

**Marketing Compost Manure to Public Entities
Texas Cooperative Extension
FY 01 319(h) Nonpoint Source Grant
TCEQ Contract No. 582-2-44407**

Quarter no. 13 From 6/01/05 Through 8/31/05.

I. Introduction/Abstract

Compost assessment data was collected and submitted to an STA certified Laboratory following approval of the QAPP. Although all facilities did not have an available sample during this quarter, a second compost sampling trip will be conducted during the next quarter. This will complete the assessment of compost material for the project.

In addition to compost sampling, the approval of the QAPP also allowed TCE to move forward with preparation for the first rainfall simulation on the indoor soil/water quality study. The first and second rainfall simulation will occur during the next quarter.

Finally, TCE began collection of materials, reports and data to compile the final project report. It is anticipated that a draft report will be available by the end of the next quarter.

II. Overall Progress and Results by Specific Work Task within each Phase

PHASE 1

Task 1.1 Texas Water Resources Institute (TWRI) will serve as the prime contractor for the project and provide overall administration required fulfilling the "Technical Contractor" responsibilities under the Texas Commission on Environmental Quality (TCEQ) Composted Manure Incentive Project scope of work. Responsibilities include planning and facilitating meetings; negotiating subcontracts; submitting reimbursement documents and appropriate documentation of project progress; handling budget and fiscal reviews; adherence to Texas State Soil and Water Conservation Board (TSSWCB) and TCEQ nonpoint source management program; and ensure all activities, deliverables and tasks follow TCEQ contract provisions.

The following actions have been completed during this reporting period:

- a. Administrative tasks completed by TWRI will fall under phase II activities from this point forward.

Task 2.1 Assess the potential market, the compost product quality, existing educational and promotional materials available for a composted manure marketing project, and research and demonstration needs.

The following actions have been completed during this reporting period:

- a. All tasks completed through phase I activities.

Task 2.2 Develop a strategic Compost Education and Marketing Plan (CEMP). The CEMP will include a Research/Demonstration Design Plan (RDDP) to address the research and demonstration needs and a Quality Assurance Project Plan (QAPP) to address environmental data collection.

The following actions have been completed during this reporting period:

- a. All tasks completed through phase I activities.

Task 2.3 Implement the strategic CEMP. The CEMP will provide educational outreach, technical assistance, and documented materials for compost producers and users. It will also provide for the direct marketing of composted manure. The CEMP will target both public entities and private citizens throughout the region.

The following actions have been completed during this reporting period:

- a. Tasks completed will fall under phase II activities from this point forward.

Task 2.4 Develop a project web site comprised of technical information for project cooperators, demonstration locations and research data, sources of available compost, educational literature from TCE, and facts about TCEQ rebate program and the TCEQ and TSSWCB nonpoint source management program.

The following actions have been completed during this reporting period:

- a. Tasks completed will fall under phase II activities from this point forward.

Task 3.1 Provide TCEQ with assistance for quality assurance activities. Compost production sites will be evaluated to ensure sound production practices and at least 20 random site visits will be conducted to monitor uses of compost to ensure applications, BMPs and rates are made in an environmentally appropriate manner.

The following actions have been completed during this reporting period:

- a. Tasks completed will fall under phase II activities from this point forward.

Task 3.2 Where existing guidance literature is lacking, reports of current and past field trials and result demonstration activities will be documented and published. All effective compost production and use aspects will be documented in draft case studies, cost analysis and effectiveness assessment reports.

The following actions have been completed during this reporting period:

- a. Tasks completed will fall under phase II activities from this point forward.

PHASE II

Task 1.1 TWRI will continue to provide overall administration required to fulfill the "Technical Contractor" responsibilities under the TCEQ Composted Manure Incentive Project scope of work in FY 2004. In addition to the responsibilities detailed in the Phase I scope of work, TWRI will negotiate a subcontract with a Compost Marketing Firm to assist with marketing and educational tasks.

The following actions have been completed during this reporting period:

- a. The amended and updated QAPP received approval from EPA on 8-15-05. Work to sample and assess compost quality as well as work associated with the indoor rainfall simulation soil/water quality study commenced following QAPP approval.
- b. TWRI received a letter from TCEQ dated 9-7-05 stating that the amended contract was signed and in effect. The amendment extended the project through April, 2006; extended the deadline for the draft and final report; reduced the overall project budget by \$68,674; and added specific language regarding the indoor rainfall simulation soil/water quality study to be conducted at TTI
- c. Many efforts were also put towards the project budget. Specifically, refining the total reduction achievable to meet TCEQs requests and have sufficient funds to cover project activities require; and ensuring project expended adequate funds by the end of this quarter.

Task 2.3 Implement the strategic CEMP. The CEMP will provide educational outreach, technical assistance, and documented materials for compost producers and users. It will also provide for the direct marketing of composted manure. The CEMP will target both public entities and private citizens throughout the region.

The following actions have been completed during this reporting period:

- a. TCE worked with TSSWCB and TCEQ to modify the Upper Leon SWCD Compost Rebate Program. Specifically, to encourage market development outside of the agricultural sector, the private producer rebate program was opened to compost distributors and baggers such as Letco, Scotts, etc. Further, due to complaints received from ag producers regarding the requirements needed to complete a certified water quality management plan, this requirement was reduced to a certified nutrient management plan, which is only necessary for the portion of land which would receive the compost application. An announcement of the modified rebate program was sent to the composters by TCEQ on 8-4-05.
- b. Composters were also notified that the Upper Leon SWCD Compost Rebate Program will be reduced to \$3 starting 9-1-05. This is due to the reduction in the Composted Manure Incentive Payment from \$5 to \$4 per cubic yard.
- c. RAA submitted a complete report of his on site facility visits conducted in the previous quarter. Mr. Alexander assessed each facilities production practices, marketing strategy and their growth/development potential. In addition, Mr.

Alexander provided individual reports to each compost facility. Each report provided a pre and post assessment by Mr. Alexander conducted during his on-site visits.

- d. TCE coordinated schedules of several compost facilities and TCEQ personnel to conduct the compost assessment trip on 8-22-05 and 8-23-05. Compost samples were collected from Producers Compost, O'Neals Compost, Dairy Cow Compost and Organic Residual Reclamation. Bosque River Compost did not have material ready to be sampled during the August trip and will be sampled during the next quarter. Samples were submitted to Soil Control Laboratory in Watsonville, CA.
- e. In addition to collection of compost samples, two separate compost materials were purchased to be utilized in the rainfall simulation soil/water quality study. These composts were sampled individually and submitted for analysis. Given dairy manure compost does not consistently meet the specifications, TCE was concerned about not being able to find a material to utilize in the study because project QAPP requires that the compost utilized in the rainfall simulation study must meet DOT specifications. After discussion with TCEQ, it was determined that 2 different materials should be obtained to ensure that TCE will have a material to use in the study. Both samples were submitted to Soil Control Laboratory in Watsonville, CA.
- f. Laboratory results of the various compost samples will be shared with TCEQ during the next quarter.
- g. TCE finalized plans with TTI personnel to conduct rainfall simulation for the indoor soil/water quality study. TTI personnel agreed to potential dates in September. First and second rainfall simulation will occur during the next quarter.
- h. TCE contacted TxDOT personnel to conduct final review of seed mix selected, treatment application and methodology related to the indoor soil/water quality study.

Task 2.4 TWRI will maintain project web site by incorporating new information from the project's success in year 2. Information added to the web site will include, but is not limited to the following: results of compost use in field trials and demonstration programs from year 2 of the RDDP; success stories of compost use as a result of the project; and recent technical information obtained from project activities in year 2.

The following actions have been completed during this reporting period:

- a. Internet user statistics of Project Website remained steady during quarter 13. Unique visitors for the month of June, July and August were tracked at 785, 679 and 746, respectively.
- b. Data and information on the Upper Leon SWCD compost rebate program was modified to reflect changes. In addition, information on the Composted Manure Incentive Program was also amended to reflect the changes which will go into effect 9-1-05.

Task 3.1 Continue to provide TCEQ assistance with quality assurance activities by conducting at least 20 random site visits to monitor the beneficial uses of compost by participating state and local government entities and assess the agencies' and users' implementation of suggested BMPs.

The following actions have been completed during this reporting period:

- a. After reviewing preliminary data from the 0 and 30 day compost samples from the organic matter mixing study, TCE proposed to TCEQ to forgo analysis of the 60 day samples. TCEQ agreed. Following a more detailed evaluation of the 0 and 30 day samples (including some statistical analysis), TCE proposed to conduct limited analysis at Control Lab only. The limited analysis, which included OM, pH, soluble salts, C:N ratio, Total N and particle size, allowed for budget conservation and provided necessary data to complete a thorough study.
- b. All data from the organic matter mixing study was entered in excel format. Raw data is included in Appendix A. Complete statistical analysis of the data will be conducted during the next quarter.
- c. TCE and McLennan County Extension Agent, Wil Kiker, in cooperation with Riesel ISD personnel installed a dairy compost use demonstration on the Riesel ISD practice field. In addition to the compost application, TCE turfgrass specialist, Dr. McAfee, worked with school personnel to address poor turf on the playing field. The school district chose to demonstrate both management practices given field conditions varied and they had limited time to work with the playing field before the season began.
- d. Case studies for Erath County and Palo Pinto County were submitted to TCEQ.
- e. Given the case studies were developed in news release format, TCE visited with the Agricultural Communications Team to discuss the possibility of releasing these 'studies' on AgNews, an on-line resource of key issues and events throughout the state and it also serves as a wire service like the Associated Press. An Ag Communications staff member agreed to release these studies on AgNMore, a daily listserv that goes out to approximately 250 daily newspapers in Texas.
- f. In addition to the short stories, TCE discussed the possibility of developing a larger story covering the entire compost project to be highlighted in Lifescapes, a publication of the Texas A&M University System Agriculture Program released three times a year. The story would not be released until a final report is submitted and approved for the entire compost project.

