li>Addressing Soil pH issues</li> <li>Increased yields and pH Levels form 5.5 to 7.1</li> <li>Expert advice and support from Liquid Systems (SA) quickly resolves issues</li> <li>Re-filling product is quick, easy &amp; efficient</li> <li>First-rate accuracy &amp; application of product</li> </ul>

GEN 4 AUTO RATE INJECTION

For the past two years, they have mixed 4L/ha of the liquid lime Calbud with 40 to 50L/ha of UAN, a liquid nitrogen produced by Summit Fertilisers.

"Where we're using Calbud on our farm, it seems to be addressing our pH problems really well. So much so that we'll be using a whole lot more this year," said Don.

Leigh Nairn, who conducts soil tests across the property, reports that on

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areas of the farm with pH levels of 5.5 four years ago, the pH levels are now 6 to 6.5, even up to 7.1. "Our pH levels are definitely increasing," said Leigh. "The benefit we're getting now and the rate of increase is purely because of liquid."

The family is also impressed with the liquid lime's ability to provide an immediate benefit to crops.

"It's instant," said Don. "You don't have to wait four or five years to get the benefit as you do with spreading lime. That's particularly helpful if you're leasing land. If you're not sure you'll have the land for the long-term, liquid lime helps your crop in the same year.

"Plus, if you can put lime down when you seed, it can't go anywhere; it can't go into the air or get blown to your neighbour's paddock. The only place it can go is to the root of the plant, so you're a long way to addressing that problem straight away."

With liquid lime's tendency to settle, a reliable agitation system is critical during seeding. In addition to the pump on Liquid Systems' (SA) GEN 4 Module, the Nairn family added an agitation pump to the water truck they use to cart liquids to the seeder. It takes 5 to 10 minutes to agitate

the liquid before the solution is transferred to the air cart. "Once it's on board, the Liquid Systems (SA) pump makes sure it remains agitated," said Don.

In addition to the GEN 4 Module, the Nairns purchased an old US army truck, which allows them to cart 12,000L of liquid. Re-filling is a quick and easy task, according to Don. "One guy fills up the air seeder while another guy fills the liquid tank. It doesn't take us any longer to fill up with liquid," he said. "And because we're putting a larger portion of nitrogen out as liquid, rather than compound fertiliser, it allows us to cover more hectares per tank. That means we're not filling up as often."

The Nairns, who operate a 15m Primary Precision Seeder bar, plan to install a second GEN 4 module next seeding program. The capacity to add an extra module, an option currently only offered by Liquid Systems (SA), means the Nairns can apply several liquid products without worrying about chemical incompatibility. "We're keen to add two lines to the system, so we can pick and choose which products we use," said Leigh.

He has several products on his radar, including trace elements, seed treatment products, wetters and potassium-type products that will help in the treatment of disease, pests, nutritional deficiencies, non-wetting soil and frost. He plans to use potassium acetate-type products like Lokomotive, which is known to be seed safe and offer a lower salt alternative to the standard potassium chloride (MoP) fertilisers, to minimise frost risk on the farm's sands. Leigh also plans to use Syngenta's Uniform, a seed treatment product, placed both in and above furrow for the treatment of Rhizoctonia. "Potassium citrates or acetates sometimes don't mix all that well with UAN, so with a dual system from Liquid Systems (SA) we can split those applications. It will make it easier to place a lot of potassium down the tube."

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In his experience using Liquid System's (SA) equipment, as both an agronomist and farmer, Leigh is confident in the system's capabilities, as well as the back-up support. "Liquid Systems (SA) provide the best knowledge and products on the market," said Leigh. "Their development team are second to none and the use of only high quality componentry makes them clear leaders in the field of liquid injection.

"We have found the Liquid Systems (SA) equipment to be superior in delivery of product at a constant and correct rate,

something which is vital when the amount of dollars we spend on some products and the effort we put into growing the best crops we can, is involved."



