

# Tirohia Compost Solutions



## Who are we?

We operate one composting facility in the Waikato, located at Tirohia, transforming by-products from the poultry industry and forestry industry into high organic matter and nutrient-rich compost.

## Composting process

Tirohia Compost operates a vertical composting unit (VCU). VCU's are in-vessel, computer controlled continuous-flow composting systems that achieve high-temperatures for rapid stabilisation of feedstock. The Tirohia Site utilises poultry processing waste, local green waste and post peel to produce a high organic matter and nitrogen, calcium, phosphorus-rich product.

## Environmentally conscious

Tirohia Compost helps the local area by not only producing a high quality compost, but by composting these poultry industry by-products, significant reductions in landfill volumes are achieved.

## Practical experience

Matamata dairy farmer, Kerry Simpson, has applied 2.5t/ha of compost to part of his farm over the past two years. His milk solids production has increased 9% to 1,200 kg/ha which Kerry largely attributes to the compost application. During the 2005 dry summer the compost treated paddocks held on better and an extra grazing was obtained from them, "the compost paddocks didn't look as stressed as the urea treated paddocks which received a 'hit' of nitrogen."



Kerry's cows eagerly await another ration of compost enriched pasture.



## Research studies

AgResearch is monitoring a series of paddocks on Mr Simpson's farm that have received either: 0 t/ha, 2.5 t/ha, or 10 t/ha of compost. Initial soil sampling six months after application revealed increasing levels of Total Nitrogen, Olsen Phosphate and Cation Exchange Capacity with increased compost rates.

## Recommended application rates

<i>Fine screened compost (&lt; 40mm)</i>	
Dairy farms	2.5t/ha
Forestry-to-dairy conversion	5-10t/ha
Horticulture	10t/ha
Cropping (Maize)	10-20t/ha

Unscreened coarse compost (> 40mm) is suitable for use as mulch, particularly in horticultural applications.

## Compost analysis (typical concentration range)

<i>Measurement</i>	<i>(%)</i>
Dry matter	45 - 60
Organic matter	40 - 45
Nitrogen	0.7 - 1.2
Phosphorus	0.30 - 0.65
Potassium	0.15 - 0.35
Calcium	1.90 - 5.50
Magnesium	0.11 - 0.28
Sodium	0.09 - 0.16



A typical trace element analysis is available on request.



**For a free quote** on pricing please provide information on:

1) area to be spread, 2) distance from composting plant, 3) type of farm,  
to Craig on 021 952 768 or Steven by email at [steven.hill@hgleach.co.nz](mailto:steven.hill@hgleach.co.nz)