Task 3.2 Where existing guidance literature is lacking, reports of current and past field trials and result demonstration activities will be documented and published. All effective compost production and use aspects will be documented in draft case studies, cost analysis and effectiveness assessment reports.

The following actions have been completed during this reporting period:

- a. Two abstracts were submitted to the Southern Region Water Quality Conference (Lexington, KY) to present information about the Dairy Compost Utilization Project. Specifically, the first presentation will cover the dairy compost studies conducted at the Dallas Research Station reviewing the use of compost to construct new landscapes. The second presentation will discuss the TxDOT Program and specifically, the results from the soil and water quality study conducted outdoors in 2003.
- b. Both presentations will be presented at the Southern Region Water Quality Meeting in Lexington, KY during the next quarter.
- c. The Project publication, Using Compost for Erosion Control and Revegetation, was reformatted to become available in the TCE Bookstore, an on-line information and education resource for Texans provided by TCE. The document is searchable by its publication number, E-354.
- d. Data collected in applied research studies, where applicable, will be included in fact sheets developed as part of the compost project. Principal investigators responsible for individual studies will be charged with amending fact sheets as necessary.
- e. TCE met with TAES personnel to discuss their work utilizing dairy compost and manure to produce turfgrass and export the phosphorus from the watershed in the form of turfgrass. The TAES personnel would like to include their work in the final report as well as work with TCE to develop a fact sheet focused towards dairy producers, compost producers and sod producers to promote this practice.

Task 3.3 Develop and submit annual and final joint reports of 'success stories' including assessment and feasibility of program strategies so that similar programs could develop from the provided outline.

The following actions have been completed during this reporting period:

- a. Individual reports summarizing completed activities were drafted. Activities summarized included dairy compost use studies, dairy compost use demonstrations, marketing assistance and compost production assistance. TCE personnel will compile individual reports during the next quarter to begin draft of final project report.

III. Related Issues/Current Problems and Favorable or Unusual Developments

Given the near end of the growing season and the dairy compost project, researchers in Dallas are faced with the decision of the fate of their applied research studies, specifically, the newly constructed landscape study. Funds allocated to continue this work were expended by the end of this quarter and therefore, the Dallas personnel do not have the resources necessary to continue these studies. Realizing the benefit of multiple year data in organic verification studies such as this, the Dallas personnel contacted the Dairy Compost Utilization project manager to discuss the possibility of soliciting additional funds to support the maintenance of these plots. By continuing this study, more accurate, detailed

and applicable information will be made available to end users such as landscape developers and contractors. The dairy compost treated plots have and continue to show a visible advantage over the plots treated conventionally (no compost). Further, savings in water and chemical use have also been noted in the compost treated plots. While, Dallas researchers anticipate similar results in the future, this hypothesis will not be verified without continuing and maintaining these plots. Therefore, a request for limited funds will be made to a granting agency in the near future. With its interest in success of the compost market, TCE hopes TCEQ will look favorable on this proposal.

IV. Conclusion/Projected Work for Next Quarter

The following will be accomplished during the coming quarter:

- a. Applied research studies performed in Dallas covering the use of Compost in a newly constructed landscape will be highlighted in the Dallas Turfgrass and Ornamental Field Day.
- b. Data from the compost improvement study (Appendix A) will be statistically analyzed and a full report will be submitted to TCEQ.
- c. TCE will complete collection of compost samples to conclude compost assessment. Data will be shared with TCEQ as it is available and a summary of results will be presented in report format.
- d. TCE will conduct first and second rainfall simulation on the indoor soil/water quality study. Data will be shared with TCEQ as it is available and a summary of results will be presented in report format.
- e. Presentations will be given at the Southern Region Water Quality Conference in Lexington, KY on the outdoor soil/water quality study and the use of compost in a newly constructed landscape.
- f. sample data will be Researchers will also be charged with Compost Analyze organic matter improvement study results (0 and 30 day data).
- g. Finalize methodology for reporting compost sale/transport data.
- h. Submit follow up individual compost facility visits to each composter and to TCEQ.
- i. A draft final report will be submitted to TCEQ.

Appendix A

Organic Matter Mixing Study Data

Table 1. Initial analysis from Soil Control Laboratory.

Table 2. Initial analysis from Soil, Water and Forage Testing Laboratory.

Table 3. Zero day analysis from Soil Control Laboratory.

Table 4. Zero day analysis from Soil, Water and Forage Testing Laboratory.

Table 5. Thirty day analysis from Soil Control Laboratory.

Table 6. Thirty day analysis from Soil, Water and Forage Testing Laboratory.

Table 7. Sixty day analysis from Soil Control Laboratory.

Table 1. Initial analysis from Soil Control Laboratory.

Sample ID	Date	C:N ratio	OM content (% dw)	Soluble Salts (umhos/cm) 1:5 w/w	pH (units) 1:5 w/w	Total N (% dw)	Total P (mg/kg dw)	Total Ca (mg/kg dw)	Total Na (mg/kg dw)	Size <5/8"	Size <3/8"	Respiration (mg CO ₂ -C/gOM/d)	Cucumber Bioassay (% germ)	Cucumber Bioassay (% vigor)	% Moisture
Composter A	4/8/05	13	10.21	1420	9.8	0.5	2313	31936	1767	100	100	1.98	100	100	24.85
Composter A	4/8/05	15	10.73	1570	9.74	0.66	2102	30221	2082	100	100	1.49	100	90	24.57
Composter B	4/8/05	15	12.85	1590	9.3	0.81	3994	120189	1725	100	100	.77.	100	90	26.61
Composter B	4/8/05	15	14.49	1740	9.27	0.86	4103	118214	1726	100	97	0.62	0	NA	29.26
Composter C	4/8/05	12	6.26	2240	8.22	0.43	1280	37038	1125	100	99.2	0.55	100	90	22
Composter C	4/8/05	13	8.8	2140	8.15	0.42	1381	50608	1110	100	97.8	0.87	100	90	23.32
Composter D	4/8/05	13	8.98	1610	9.1	0.45	2852	62673	905	100	100	0.71	80	100	24.11
Composter D	4/8/05	13	8.55	1650	9.16	0.56	2490	60619	616	100	100	0.82	NA	0	23.43
Peanut Hulls	4/8/05	57	96.07	5180	5.65	0.89	451	1888	410						11.64
Peanut Hulls	4/8/05	55	95.76	5060	5.59	0.91	377	2047	345						11.43
Sawdust	4/8/05	651	99.65	1360	4.02	0.081	56	388	94						6.42
Sawdust	4/8/05	636	99.71	1000	3.93	0.083	43	306	77						6.58
Woodchips	4/8/05	130	95.5	2220	6.61	0.39	338	5971	80						21.58
Woodchips	4/8/05	157	95.42	2320	6.8	0.33	211	6087	66						40.53

Table 2. Initial analysis from Soil, Water and Forage Testing Laboratory.

Composter	Date	Nitrogen %	Phosphorus %	Potassium %	Calcium %	Magnesium %	Sodium %	Zinc ppm	Iron ppm	Copper ppm	Manganese ppm	pH	Cond umhos/cm	LOI %	Moisture %
Composter A	4/8/05	0.4760	0.2032	0.5040	3.0140	0.2798	0.2723	83.90	5300.00	23.08	160.70	9.3	1532	10.4	25.4
Composter A	4/8/05	0.5100	0.2005	0.5328	3.2398	0.2879	0.2843	84.30	5461.00	24.59	164.00	9.2	1743	11.3	24.7
Composter B	4/8/05	0.8560	0.4531	0.9838	12.2429	0.6666	0.3425	211.70	8704.00	46.14	280.80	8.8	2245	17.1	27.8
Composter B	4/8/05	0.8240	0.4417	0.9091	12.1550	0.6299	0.3198	202.40	8028.00	43.76	270.50	8.7	1982	16.2	27.2
Composter C	4/8/05	0.4040	0.1302	0.5141	4.6188	0.3478	0.2223	59.30	6712.00	13.57	166.50	8.1	1982	7.6	23.4
Composter C	4/8/05	0.4210	0.1378	0.5694	4.6722	0.3762	0.2334	62.10	7264.00	13.62	180.40	8.1	1709	8.1	24.1
Composter D	4/8/05	0.4850	0.2858	0.8229	6.5109	0.4324	0.2473	86.60	9655.00	19.64	217.40	8.9	1720	8.1	23.4
Composter D	4/8/05	0.4720	0.2838	0.8092	6.5488	0.4289	0.2123	85.50	8926.00	19.21	222.40	8.4	1487	8.7	23.7

Table 3. Zero day analysis from Soil Control Laboratory.

