

Tree nutrient availability and fruit quality in sweet cherry and apple



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Background

There is a current belief that traditional fertiliser applications cause imbalance in microbial biomass under the surface of the soil. This has led many researchers and interested people, including this study, to find ways to integrate or replace these applications with other applications. There is a belief that bio-fertilisers such as microbial and fungal inoculations and humate-based products may enable reduced use of traditional fertiliser applications and increase plant growth and yield. There is also a belief that the addition of humic compounds may improve the overall stability of the soil by improving the soil's ability to retain water, and thus, reduce the threat caused by irregular wetting and drying for the soil.



Objectives

1. To investigate the effects of synthetic fertilisers versus organic amendments on plant productivity.
2. To investigate whether humic compounds are capable of providing the necessary nutritional requirements for growth and development of the plant compared with conventional fertilisers
3. To examine the effects of inoculation by commercial effective microbes (EM) on growth and development of sunflower (*Helianthus annuus*, 'Dwarf Sensation').



Results to date

Initial results indicate that soil amendments used in the study compared with traditional applications achieve positive results for other life under the surface of the soil (fungal activity). Further investigations and measurements will be conducted to provide additional evidence.

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