

Case study

IT PAYS TO HAVE A FERTIGATION ASSESSMENT

Fertigation is widely known as a practice to distribute fertiliser directly to horticultural crops via the irrigation system. It has become the norm in the fruit and vegetable industry in recent years.

Growcom has seen a wide variety of fertigation systems in use across the sector and they all have their good and bad points. The principles remain the same and so long as these are adhered to growers will see positive results.

During the course of the Australian Government's Reef Programme (previously Reef Rescue) Growcom assisted a large number of growers to implement fertigation, especially automated systems, and provide training and on farm assistance to optimise these systems.

In the early stages of the program, Sid Jones (not his real name), a banana grower in Mourilyan, received funding to install an automated fertigation system. It is now a few years down the track and Mr Jones has had plenty of experience using the system. We visited him recently to see how he has fared.

Mr Jones commented that making the investment was a good idea, however, a different type of tank with improved agitation would have been better. (A large rainwater tank was installed.)

Overall he feels the reduction in fertiliser has been minimal, however, he is producing more product at a higher quality, thus meeting his primary objective.

Via the soil moisture monitoring, which is a component of the automated system, Mr Jones has been able to better manage irrigation inputs and thus placement of nutrients. He commented that through this process the loss of nutrients past the root zone has been minimalised and the system has enabled him to improve nutrient availability and plant uptake.

Fertigation training activities in Horseshoe Bay provided attending growers and consultants with the fundamental principles to implement fertigation into their farming systems.



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General comments from the training indicate growers were going home to clean and check fertigation systems and irrigation lines, check sprinkler performance and review their total irrigation activities.

Other comments made as to potential management changes that may take place on farm were:

- check filter systems to prevent blockages
- check the time it takes for fertigation to come through
- check fertigation injection and mixing
- calibrate irrigation system.

To assist horticulture growers implement practice change, Growcom provides an extension service as a follow-on from the fertigation training. Growcom staff are conducting fertigation assessments to assist growers develop improved management skills in relation to fertigation systems and the timing of applications.

On visiting one grower and conducting the assessment, he said he was surprised at how long it took the fertiliser to reach the end of the block and that it was about twice as long as he had estimated.

Without this assessment being conducted, this grower would have continued to fertigate without being aware that the majority of the fertiliser was going to a different block within the farm and potentially to a different crop.