Sample ID	Carbon Source	Date	C:N ratio	OM content (% dw)	Soluble Salts (umhos/cm) 1:5 w/w	pH (units) 1:5 w/w	Total N (% dw)	Total P (mg/kg dw)	Total Ca (mg/kg dw)	Total Na (mg/kg dw)	Size <5/8"	Size <3/8"	Respiration (mg CO ₂ -C/gOM/d)	Cucumber Bioassay (% germ)	Cucumber Bioassay (% vigor)	% Moisture
Composter A	Control	4/21/05	13	9.85	1290	9.38	0.50	2071	30510	1703	100.0	99.1	1.9	NA	100	20.7
Composter A	Control	4/21/05	14	10.15	1202	9.19	0.48	1920	24061	1641	100.0	99.4	1.71	NA	97	23.7
Composter A	Control	4/21/05	14	10.06	1153	9.35	0.46	1879	50432	2027	100.0	100.0	1.32	100	100	22.8
Composter A	10% Sawdust	4/21/05	18	12.84	1074	9.19	0.52	2042	28966	1826	100.0	100.0	2.44	100	96	23.9
Composter A	10% Sawdust	4/21/05	15	12.83	1148	9.23	0.44	1968	27195	1991	100.0	100.0	2.49	100	98	22.7
Composter A	10% Sawdust	4/21/05	17	12.10	1106	9.22	0.48	1844	52307	1648	100.0	99.9	2.42	100	92	22.8
Composter A	30% Sawdust	4/21/05	26	16.02	930	9.12	0.44	1914	35369	2194	100.0	100.0	2.02	100	100	23.3
Composter A	30% Sawdust	4/21/05	20	17.65	887	9.07	0.41	1905	29276	1904	100.0	100.0	1.74	100	100	23.3
Composter A	30% Sawdust	4/21/05	20	17.63	956	9.08	0.35	2130	43001	2040	100.0	93.3	1.21	NA	96	21.6
Composter A	10% Peanut Hulls	4/21/05	17	12.12	1231	9.08	0.44	1671	35891	1536	100.0	100.0	1.97	NA	92	23.3
Composter A	10% Peanut Hulls	4/21/05	16	12.53	1180	9.14	0.53	1709	22616	1418	100.0	100.0	1.61	100	96	23.3
Composter A	10% Peanut Hulls	4/21/05	15	12.12	1113	9.15	0.44	1961	46489	1796	100.0	100.0	1.84	88	96	24
Composter A	30% Peanut Hulls	4/21/05	18	15.94	1421	8.73	0.53	2003	24800	1635	100.0	100.0	2.24	100	98	25.1
Composter A	30% Peanut Hulls	4/21/05	21	16.70	1107	8.86	0.58	2033	36415	2321	100.0	100.0	1.82	100	100	22.6
Composter A	30% Peanut Hulls	4/21/05	18	15.45	1293	8.92	0.49	1893	56177	2883	100.0	100.0	2.28	100	100	24.1
Composter A	10% Wood Chips	4/21/05	13	10.77	1331	9.16	0.48	2130	43001	2040	100.0	98.5	1.31	96	92	23.6
Composter A	10% Wood Chips	4/21/05	17	13.92	1222	9.13	0.50	1671	35891	1536	100.0	97.2	0.67	96	100	24.7
Composter A	10% Wood Chips	4/21/05	15	12.58	1132	9.15	0.41	1734	31448	1427	100.0	96.1	1.08	100	94	25.5
Composter A	30% Wood Chips	4/21/05	22	19.30	1208	9.05	0.46	1753	33620	1853	100.0	97.8	2.25	100	100	28.2
Composter A	30% Wood Chips	4/21/05	40	22.16	1291	9.17	0.45	1623	33816	2037	96.6	93.9	0.96	100	100	21.4
Composter A	30% Wood Chips	4/21/05	18	26.57	1328	9.12	0.44	1716	25666	1594	97.7	96.7	1.32	100	100	27.2
Composter B	Control	4/21/05	14	13.18	1422	9.08	0.87	4927	115219	1874	100.0	99.4	0.68	100	100	23.43
Composter B	Control	4/21/05	15	15.46	1319	9.10	0.79	4639	145319	2002	100.0	97.8	0.09	100	100	27.02
Composter B	Control	4/21/05	15	14.80	1508	9.04	0.76	4654	117046	1942	100.0	94.0	0.07	94	100	25.24
Composter B	10% Sawdust	4/21/05	18	18.26	1293	8.94	0.79	3928	116424	2070	100.0	98.4	0.94	100	92	28.26
Composter B	10% Sawdust	4/21/05	16	17.68	1270	8.97	0.80	2363	120536	1376	100.0	94.6	0.51	100	100	26.97
Composter B	10% Sawdust	4/21/05	17	15.62	1192	9.02	0.82	4678	122023	1874	100.0	92.1	1.22	NA	100	24.16
Composter B	30% Sawdust	4/21/05	20	19.09	1092	8.86	0.74	4193	118882	2431	100.0	100.0	1	NA	95	23.8
Composter B	30% Sawdust	4/21/05	20	18.26	1071	8.78	0.72	4449	125918	2579	100.0	98.5	0.86	100	100	21.98
Composter B	30% Sawdust	4/21/05	20	20.74	1224	8.80	0.72	2130	223814	1550	100.0	97.3	0.82	92	100	25.08
Composter B	10% Peanut Hulls	4/21/05	18	16.74	1345	8.98	0.80	2128	129470	1279	100.0	95.2	1.69	100	93	25.46

Composter B	10% Peanut Hulls	4/21/05	16	13.06	1300	8.91	0.83	4500	138479	2268	100.0	94.0	1.03	100	100	20.8
Composter B	10% Peanut Hulls	4/21/05	16	16.95	1534	8.90	0.81	3346	135891	1842	100.0	96.7	2.52	100	100	25.51
Composter B	30% Peanut Hulls	4/21/05	19	19.08	1204	8.76	0.69	4528	102610	1741	100.0	97.3	2.33	100	100	24.69
Composter B	30% Peanut Hulls	4/21/05	19	20.98	1287	8.67	0.72	3006	95069	1726	100.0	99.4	1.95	100	100	26.51
Composter B	30% Peanut Hulls	4/21/05	19	17.28	1281	8.55	0.70	2445	183070	1520	100.0	97.2	2.37	100	96	23.11
Composter B	10% Wood Chips	4/21/05	17	18.92	1468	8.89	0.66	2130	112814	1550	100.0	97.1	1.19	100	100	27.14
Composter B	10% Wood Chips	4/21/05	18	16.92	1407	9.01	0.68	2128	129470	1279	98.8	93.0	0.54	100	96	27.66
Composter B	10% Wood Chips	4/21/05	18	18.33	1501	9.03	0.72	2637	115733	1643	100.0	94.2	1.06	100	92	28.28
Composter B	30% Wood Chips	4/21/05	25	30.59	1383	8.86	0.60	3563	119510	1666	100.0	92.1	1.02	100	100	30.82
Composter B	30% Wood Chips	4/21/05	24	33.73	1045	8.98	0.83	3934	90747	2834	99.6	94.1	1.97	90	100	26.12
Composter B	30% Wood Chips	4/21/05	29	18.95	1400	8.94	0.65	2517	125222	1686	100.0	93.5	0.98	86	93	28.85
Composter C	Control	4/21/05	16	8.17	1595	8.00	0.39	1374	59963	1448	100.0	98.3	0.07	88	98	22.5
Composter C	Control	4/21/05	14	7.88	2171	8.02	0.40	1204	42885	1270	100.0	100.0	0.29	90	100	22.1
Composter C	Control	4/21/05	12	7.74	1808	7.91	0.41	1460	50740	1866	100.0	100.0	0.12	92	100	21.8
Composter C	10% Sawdust	4/21/05	16	10.46	1450	7.76	0.36	1116	36385	1396	100.0	99.2	5.03	94	100	22.8
Composter C	10% Sawdust	4/21/05	16	9.86	1567	7.63	0.39	1406	45462	1543	100.0	98.9	4.43	96	90	20.3
Composter C	10% Sawdust	4/21/05	10	9.34	1606	7.58	0.52	1276	42241	1405	100.0	99.6	4.08	98	100	21.3
Composter C	30% Sawdust	4/21/05	17	13.56	1452	7.53	0.40	1217	49271	1264	100.0	94.7	6.59	100	96	18.2
Composter C	30% Sawdust	4/21/05	22	13.43	1357	7.53	0.38	1263	44102	1427	100.0	98.3	7.08	102	100	20.1
Composter C	30% Sawdust	4/21/05	22	14.01	1252	7.60	0.49	1131	43407	1284	100.0	100.0	6.68	104	100	21.1
Composter C	10% Peanut Hulls	4/21/05	15	10.23	1461	7.79	0.43	1262	48763	1420	100.0	99.4	1.57	106	100	20.4
Composter C	10% Peanut Hulls	4/21/05	17	9.96	1430	7.80	0.52	1453	43791	1402	100.0	99.2	1.58	108	98	19.4
Composter C	10% Peanut Hulls	4/21/05	16	10.37	1800	7.82	0.46	1362	53423	1570	100.0	96.9	1.3	110	98	20.6
Composter C	30% Peanut Hulls	4/21/05	18	13.22	1562	7.50	0.41	1163	46391	1442	100.0	95.0	1.64	112	98	21
Composter C	30% Peanut Hulls	4/21/05	17	12.56	1571	7.47	0.46	1196	49567	1689	100.0	97.5	1.92	114	96	21.3
Composter C	30% Peanut Hulls	4/21/05	17	13.88	1410	7.58	0.33	1185	36669	1647	100.0	100.0	1.78	116	100	20.2
Composter C	10% Wood Chips	4/21/05	18	11.57	1496	7.64	0.44	1131	43407	1284	95.7	94.3	0.65	118	100	22.9
Composter C	10% Wood Chips	4/21/05	12	10.03	1511	7.76	0.44	1262	48763	1420	100.0	96.7	0.58	120	100	22.2
Composter C	10% Wood Chips	4/21/05	15	7.36	1689	7.66	0.42	1150	53102	1420	99.3	96.3	0.52	122	100	19.3
Composter C	30% Wood Chips	4/21/05	17	13.29	1546	7.69	0.44	1122	47851	1278	99.6	98.2	1.57	124	100	21.8
Composter C	30% Wood Chips	4/21/05	43	16.04	1611	7.67	0.42	1153	42282	721	98.8	95.6	0.66	126	100	21.9
Composter C	30% Wood Chips	4/21/05	17	14.23	1719	7.91	0.43	1176	49754	1849	99.5	98.6	1.47	NA	100	23
Composter D	Control	4/21/05	13	8.16	1332	9.02	0.47	2459	48500	1418	10.0	96.2	0.68	NA	100	22.1
Composter D	Control	4/21/05	12	8.12	1239	9.05	0.41	2444	54927	738	100.0	98.4	0.04	NA	91	21.8
Composter D	Control	4/21/05	13	8.74	1311	9.07	0.43	2342	67249	1186	100.0	96.3	0.68	NA	92	21.8
Composter D	10% Sawdust	4/21/05	15	10.20	1485	8.69	0.46	2264	61807	703	100.0	94.0	2.25	NA	98	21.1
Composter D	10% Sawdust	4/21/05	16	12.32	1350	8.87	0.42	2077	72861	1046	97.3	96.3	2.85	NA	98	21.8
Composter D	10% Sawdust	4/21/05	17	10.63	1123	8.96	0.42	2301	54909	647	100.0	97.8	2.31	NA	95	21.7
Composter D	30% Sawdust	4/21/05	21	15.07	878	8.70	0.37	1993	68164	589	100.0	97.6	1.71	98	100	18.3

