



BENEFITS OF BREWING NATURALLY

About 5 years ago, Gayndah citrus farmer Russ Baker started producing compost and brewing a compost tea to help reduce his reliance on chemicals and fertilisers on his property.

He has been able to produce enough compost tea rich in beneficial fungi which he uses as a foliar spray to be able to cover his 70 ha mandarin orchard.

Each batch takes about 10 to 15 mins to make and is ready to use in 12 hours in the summer and 22 hours in the winter and he has used funding provided by the Reef Rescue program to improve the efficiency of production and application and now has installed a concrete pad, a large stand and tank. He has also modified spray and pumping equipment so he can apply the compost tea without damaging the living organisms it contains.

He is very scientific in his approach to compost tea production and checks each batch he makes with an oxygen meter to log the number of organisms they contain and checks the fungal counts with a microspore. Cleaning and sanitation is also an important part of the process in order to ensure batch consistency and to avoid contamination.

He is constantly looking for ways to refine and improve his system and has experimented with different fungal types and he believes that his "recipe" is just about right.

According to Russ, the benefits of using the compost and compost tea foliar spray are many:

COST

Russ estimates that his system costs about 10% of what he used to spend on fungicides. He has also reduced his overall commercial fertilizer use by one third and hopes to reduce this further in time.

He has found he is able to apply the foliar spray and get a necessary 70% - 80% coverage on his trees by driving his tractor at 7-8 kms/hr compared with 3-4 kms/hr when he was using conventional fungicide application meaning further increases in efficiencies.

BETTER FOR THE TREES, BETTER FOR THE ENVIRONMENT

Russ has found that although he hasn't completely overcome the issue of black spot on his mandarins, using the compost tea is producing healthier, chemical free fruit and the fungi in the compost tea, in addition to improving his soils and overall plant health, also act as a fungicide outcompeting the fungi that causes black spot.

Spray drift, often an issue when using conventional fungicide application is also not an issue meaning that he can apply the foliar spray in a wider range of conditions.

When he first started using his system, he had baseline soil testing done. Annual follow up testing has shown a noticeable change in the health of his sandy and heavy loam soils.

The residue compost is also applied to the base of his trees further adding organic matter and beneficial soil organisms.

THE WAY FORWARD

Russ is now at a stage where he is looking to add to his staff of 2 and employ someone full-time to make his compost tea brew. He further hopes to encourage other producers to implement his system and spread the word the advantages of using sustainable natural methods such as composting and to move away from a reliance on costly chemical use.



The brew stand allows gravity to do the work



The compost tea foliar spray is creating healthy, chemical free plants