

SCATO PLUS

(Composted Garden Organics)



INTRODUCTION

The conversion of green waste to compost and mulch is a growing market. The Northern Waste Management Region green organics facility in Epping processes an average 800 to 1700 tonnes per month of composted garden organics.

THE COMPANY

ScatoPlus have been producing compost on a commercial scale for over sixteen years, focusing on agricultural waste streams for use in the production of high quality mushroom growing substrate. ScatoPlus also produce general horticultural compost from green organics in the Northern Region in Melbourne. ScatoPlus estimate that it provides approximately 15% of the current market for garden products.

THE PROJECT

EcoRecycle funded an organics field trial to evaluate the performance of Scatoplus 'Alive' green organics compost as a soil conditioner. It was compared to standard grower practice in cauliflower production near Bendigo. 'Alive' green organics compost was produced to Australian Standards (AS4454) by ScatoPlus from kerbside collected and self-haul green organics from the Northern Waste Management Region at the Epping facility. An intended outcome of the project was to promote awareness of composted green organics in the Bendigo region and to promote its use both commercially and domestically. The trials included laboratory analysis of soils, monitoring of crop response, yields and crop quality from amended soils and controls.

METHODOLOGY

The compost was applied at rates of 25t/ha, 50t/ha and 100t/ha, and 50t/ha, together with nitrogen fixing bacteria or worm leachate. The grower's standard fertiliser rate

was used throughout the trial and the compost was incorporated to a depth of around 30cm. The cauliflowers were then harvested and yields measured.

RESULTS

In this trial, the optimum amount of composted green organics was found to be 50t/ha. This, however is not economically feasible and data from other trials indicate that an application rate of between 20t/ha and 50t/ha is more economical. Trial results include improved soil moisture, soil structure and soil organic matter. An increase in available potassium and calcium were also observed with the addition of compost. The number of earthworms increased and the microbial population of the soil improved. The composted areas compared to the control plots required 20% less water, produced healthier crops and required 33% less cultivation for bed formation. There was an 18% increase in the size of cauliflower heads at 50t/ha.

BENEFITS OF USING RECYCLED MATERIALS

The benefits of using composted green organics as demonstrated by this trial are the potential to significantly reduce irrigation and cultivation costs. This includes the improvement in soil workability with significant savings in tractor time required for cultivation and bed forming and associated costs. Compost also has the potential to reduce the use of inorganic fertilisers by improving the long-term physical, chemical and biological conditions of farming soils. Overall, these factors will result in greater efficiency, improved growing conditions and cost savings.

OTHER BENEFITS OF THE PROJECT

The project has led to a significant market expansion in the Bendigo and Northern Regions where the compost is being used by the landscaping, nursery and agricultural markets. Sales of the product to nurseries have reached 20 -30 tonnes per week in the Bendigo region. As a result of the trial, orders for compost were also received from farmers including:

- 30 tonnes to a vineyard in Maryborough, August 1999
- 40 tonnes to a cherry orchard in Bridgewater, October 1999
- 30 tonnes to the cauliflower farmer for further (self funded) trials, November 1999
- 30 tonnes to a raspberry farm in Trentham, December 1999
- Sales of 1000m³ to vineyards in Castlemaine, 2000.

As a result of the project, approximately 5,500 tonnes of green waste have been diverted from landfill.

FURTHER INFORMATION

- EcoRecycle Publication: *Organics Field Trial: Regional Compost Market Development – Scato Plus (2000)*
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