Composter D	30% Sawdust	4/21/05	22	17.30	1070	8.71	0.45	2040	63593	623	100.0	99.3	1.63	96	94	20.2
Composter D	30% Sawdust	4/21/05	22	15.54	857	8.64	0.41	1854	66686	1025	100.0	97.9	1.53	100	88	21.1
Composter D	10% Peanut Hulls	4/21/05	14	11.41	1361	8.75	0.42	1838	61782	980	100.0	99.2	1.24	94	98	20.9
Composter D	10% Peanut Hulls	4/21/05	15	9.86	1145	8.86	0.41	1744	110721	1000	100.0	96.2	1.4	NA	91	20.2
Composter D	10% Peanut Hulls	4/21/05	14	10.61	1210	8.92	0.46	2192	60137	1122	100.0	95.5	1.41	NA	100	20.8
Composter D	30% Peanut Hulls	4/21/05	19	14.90	1197	8.62	0.37	2097	56906	1243	100.0	98.4	1.79	NA	90	20.6
Composter D	30% Peanut Hulls	4/21/05	16	12.48	1217	8.68	0.46	1967	72059	647	100.0	98.9	1.88	NA	93	19.4
Composter D	30% Peanut Hulls	4/21/05	19	12.18	1210	8.73	0.44	1999	53941	602	100.0	98.7	1.77	96	88	21.2
Composter D	10% Wood Chips	4/21/05	13	9.98	1392	8.93	0.43	1854	66686	1025	99.7	98.4	0.86	100	100	20.8
Composter D	10% Wood Chips	4/21/05	19	9.27	1162	9.03	0.42	1838	61782	980	99.5	93.8	1.93	100	100	20.9
Composter D	10% Wood Chips	4/21/05	12	8.62	1239	9.01	0.42	2198	55581	627	99.1	96.9	1.88	100	100	21.6
Composter D	30% Wood Chips	4/21/05	18	11.34	1195	8.92	0.42	2294	76689	596	98.9	97.3	2.02	100	100	20.3
Composter D	30% Wood Chips	4/21/05	15	12.43	1212	8.95	0.46	2529	56232	634	99.0	93.7	2.32	NA	100	22.5
Composter D	30% Wood Chips	4/21/05	13	14.37	1199	8.92	0.44	2610	50791	600	98.6	97.3	2.73		100	21.3

Table 4. Zero day analysis from Soil, Water and Forage Testing Laboratory.

Composter	Carbon Source	Date	Nitrogen %	Phosphorus %	Potassium %	Calcium %	Magnesium %	Sodium %	Zinc ppm	Iron ppm	Copper ppm	Manganese ppm	pH	Cond umhos/cm	LOI %	Moisture %
Composter A	Control	4/21/05	0.5000	0.2332	0.6063	3.0556	0.2935	0.3002	83.10	6839.00	1.32	183.10	9.5	1434	10.4	22.1
Composter A	Control	4/21/05	0.4630	0.1962	0.5519	2.7611	0.2831	0.3157	71.70	6312.00	1.30	174.80	9.4	1536	9.4	21.2
Composter A	Control	4/21/05	0.5050	0.2119	0.5737	3.0487	0.2960	0.2965	78.60	5696.00	1.27	170.30	9.7	1427	10.5	24.4
Composter A	10% Sawdust	4/21/05	0.4490	0.1880	0.5099	2.7060	0.2697	0.3334	68.80	5728.00	1.29	162.90	9.6	1449	11.8	23.4
Composter A	10% Sawdust	4/21/05	0.4860	0.1923	0.5201	2.7718	0.2712	0.2808	70.30	5699.00	1.31	160.70	9.3	1357	11.5	22.5
Composter A	10% Sawdust	4/21/05	0.7450	0.1945	0.5397	2.9129	0.2830	0.3387	71.90	6561.00	1.33	173.70	9.5	1236	11.8	23.0
Composter A	30% Sawdust	4/21/05	0.4550	0.1867	0.5036	2.5936	0.2612	0.2648	68.20	5088.00	1.30	153.50	9.2	1373	15.6	83.1
Composter A	30% Sawdust	4/21/05	0.4540	0.1774	0.4880	2.5884	0.2584	0.3114	63.80	5764.00	1.33	158.30	9.5	1148	17.0	22.6
Composter A	30% Sawdust	4/21/05	0.4550	0.1812	0.4883	2.5665	0.2638	0.3064	66.40	5176.00	1.33	157.20	9.4	1371	14.1	22.2
Composter A	10% Peanut Hulls	4/21/05	0.4950	0.1963	0.5394	2.8478	0.2896	0.3073	70.90	5401.00	1.32	164.50	9.5	1526	11.7	23.1
Composter A	10% Peanut Hulls	4/21/05	0.4910	0.1968	0.5349	2.7790	0.2905	0.3269	71.20	5407.00	1.32	169.30	9.6	1451	11.2	22.8
Composter A	10% Peanut Hulls	4/21/05	0.5000	0.1930	0.5279	2.7360	0.2838	0.3290	69.10	5146.00	1.34	164.50	9.5	1481	11.3	23.5
Composter A	30% Peanut Hulls	4/21/05	0.4990	0.1872	0.5381	2.6539	0.2867	0.3477	68.10	4916.00	1.33	160.90	9.6	1279	15.8	24.1
Composter A	30% Peanut Hulls	4/21/05	0.4950	0.1937	0.5527	2.8372	0.2940	0.3129	72.10	5203.00	1.30	177.80	9.5	1537	13.3	22.2
Composter A	30% Peanut Hulls	4/21/05	0.5200	0.2024	0.5636	2.8890	0.3042	0.3195	72.50	5256.00	1.36	169.40	9.6	1530	14.1	22.9
Composter A	10% Wood Chips	4/21/05	0.4870	0.1933	0.5004	2.7672	0.2783	0.2851	39.57	5300.00	15.73	157.60	9.6	1410	9.9	23.5
Composter A	10% Wood Chips	4/21/05	0.4710	0.1940	0.5250	2.9752	0.2837	0.3040	41.24	5535.00	13.71	166.50	9.6	1474	10.1	23.5
Composter A	10% Wood Chips	4/21/05	0.4790	0.1928	0.5135	2.7447	0.2780	0.3027	37.46	5555.00	13.19	161.20	9.7	1211	10.0	23.7
Composter A	30% Wood Chips	4/21/05	0.4910	0.1978	0.5300	2.8439	0.2863	0.3097	40.30	5469.00	14.10	164.40	9.6	1368	10.3	25.2
Composter A	30% Wood Chips	4/21/05	0.4910	0.1986	0.5425	3.0055	0.2928	0.3295	38.31	5472.00	12.42	169.30	9.8	1417	10.4	24.4
Composter A	30% Wood Chips	4/21/05	0.4970	0.1984	0.5331	2.8698	0.2892	0.3065	39.10	6016.00	13.14	169.90	9.5	1298	10.8	24.7
Composter B	Control	4/21/05	0.8600	0.4503	1.0303	12.3762	0.6720	0.3662	156.90	9323.00	34.57	283.50	9.0	1972	16.6	24.8
Composter B	Control	4/21/05	0.8610	0.4527	1.0747	12.9857	0.6978	0.4216	163.50	9697.00	37.61	292.60	9.1	1895	16.5	25.5
Composter B	Control	4/21/05	0.8400	0.4501	1.0799	15.3063	0.6987	0.4562	163.40	9443.00	36.41	294.50	9.0	2099	16.2	22.4
Composter B	10% Sawdust	4/21/05	0.8130	0.4389	1.0012	12.5983	0.6615	0.3973	155.30	8985.00	35.25	280.00	9.2	1831	19.1	26.6
Composter B	10% Sawdust	4/21/05	0.8210	0.4278	1.0385	12.2321	0.6613	0.4306	151.20	9149.00	33.50	278.90	9.0	1801	18.1	26.2
Composter B	10% Sawdust	4/21/05	0.8120	0.4242	1.0138	12.4036	0.6549	0.3829	151.70	8800.00	33.43	281.70	9.1	1810	18.7	24.8
Composter B	30% Sawdust	4/21/05	0.7580	0.4020	0.9272	11.5227	0.6117	0.3447	145.90	8388.00	38.67	258.50	9.0	1575	23.4	25.2
Composter B	30% Sawdust	4/21/05	0.7510	0.4013	0.9071	11.4160	0.6017	0.3588	139.90	7928.00	27.91	266.00	9.1	1608	23.4	23.6
Composter B	30% Sawdust	4/21/05	0.7510	0.4017	0.9318	11.5192	0.6120	0.3372	143.20	8308.00	30.93	263.00	9.2	1641	24.0	25.1
Composter B	10% Peanut Hulls	4/21/05	0.7460	0.4033	0.9318	11.4089	0.6129	0.3220	141.80	9383.00	28.94	268.10	9.1	449	17.0	25.1
Composter B	10% Peanut Hulls	4/21/05	0.8140	0.4359	0.9569	12.0297	0.6413	0.3319	156.30	8206.00	31.26	275.00	9.1	1629	17.8	23.3
Composter B	10% Peanut Hulls	4/21/05	0.7930	0.4175	0.9724	12.3370	0.6396	0.3225	149.00	8132.00	29.41	264.80	9.3	1665	17.8	23.4

