

Aman on a mission — future proofing the industry

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Aman Lehl is a blueberry and raspberry grower based in Corindi, NSW. Aman has been working with NSW DPI in the Clean Coastal Catchments project to establish a demonstration site to showcase change and drive adoption of best management practices in the berry industry. The main purpose of this demonstration site is to investigate the effectiveness and practicality of capturing and re-using substrate drainage in blueberries (Figure 2).

A key learning through this process has been that retrofitting a system to collect and re-use run-off can be difficult. It is far better to design a production system with the ability to collect drainage at the installation stage as this makes it much easier in the long run.

The Lehl family have been growing blueberries since 1996. In 2016, they decided to diversify into raspberries and currently have 4.5 hectares under raspberry production. Since they were already growing blueberries and raspberries, blackberries seemed like a natural addition to the farm and so have recently plant one hectare of the blackberry variety 'Elvira'.

Aman has decided to set up his blackberries with a similar system employed in the Clean Coastal Catchments project, which for blueberries will capture all drainage with the aim of re-using valuable water and nutrients.z

Aman is using the 30L Galuku Plantlogic drainage collection pots (Figure 3). These pots have centre holes which direct water into a channel which allows the collection of run-off (Figure 4). He is then pumping this drainage into holding tanks for treatment and then re-use. The water is treated with Ultraviolet (UV) light to disinfect the drain water, preventing the re-circulation of any disease problems.

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I have always been interested in technology and enjoy working with it. With the recent drought, and the possibility of climate change, being more efficient with our water use is important to remain sustainable into the future. In addition to water, reusing the fertiliser could also have positive benefits for the environment and the wallet.



Figure 1. Aman Lehl has recently set up 1ha of blackberries in Corindi. Photo credit: Aman Lehl



Figure 2. Retro-fitted capture system at Aman's set up in his existing blueberries. Photo credit: Melinda Simpson, NSW DPI



Plantlogic system in use for raspberry cultivation in Australia. Photo credit: Galuku



Figure 3: Plantlogic pot allows capacity to collect nutrient rich drainage water for re-use.

Photo credit: Galuku – Australian distributor for Plantlogic

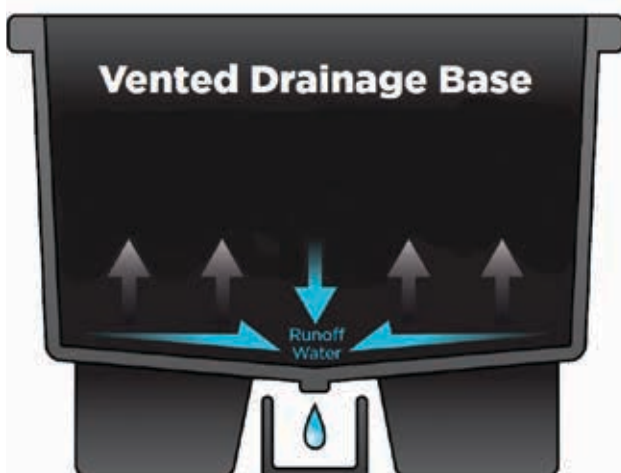


Figure 4: System installed in Aman’s blackberries to collect nutrient rich drainage water for re-use.

Image credit: Plantlogic



Cost is the biggest challenge in setting up a system that allows the collection of drainage. Currently it is very expensive to set up vs a normal run-to-waste system and this upfront cost will need to come down in order to encourage more take up amongst growers.

It is estimated that by using this system, in the blackberries alone, Aman will be able to collect and re-use between 1 and 1.3ml of water per hectare per year. There is a lot to learn about how this system will work and the difficulties and issues that may arise in the future. Through this work we are trying to understand issues such as what is the adequate slope to prevent water pooling and draining properly. We will also be looking at how many cycles we can re-use the water before it becomes un-useable due to salt build up and what is the fate of the un-useable water?

Probably the most relevant question individual growers would be asking as they read this article is what savings can be made on nutrient and water re-use and how long will this system take to pay for itself?

With ever-growing concerns of drought, social license and states/council’s enforcement of better on-farm management of nutrient rich wastewater, the work and investment that the Lehl family has put in to installing and trialling this system should be acknowledged and appreciated as learnings arise for all of industry.

Keep an eye out in future editions of the journal for updates on how the system is going and further lessons learnt.

The Clean Coastal Catchments project is funded under the NSW Government’s Marine Estate Management Strategy. The ten-year Strategy was developed by the NSW Marine Estate Management Authority to coordinate the management of the marine estate.



**Department of
Primary Industries**