

APPENDIX B. CHARACTERISTICS OF COMPOSTED YARD WASTE

Table B-1. Concentration of soluble metals in yard waste compost (saturated media in mg/kg)

Metal	Site 1 ^a	Site 2 ^b
Calcium	50	59
Magnesium	16	23
Iron	3.70	3.70
Manganese	0.80	2
Zinc	0.14	0.17
Copper	0.08	0.07
Boron	0.20	0.20
Sulphur	12	6
Sodium	21	31
Aluminium	4.80	3.30

Source: *Portland Area Compost Market Study*, Final Report, prepared by CalRecovery, Inc. for the Metropolitan Service District, Portland, Oregon, October 1988.

^a One sample.

^b Average of seven samples.

Table B-2. Concentrations of pathogens found in yard waste compost

Pathogen	Site 1	Site 2
<i>Salmonella</i>	negative	negative
<i>E. coli</i>	$> 1.0 \times 10^3$	$< 1.0 \times 10^4$
Faecal coliform	2.3×10^3	9.3×10^4
Total coliform	1.4×10^3	3.0×10^5
<i>Pseudomonas</i> spp.	positive	positive

Source: *Portland Area Compost Market Study*, Final Report, prepared by CalRecovery, Inc. for the Metropolitan Service District, Portland, Oregon, October 1988.

Note:

1. *Aspergillus fumigatus* (rhizopus and geotrichum found), human parasitic ova, dog parasitic ova, *Entamoeba coli*, *Entamoeba histolytica*, *Ascaris lumbricoides* (roundworm), *Taenia* spp. (tapeworm), and *Trichuris trichuria* (hookworm) not found in either site.

Table B-3. Nutrient content and other parameters of yard waste compost

Parameter	Units	Site 1	Site 2
Total (Acid Digestion) CEC^a	meq/100g	26.8	28.2
Nitrogen	%	0.90	0.63
Sulphur	%	0.26	0.20
Phosphorus	%	0.16	0.14
Potassium	%	0.72	0.62
Water Soluble			
Nitrogen	ppm	2.0	< 1.0
Sulphur	ppm	12.0	6.0
Phosphorus	ppm	143 ^b	121 ^c
Potassium	ppm	3,132 ^b	2,604 ^c
NH ₄ -N	ppm	21 ^b	20 ^c
NO ₃ -N	ppm	6 ^b	4 ^c
Bulk Density	kg/m ³	353 ^b	431 ^c
Moisture Content	%	48.5 ^b	48.9 ^c
Organic Matter	%	67.3 ^b	64.5 ^c
pH		7.1 ^b	6.7 ^c
Specific Conductance	mmho/cm ^d	1.4 ^b	1.4 ^c
Particle Size			
9.5 mm	% passing	94.2 ^b	95.0 ^c

Source: *Portland Area Compost Market Study*, Final Report, prepared by CalRecovery, Inc. for the Metropolitan Service District, Portland, Oregon, October 1988.

^a CEC = cationic exchange capacity, expressed in miliequivalents (meq) exchangeable cations per 100 grams of dry soil.

^b Average of eight samples.

^c Average of five samples.

^d mmho/cm = millimho per centimetre.