Composter B	30% Peanut Hulls	4/21/05	0.8260	0.4130	1.0015	12.3704	0.6451	0.3174	147.70	8256.00	28.57	266.50	9.1	1913	21.3	23.9
Composter B	30% Peanut Hulls	4/21/05	0.8340	0.4170	0.9829	11.7566	0.6388	0.3147	148.40	7935.00	30.31	260.20	9.1	1830	22.0	24.6
Composter B	30% Peanut Hulls	4/21/05	0.8040	0.4109	1.0034	11.9347	0.6454	0.3290	143.70	8254.00	29.18	260.20	8.9	1734	21.2	24.6
Composter B	10% Wood Chips	4/21/05	0.8310	0.4336	0.9851	12.7329	0.6533	0.3154	158.50	8613.00	30.86	278.30	9.1	1767	16.4	25.8
Composter B	10% Wood Chips	4/21/05	0.8380	0.4330	1.0187	13.1886	0.6705	0.3124	159.30	9152.00	30.74	283.70	9.2	1925	16.5	26.3
Composter B	10% Wood Chips	4/21/05	0.8340	0.4328	1.0128	13.1139	0.6593	0.3134	160.20	8786.00	31.23	280.20	9.1	1991	16.4	27.2
Composter B	30% Wood Chips	4/21/05	0.8070	0.4305	1.0077	13.1548	0.6553	0.3159	159.10	8767.00	31.24	277.20	9.3	1695	16.6	26.1
Composter B	30% Wood Chips	4/21/05	0.8130	0.4332	1.0100	13.4316	0.6684	0.3207	157.40	8908.00	32.15	281.60	9.2	1717	16.8	25.4
Composter B	30% Wood Chips	4/21/05	0.8280	0.4470	1.0407	12.9785	0.6885	0.3216	157.40	9354.00	32.05	284.70	9.0	1887	17.4	27.6
Composter C	Control	4/21/05	0.4620	0.1494	0.6009	5.2956	0.3992	0.2464	21.29	7462.00	4.24	185.30	8.4	1948	8.6	21.4
Composter C	Control	4/21/05	0.4120	0.1299	0.5194	4.0413	0.3452	0.2372	13.42	6740.00	2.75	167.20	8.1	2001	7.4	22.0
Composter C	Control	4/21/05	0.4260	0.1344	0.5506	4.3302	0.3553	0.2376	14.69	6964.00	2.74	174.30	8.2	1809	7.9	22.4
Composter C	10% Sawdust	4/21/05	0.4190	0.1329	0.5517	4.2793	0.3590	0.2424	14.10	6969.00	2.84	168.60	8.0	1743	10.0	21.8
Composter C	10% Sawdust	4/21/05	0.2700	0.1287	0.5323	4.2207	0.3462	0.2283	13.09	6695.00	2.82	166.60	8.1	1849	9.4	21.7
Composter C	10% Sawdust	4/21/05	0.4270	0.1298	0.5579	4.3959	0.4035	0.2376	14.92	6929.00	2.63	176.60	8.2	1982	9.2	22.0
Composter C	30% Sawdust	4/21/05	0.4070	0.1300	0.5629	4.3184	0.3636	0.2729	13.64	6838.00	2.80	174.70	8.3	1705	13.3	19.7
Composter C	30% Sawdust	4/21/05	0.3780	0.1297	0.5414	4.1170	0.3458	0.3055	13.37	6424.00	3.40	168.30	8.5	1530	14.0	20.8
Composter C	30% Sawdust	4/21/05	0.3830	0.1317	0.5548	4.1309	0.3604	0.2756	13.61	6855.00	2.69	177.40	8.2	1598	13.0	18.9
Composter C	10% Peanut Hulls	4/21/05	0.3790	0.1341	0.5841	4.3518	0.3664	0.2795	14.36	6895.00	3.07	172.40	8.9	1523	9.0	21.5
Composter C	10% Peanut Hulls	4/21/05	0.3890	0.1332	0.5770	4.6486	0.3681	0.2694	13.63	7202.00	2.80	187.10	9.1	1528	9.6	20.5
Composter C	10% Peanut Hulls	4/21/05	0.4040	0.1412	0.6246	4.7847	0.3949	0.2574	17.39	7485.00	3.20	184.60	8.9	1616	9.7	21.9
Composter C	30% Peanut Hulls	4/21/05	0.3740	0.1258	0.5524	4.1310	0.3618	0.2452	13.45	6526.00	2.76	163.30	9.0	1381	11.2	21.1
Composter C	30% Peanut Hulls	4/21/05	0.3870	0.1282	0.5529	3.9738	0.3448	0.2610	13.55	6683.00	2.78	161.10	8.8	1399	11.9	27.4
Composter C	30% Peanut Hulls	4/21/05	0.3800	0.1299	0.5462	4.0681	0.3434	0.2570	13.30	6635.00	2.73	165.50	8.8	1456	11.7	20.4
Composter C	10% Wood Chips	4/21/05	0.4040	0.1331	0.5821	4.6651	0.3919	0.2487	13.60	7242.00	2.72	187.60	8.3	1939	7.7	22.2
Composter C	10% Wood Chips	4/21/05	0.4010	0.1416	0.6031	4.8625	0.4105	0.2823	17.24	7388.00	2.75	188.70	8.3	1822	7.9	21.2
Composter C	10% Wood Chips	4/21/05	0.4130	0.1377	0.5980	4.7765	0.4064	0.2567	15.95	7364.00	2.75	187.60	8.2	1644	8.0	21.4
Composter C	30% Wood Chips	4/21/05	0.4020	0.1413	0.5910	4.9371	0.3974	0.2544	16.94	7298.00	2.73	183.90	8.5	1480	8.4	20.8
Composter C	30% Wood Chips	4/21/05	0.3970	0.1374	0.5676	4.5954	0.3833	0.2525	15.30	7186.00	2.72	186.50	8.6	1589	8.6	21.3
Composter C	30% Wood Chips	4/21/05	0.3900	0.1435	0.5847	4.8518	0.3843	0.2719	17.68	7569.00	2.82	196.00	8.8	1523	8.6	21.5
Composter D	Control	4/21/05	0.4520	0.2848	0.8558	6.5841	0.4382	0.2583	38.59	8845.00	6.28	223.30	9.1	1617	8.6	21.6
Composter D	Control	4/21/05	0.4420	0.2868	0.8500	6.7167	0.4364	0.2679	39.16	8841.00	6.64	212.50	9.2	1581	8.6	21.8
Composter D	Control	4/21/05	0.4530	0.2841	0.8438	6.5578	0.4343	0.2403	39.92	9056.00	6.74	217.50	9.0	1426	8.7	20.7
Composter D	10% Sawdust	4/21/05	0.4650	0.2747	0.8173	6.0000	0.4172	0.2530	35.88	8699.00	5.50	204.20	9.0	1445	11.1	21.0
Composter D	10% Sawdust	4/21/05	0.4570	0.2800	0.8256	6.2465	0.4289	0.2823	38.50	8552.00	7.18	223.90	9.2	1515	11.1	21.1
Composter D	10% Sawdust	4/21/05	0.4920	0.2774	0.8253	6.3754	0.4295	0.2846	36.03	8629.00	7.30	213.60	9.1	1365	11.4	21.2
Composter D	30% Sawdust	4/21/05	0.4830	0.2573	0.7665	6.0133	0.4019	0.2322	31.29	8189.00	4.61	199.80	9.0	1301	16.2	20.4
Composter D	30% Sawdust	4/21/05	0.4810	0.2651	0.7785	5.9162	0.4078	0.2368	36.10	8598.00	5.34	210.40	8.9	1172	14.3	20.6
Composter D	30% Sawdust	4/21/05	0.4760	0.2614	0.7486	5.4918	0.3979	0.2295	31.72	8555.00	4.73	199.90	8.9	1247	14.9	20.3

Composter D	10% Peanut Hulls	4/21/05	0.5300	0.2689	0.7971	6.0928	0.4138	0.2315	35.59	8109.00	5.40	202.70	9.2	1471	11.3	20.1
Composter D	10% Peanut Hulls	4/21/05	0.5070	0.2720	0.7933	6.0454	0.4258	0.2515	34.34	8566.00	6.05	216.70	9.2	1343	10.3	9.3
Composter D	10% Peanut Hulls	4/21/05	0.0521	0.2846	0.8527	6.1835	0.4441	0.2602	38.60	8910.00	6.27	217.80	9.2	1539	11.1	20.1
Composter D	30% Peanut Hulls	4/21/05	0.5410	0.2763	0.8492	5.8895	0.4318	0.2588	34.70	8816.00	5.41	205.20	8.8	1477	14.0	20.2
Composter D	30% Peanut Hulls	4/21/05	0.5370	0.2703	0.8125	5.9148	0.4164	0.2468	34.73	8374.00	4.94	204.60	8.9	1457	13.3	20.7
Composter D	30% Peanut Hulls	4/21/05	0.5360	0.2649	0.7896	5.8864	0.4167	0.2711	32.97	8067.00	5.75	212.60	9.1	1481	13.3	20.4
Composter D	10% Wood Chips	4/21/05	0.5230	0.2852	0.8524	6.6011	0.4405	0.3180	38.92	8989.00	9.45	235.20	9.2	1364	9.2	20.8
Composter D	10% Wood Chips	4/21/05	0.5130	0.2773	0.8238	6.6487	0.4302	0.2514	35.79	8754.00	6.83	221.70	9.2	1384	8.8	29.4
Composter D	10% Wood Chips	4/21/05	0.5100	0.2754	0.8092	6.2583	0.4215	0.2466	37.96	8862.00	6.53	208.20	9.0	1245	9.0	21.4
Composter D	30% Wood Chips	4/21/05	0.5040	0.2797	0.8065	6.4353	0.4237	0.2410	36.15	8600.00	4.52	207.90	9.1	1240	9.1	19.4
Composter D	30% Wood Chips	4/21/05	0.5310	0.2788	0.8207	6.2718	0.4269	0.2465	38.96	8538.00	6.70	212.80	9.3	1459	9.5	22.0
Composter D	30% Wood Chips	4/21/05	0.5230	0.2785	0.8480	6.2899	0.4279	0.2405	37.69	8904.00	5.10	213.70	9.2	1503	9.5	21.6

Table 5. Thirty day analysis from Soil Control Laboratory.

Sample ID	Carbon Source	Date	C:N ratio	OM content (% dw)	Soluble Salts (umhos/cm) 1:5 w/w	pH (units) 1:5 w/w	Total N (% dw)	Total P (mg/kg dw)	Total Ca (mg/kg dw)	Total Na (mg/kg dw)	Size <5/8"	Size <3/8"	Respiration (mg CO ₂ -C/gOM/d)	Cucumber Bioassay (% germ)	Cucumber Bioassay (% vigor)	% Moisture
Composter A	Control	5/20/05	11	9.47	1228	9.30	0.48	2113	37334	1976	100.0	98.0	3.58	100	100	22.87
Composter A	Control	5/20/05	12	9.54	1131	9.42	0.29	2114	34128	1489	100.0	100.0	2.05	100	98	19.9
Composter A	Control	5/20/05	12	9.42	1114	9.36	0.29	1836	29081	1483	100.0	100.0	1.97	100	100	21.5
Composter A	10% Sawdust	5/20/05	15	11.75	1327	9.34	0.51	1745	48518	1364	100.0	99.5	2.19	100	92	22.4
Composter A	10% Sawdust	5/20/05	14	12.99	1073	9.36	0.46	1477	41718	1336	100.0	100.0	2.33	100	100	21.8
Composter A	10% Sawdust	5/20/05	14	12.64	1152	9.35	0.51	2055	34186	1630	100.0	99.4	2.30	100	94	20.5
Composter A	30% Sawdust	5/20/05	20	18.91	913	9.12	0.53	1588	37592	1352	100.0	100.0	2.43	100	100	21.3
Composter A	30% Sawdust	5/20/05	17	15.83	953	9.25	0.43	1946	39392	1434	100.0	99.4	1.78	100	100	21.5
Composter A	30% Sawdust	5/20/05	23	17.30	888	9.26	0.38	1817	29077	1690	100.0	100.0	1.85	100	100	19.4
Composter A	10% Peanut Hulls	5/20/05	14	11.49	1367	9.31	0.43	1793	34147	1326	100.0	100.0	2.36	100	100	20.3
Composter A	10% Peanut Hulls	5/20/05	13	12.10	1265	9.32	0.48	1905	27907	1865	100.0	99.2	1.64	100	94	19.9
Composter A	10% Peanut Hulls	5/20/05	15	12.19	1247	9.30	0.52	1927	28692	1320	100.0	99.1	2.19	100	100	22.7
Composter A	30% Peanut Hulls	5/20/05	15	15.63	938	9.28	0.49	1975	27578	1493	100.0	99.5	1.98	NA	86	22.6
Composter A	30% Peanut Hulls	5/20/05	20	16.11	1124	9.21	0.58	1820	64343	1693	100.0	100.0	2.15	NA	78	21.5
Composter A	30% Peanut Hulls	5/20/05	17	14.12	1100	9.30	0.45	1779	31994	1282	100.0	98.9	1.88	NA	90	20.6
Composter A	10% Wood Chips	5/20/05	14	12.20	1303	9.14	0.48	1817	29077	1690	69.9	94.7	1.77	100	100	21.4
Composter A	10% Wood Chips	5/20/05	14	10.55	1224	9.23	0.48	1793	34147	1326	98.8	97.2	2.17	100	96	21.3
Composter A	10% Wood Chips	5/20/05	15	11.63	1326	9.13	0.40	1830	32531	1517	98.7	98.4	2.38	100	100	22.5
Composter A	30% Wood Chips	5/20/05	12	13.26	1064	9.11	0.44	1714	26888	1226	99.7	98.3	2.78	100	100	22.8
Composter A	30% Wood Chips	5/20/05	13	15.18	1126	9.09	0.62	1674	24836	1314	98.5	95.1	2.09	NA	62	24.2
Composter A	30% Wood Chips	5/20/05	18	12.52	1127	9.14	0.59	1770	41744	1097	98.6	96.3	1.93	100	100	22.8
Composter B	Control	5/20/05	16	13.79	1703	8.89	0.58	3142	141797	1298	100.0	97.1	0.72	100	100	18.1
Composter B	Control	5/20/05	16	14.17	1532	8.91	0.82	3350	123947	1287	100.0	95.6	1.66	100	100	22.6
Composter B	Control	5/20/05	14	15.12	1342	8.40	0.71	3292	142491	1368	100.0	97.4	1.54	100	100	23.3
Composter B	10% Sawdust	5/20/05	16	17.17	1169	8.95	1.02	3831	138680	2144	100.0	94.9	2.06	100	100	25.9
Composter B	10% Sawdust	5/20/05	6	17.68	1164	8.88	0.83	3609	127700	1752	100.0	95.3	1.16	100	100	24.7
Composter B	10% Sawdust	5/20/05	7	15.64	1212	8.91	0.75	3566	130237	1478	100.0	93.9	1.11	NA	16	23
Composter B	30% Sawdust	5/20/05	20	20.10	980	8.93	0.64	2991	148720	1471	100.0	96.2	1.40	100	100	24.5
Composter B	30% Sawdust	5/20/05	19	20.09	1047	8.93	0.73	3383	128729	1310	100.0	95.3	1.37	100	100	22.1
Composter B	30% Sawdust	5/20/05	19	17.20	937	8.94	0.66	3318	122252	1365	100.0	93.6	1.20	100	100	22.2
Composter B	10% Peanut Hulls	5/20/05	16	15.17	1094	8.88	0.83	3162	113008	1544	100.0	94.2	0.97	100	90	23.8

Composter B	10% Peanut Hulls	5/20/05	15	15.71	1146	8.94	0.87	3532	124900	1488	98.1	92.4	0.77	100	100	22.3
Composter B	10% Peanut Hulls	5/20/05	16	14.47	1573	8.84	0.86	3457	147783	1887	100.0	96.7	0.54	100	96	20.5
Composter B	30% Peanut Hulls	5/20/05	19	18.65	1070	8.92	1.01	3507	111741	1417	100.0	96.6	1.07	100	98	21.2
Composter B	30% Peanut Hulls	5/20/05	19	19.61	1193	8.80	0.78	3411	118733	1335	100.0	94.0	1.00	100	84	23.9
Composter B	30% Peanut Hulls	5/20/05	16	31.25	1461	8.85	0.80	2795	183423	950	100.0	91.0	1.18	NA	2	20.8
Composter B	10% Wood Chips	5/20/05	14	14.02	1317	8.80	0.87	3318	122252	1365	98.6	93.3	1.35	100	90	21.6
Composter B	10% Wood Chips	5/20/05	19	21.36	1472	8.84	0.75	3162	113008	1544	98.3	91.3	1.34	100	96	29.4
Composter B	10% Wood Chips	5/20/05	16	12.75	1500	8.81	0.75	3557	114365	1486	98.3	90.7	1.37	NA	44	22.8
Composter B	30% Wood Chips	5/20/05	22	14.42	1451	8.76	0.73	3293	108451	1734	97.8	87.3	1.73	100	100	22.7
Composter B	30% Wood Chips	5/20/05	15	16.34	1257	8.83	0.95	4127	134419	1563	93.3	86.7	1.73	100	100	22.8
Composter B	30% Wood Chips	5/20/05	18	16.30	1215	8.94	0.76	2328	71940	1842	100.0	88.8	1.60	100	100	22.2
Composter C	Control	5/20/05	17	7.35	1432	7.89	0.34	2037	72724	1468	100.0	98.0	2.82	86	100	20.3
Composter C	Control	5/20/05	18	7.74	1794	7.82	0.31	1123	47680	965	100.0	100.0	1.20	88	88	20
Composter C	Control	5/20/05	18	8.61	1921	7.76	0.21	1068	42625	902	100.0	98.3	1.42	90	98	19.6
Composter C	10% Sawdust	5/20/05	19	9.30	1427	8.20	0.33	1745	67905	1497	100.0	96.9	3.26	92	100	19.8
Composter C	10% Sawdust	5/20/05	23	9.22	1374	8.24	0.29	1043	36355	984	100.0	96.5	4.03	94	100	17.6
Composter C	10% Sawdust	5/20/05	19	8.92	1437	8.13	0.29	1878	72046	1524	100.0	99.2	4.24	96	98	21.7
Composter C	30% Sawdust	5/20/05	29	12.35	903	8.65	0.31	1167	46299	1217	100.0	99.5	4.76	98	100	20.4
Composter C	30% Sawdust	5/20/05	26	12.30	895	8.63	0.27	1336	64910	1290	100.0	100.0	3.25	100	100	19.6
Composter C	30% Sawdust	5/20/05	27	10.18	953	8.62	0.28	1772	94577	1596	100.0	99.0	3.41	102	100	17.5
Composter C	10% Peanut Hulls	5/20/05	20	10.23	1812	7.92	0.48	811	44063	1106	100.0	100.0	1.03	104	94	19.9
Composter C	10% Peanut Hulls	5/20/05	18	10.16	1727	7.86	0.35	1380	42701	1339	100.0	99.4	1.06	106	100	22.4
Composter C	10% Peanut Hulls	5/20/05	19	9.33	1544	7.91	0.30	1100	62702	1082	100.0	92.6	1.48	108	94	20
Composter C	30% Peanut Hulls	5/20/05	26	9.39	1467	8.04	0.25	1374	59991	1094	100.0	98.2	1.28	110	96	19.9
Composter C	30% Peanut Hulls	5/20/05	21	13.29	1634	8.01	0.28	1051	55556	893	100.0	93.1	1.32	112	88	19.5
Composter C	30% Peanut Hulls	5/20/05	19	13.41	1421	7.92	0.27	1011	38824	861	100.0	100.0	1.12	114	80	19
Composter C	10% Wood Chips	5/20/05	20	8.10	1529	7.77	0.24	1772	94577	1596	98.0	99.8	1.36	116	86	19.8
Composter C	10% Wood Chips	5/20/05	22	9.57	1716	7.84	0.29	811	44063	1106	100.0	97.7	1.49	118	96	20.3
Composter C	10% Wood Chips	5/20/05	25	8.70	1614	7.88	0.22	1112	73491	1068	95.5	91.3	2.43	120	90	22.3
Composter C	30% Wood Chips	5/20/05	16	18.88	1529	8.04	0.36	1029	35092	937	98.9	95.0	2.09	122	92	22.3
Composter C	30% Wood Chips	5/20/05	15	14.49	1520	7.97	0.46	1486	53938	1283	100.0	93.8	2.71	124	94	20.5
Composter C	30% Wood Chips	5/20/05	25	12.36	1606	8.20	0.55	1047	34545	861	97.1	91.1	2.12	126	96	21.8
Composter D	Control	5/20/05	13	6.94	1396	8.93	0.48	3904	100468	1405	100.0	97.6	0.95	NA	82	19.71
Composter D	Control	5/20/05	13	7.74	1186	8.93	0.56	2033	51538	956	100.0	94.3	1.20	NA	50	21.88
Composter D	Control	5/20/05	12	8.00	1294	9.01	0.47	2295	51513	986	100.0	98.8	2.30	NA	18	21.15
Composter D	10% Sawdust	5/20/05	14	9.73	1087	9.04	0.46	2429	71035	874	100.0	99.2	1.64	NA	20	20.21
Composter D	10% Sawdust	5/20/05	18	9.68	1214	9.02	0.46	2348	61065	833	100.0	100.0	1.85	100	90	18.28
Composter D	10% Sawdust	5/20/05	15	9.11	1055	9.01	0.42	2824	72967	899	100.0	98.0	2.37	100	100	18.85
Composter D	30% Sawdust	5/20/05	23	14.71	860	8.87	0.40	2667	99573	962	100.0	94.3	1.30	NA	14	18.92

Composter D	30% Sawdust	5/20/05	19	13.66	851	8.95	0.47	2416	70519	956	100.0	99.1	1.54	100	100	18.54
Composter D	30% Sawdust	5/20/05	21	12.30	860	8.99	0.57	3071	80940	1336	100.0	96.1	1.29	NA	0	18.71
Composter D	10% Peanut Hulls	5/20/05	14	8.73	1314	8.94	0.51	2479	53144	850	100.0	96.3	0.41	100	80	16.15
Composter D	10% Peanut Hulls	5/20/05	14	9.37	1370	8.99	0.47	2904	69457	1092	100.0	99.1	0.81	NA	60	19.34
Composter D	10% Peanut Hulls	5/20/05	14	10.70	1465	9.03	0.46	2894	72238	1062	100.0	98.3	0.96	NA	50	18.41
Composter D	30% Peanut Hulls	5/20/05	17	12.50	1356	8.99	0.43	2580	64507	1100	100.0	94.9	2.31	100	0	16.53
Composter D	30% Peanut Hulls	5/20/05	18	13.42	1109	9.01	0.43	2153	61395	798	100.0	97.4	1.18	100	100	19.18
Composter D	30% Peanut Hulls	5/20/05	15	13.35	1017	8.98	0.42	2399	57112	1094	100.0	99.5	1.99	NA	40	17.65
Composter D	10% Wood Chips	5/20/05	16	7.84	1345	8.94	0.41	3071	80940	1336	99.6	97.9	1.53	NA	45	18.83
Composter D	10% Wood Chips	5/20/05	15	9.57	1276	8.84	0.43	2479	53144	850	99.3	96.9	1.32	NA	25	20.91
Composter D	10% Wood Chips	5/20/05	19	9.12	1515	8.69	0.36	2686	57284	995	100.0	99.2	1.33	100	88	18.39
Composter D	30% Wood Chips	5/20/05	18	12.19	1288	8.78	0.39	2457	60717	964	98.6	92.3	2.03	NA	83	17.91
Composter D	30% Wood Chips	5/20/05	20	15.26	1356	8.90	0.45	2961	54883	923	99.1	94.9	1.58	NA	38	18.88
Composter D	30% Wood Chips	5/20/05	22	11.99	1371	9.04	0.41	4471	113051	1565	96.8	88.7	1.27	NA	30	15.94

Table 6. Thirty day analysis from Soil, Water and Forage Testing Laboratory.

Composter	Carbon Source	Date	Nitrogen %	Phosphorus %	Potassium %	Calcium %	Magnesium %	Sodium %	Zinc ppm	Iron ppm	Copper ppm	Manganese ppm	pH	Cond umhos/cm	LOI %	Moisture %
Composter A	Control	5/20/05	0.5010	0.2040	0.5357	2.9446	0.2889	0.3456	87.10	6054.00	22.18	176.80	9.5	927	10.5	16.8
Composter A	Control	5/20/05	0.4920	0.2013	0.5284	2.9623	0.2920	0.3458	83.70	5775.00	21.67	171.80	9.4	1541	9.9	25.3
Composter A	Control	5/20/05	0.4860	0.2048	0.5252	2.9493	0.2908	0.3194	82.80	5733.00	21.27	172.80	9.7	1855	10.0	25.9
Composter A	10% Sawdust	5/20/05	0.5040	0.2035	0.5371	3.0188	0.2938	0.3329	84.70	6159.00	22.63	176.70	9.2	1617	12.3	21.1
Composter A	10% Sawdust	5/20/05	0.5130	0.2061	0.5596	3.0975	0.3014	0.3373	84.30	5901.00	22.27	174.20	9.5	779	12.5	21.2
Composter A	10% Sawdust	5/20/05	0.5060	0.1980	0.5172	2.9329	0.2825	0.3190	81.80	5668.00	20.78	167.70	9.4	1098	12.5	22.2
Composter A	30% Sawdust	5/20/05	0.4930	0.1850	0.4927	2.7546	0.2713	0.3296	77.70	5679.00	20.31	161.90	9.2	1429	16.4	19.9
Composter A	30% Sawdust	5/20/05	0.4710	0.1888	0.4889	2.7532	0.2698	0.3071	77.50	5237.00	20.98	158.80	9.0	1569	16.6	21.7
Composter A	30% Sawdust	5/20/05	0.4710	0.1891	0.4932	2.6995	0.2726	0.3468	77.40	5367.00	20.66	162.60	9.0	1348	16.4	20.8
Composter A	10% Peanut Hulls	5/20/05	0.5200	0.2066	0.5406	2.9807	0.2983	0.3185	83.00	5684.00	20.30	168.80	9.4	1494	12.1	20.8
Composter A	10% Peanut Hulls	5/20/05	0.5180	0.2007	0.5311	2.9205	0.2933	0.3621	85.40	6225.00	22.07	173.50	9.5	1034	11.6	22.7
Composter A	10% Peanut Hulls	5/20/05	0.5080	0.2000	0.5326	2.8859	0.2903	0.3610	81.60	6368.00	22.14	176.80	9.4	1590	11.4	22.7
Composter A	30% Peanut Hulls	5/20/05	0.5330	0.1975	0.5370	2.8265	0.2931	0.3224	81.50	5435.00	21.25	164.40	9.1	1738	13.6	22.6
Composter A	30% Peanut Hulls	5/20/05	0.5260	0.2040	0.5516	3.0347	0.3059	0.3315	82.20	5631.00	22.13	171.40	9.1	1676	13.3	22.0
Composter A	30% Peanut Hulls	5/20/05	0.5130	0.1918	0.5216	2.7006	0.2909	0.3343	79.50	5454.00	20.40	161.10	9.3	797	13.4	20.2
Composter A	10% Wood Chips	5/20/05	0.5150	0.2046	0.5334	2.9844	0.2977	0.3279	85.40	5750.00	22.20	172.70	9.5	974	10.4	22.3
Composter A	10% Wood Chips	5/20/05	0.4920	0.1975	0.5151	2.9662	0.2891	0.3563	81.00	5721.00	21.65	169.50	9.5	1444	9.8	22.7
Composter A	10% Wood Chips	5/20/05	0.5040	0.2017	0.5208	2.9345	0.2905	0.3617	83.30	5760.00	22.35	173.10	9.3	1617	10.3	23.4
Composter A	30% Wood Chips	5/20/05	0.5140	0.2023	0.5190	2.9772	0.2907	0.3250	82.70	5620.00	22.12	169.50	9.2	1451	10.5	23.5
Composter A	30% Wood Chips	5/20/05	0.5190	0.2049	0.5335	3.0787	0.2962	0.3622	84.50	5897.00	22.79	172.50	9.5	1409	10.6	24.0
Composter A	30% Wood Chips	5/20/05	0.5160	0.2026	0.5047	2.9178	0.2896	0.3261	81.70	5603.00	22.49	168.30	9.5	1078	10.6	23.8
Composter B	Control	5/20/05	0.8640	0.4558	0.9975	12.8524	0.6863	0.3987	204.00	9173.00	44.93	293.40	8.9	2056	16.6	21.3
Composter B	Control	5/20/05	0.8440	0.4621	1.0236	13.4864	0.7004	0.4258	204.00	9426.00	44.82	303.70	8.7	2371	16.8	29.0
Composter B	Control	5/20/05	0.8460	0.4579	1.0452	13.1292	0.6981	0.4155	205.00	9734.00	47.02	298.60	8.7	2284	16.7	27.7
Composter B	10% Sawdust	5/20/05	0.8280	0.4391	0.9617	12.1130	0.6506	0.3801	194.80	9132.00	43.64	282.60	9.1	1513	18.3	25.4
Composter B	10% Sawdust	5/20/05	0.8260	0.4396	0.9938	13.3858	0.6753	0.3782	193.20	9858.00	46.50	292.90	9.1	1422	18.3	24.2
Composter B	10% Sawdust	5/20/05	0.8050	0.4346	0.9664	12.7778	0.6561	0.4024	193.70	9318.00	44.56	285.50	9.0	1662	18.0	21.9
Composter B	30% Sawdust	5/20/05	0.7730	0.4138	0.9157	12.6577	0.6339	0.3574	190.60	8783.00	40.79	273.20	8.7	1769	22.2	24.5
Composter B	30% Sawdust	5/20/05	0.7570	0.4193	0.9381	12.2770	0.6395	0.3542	196.20	9083.00	43.05	276.30	8.7	1709	21.9	21.3
Composter B	30% Sawdust	5/20/05	0.7670	0.4345	0.9631	12.9885	0.6632	0.4048	197.00	8874.00	43.65	282.70	9.0	1571	22.5	24.1
Composter B	10% Peanut Hulls	5/20/05	0.8440	0.4566	0.9745	13.1041	0.6812	0.3638	205.90	8845.00	43.69	293.40	9.0	986	19.2	23.9
Composter B	10% Peanut Hulls	5/20/05	0.8470	0.4579	0.9613	12.8193	0.6801	0.3698	205.50	9200.00	44.57	297.80	9.0	1734	18.5	22.9
Composter B	10% Peanut Hulls	5/20/05	0.8140	0.4464	0.9841	13.0321	0.6782	0.3873	200.40	9239.00	43.06	291.50	8.8	2067	17.7	21.6

Composter B	30% Peanut Hulls	5/20/05	0.8590	0.4444	1.0326	13.3317	0.6937	0.3763	201.80	9252.00	42.95	293.70	8.7	1941	21.4	22.0
Composter B	30% Peanut Hulls	5/20/05	0.8220	0.4354	0.9692	12.4099	0.6675	0.4051	193.70	8647.00	42.14	303.50	8.9	1636	20.8	23.7
Composter B	30% Peanut Hulls	5/20/05	0.8430	0.4387	1.0205	13.0572	0.6890	0.3923	194.70	8957.00	42.59	288.30	9.0	1032	20.5	24.7
Composter B	10% Wood Chips	5/20/05	0.8130	0.4568	0.9840	12.8000	0.6833	0.4015	208.50	9238.00	43.52	297.30	9.0	1585	15.9	22.6
Composter B	10% Wood Chips	5/20/05	0.8210	0.4570	0.9993	13.0572	0.6936	0.3687	205.10	9569.00	44.94	297.60	8.7	2042	16.3	24.6
Composter B	10% Wood Chips	5/20/05	0.8110	0.4509	0.9981	13.8073	0.6869	0.3865	204.30	9478.00	43.87	295.20	8.7	1883	16.5	24.4
Composter B	30% Wood Chips	5/20/05	0.8080	0.4562	0.9980	13.5270	0.6885	0.3853	206.50	9375.00	43.83	301.70	9.1	1546	16.8	24.6
Composter B	30% Wood Chips	5/20/05	0.8080	0.4446	0.9963	13.3844	0.6850	0.3683	202.30	9882.00	42.85	295.50	9.1	1242	17.9	23.7
Composter B	30% Wood Chips	5/20/05	0.8190	0.4492	1.0078	13.3711	0.6889	0.3736	201.60	9600.00	44.07	297.00	9.0	1710	17.4	24.4
Composter C	Control	5/20/05	0.4160	0.1496	0.5586	4.6639	0.3839	0.3319	66.30	8335.00	16.15	197.60	8.8	1936	8.4	19.4
Composter C	Control	5/20/05	0.3270	0.1403	0.5433	4.4312	0.3791	0.2805	63.60	7655.00	14.35	187.10	7.7	2139	7.8	22.8
Composter C	Control	5/20/05	0.2720	0.1412	0.5554	4.5784	0.3773	0.2955	63.40	7805.00	14.23	197.10	8.1	1831	7.7	21.9
Composter C	10% Sawdust	5/20/05	0.3760	0.1415	0.5712	4.7080	0.3865	0.3034	63.90	7888.00	15.13	190.20	8.5	1098	8.4	20.7
Composter C	10% Sawdust	5/20/05	0.3890	0.1355	0.5518	4.3612	0.3787	0.2767	61.00	7737.00	13.11	184.00	8.5	1412	8.4	19.7
Composter C	10% Sawdust	5/20/05	0.3920	0.1430	0.5596	4.7126	0.3885	0.3025	64.10	7891.00	16.56	189.30	8.2	1633	7.5	20.6
Composter C	30% Sawdust	5/20/05	0.4080	0.1427	0.5864	4.7854	0.4021	0.2974	62.90	8062.00	14.33	201.90	8.5	888	10.8	20.9
Composter C	30% Sawdust	5/20/05	0.4100	0.1490	0.5653	4.6333	0.3811	0.2884	62.40	7598.00	15.30	184.70	8.8	1165	11.5	19.5
Composter C	30% Sawdust	5/20/05	0.4050	0.1385	0.5474	4.4035	0.3671	0.2898	62.56	8033.00	14.05	186.20	8.5	653	12.0	19.1
Composter C	10% Peanut Hulls	5/20/05	0.4330	0.1439	0.5718	4.7259	0.3865	0.2815	64.00	7588.00	13.39	188.50	7.9	1788	9.1	19.5
Composter C	10% Peanut Hulls	5/20/05	0.4280	0.1517	0.5974	4.9261	0.4063	0.2977	65.60	7987.00	14.34	195.00	7.9	2329	8.9	19.8
Composter C	10% Peanut Hulls	5/20/05	0.4550	0.1488	0.5942	4.6199	0.4114	0.2899	66.00	8025.00	14.70	194.00	7.8	2137	9.4	19.5
Composter C	30% Peanut Hulls	5/20/05	0.4190	0.1344	0.5604	4.5060	0.3845	0.2914	60.00	7438.00	13.09	178.70	8.3	1723	10.6	20.1
Composter C	30% Peanut Hulls	5/20/05	0.4340	0.1369	0.5491	4.3764	0.3704	0.2760	60.40	7413.00	14.03	175.50	8.0	852	11.5	20.5
Composter C	30% Peanut Hulls	5/20/05	0.4540	0.1425	0.5978	4.6246	0.4013	0.2966	66.50	7860.00	13.72	194.52	8.1	1496	11.7	19.9
Composter C	10% Wood Chips	5/20/05	0.4050	0.1353	0.5357	4.3929	0.3690	0.2694	62.10	7598.00	12.26	194.00	7.8	1967	8.1	19.8
Composter C	10% Wood Chips	5/20/05	0.4080	0.1374	0.5440	4.3900	0.3761	0.2552	62.60	7893.00	12.67	183.50	7.8	1870	7.8	19.1
Composter C	10% Wood Chips	5/20/05	0.4110	0.1439	0.6143	4.7282	0.4294	0.2763	64.10	8428.00	13.76	199.30	8.3	1806	8.0	21.1
Composter C	30% Wood Chips	5/20/05	0.4080	0.1435	0.5595	4.7067	0.3949	0.3016	65.40	7780.00	13.45	190.30	8.3	557	7.2	19.8
Composter C	30% Wood Chips	5/20/05	0.4150	0.1475	0.5821	5.1897	0.4083	0.2807	65.00	7979.00	13.33	194.00	8.3	1279	5.9	19.9
Composter C	30% Wood Chips	5/20/05	0.4220	0.1453	0.5682	4.8791	0.3891	0.2855	64.30	7773.00	13.68	191.00	8.2	1748	8.3	20.5
Composter D	Control	5/20/05	0.4850	0.2941	0.8192	6.3877	0.4513	0.2657	86.70	9606.00	17.39	219.40	8.7	1664	8.1	19.5
Composter D	Control	5/20/05	0.4970	0.2981	0.8452	6.4333	0.4568	0.2989	88.10	9764.00	18.82	220.70	9.1	1520	7.5	19.9
Composter D	Control	5/20/05	0.4770	0.2951	0.8492	6.6462	0.4632	0.3275	87.80	10104.0	17.85	245.20	8.9	856	9.0	19.9
Composter D	10% Sawdust	5/20/05	0.4750	0.2914	0.8145	6.3861	0.4495	0.2930	86.80	9589.00	18.99	220.20	9.0	1298	10.2	19.8
Composter D	10% Sawdust	5/20/05	0.4800	0.2934	0.8192	6.1977	0.4528	0.2905	87.00	9589.00	17.90	224.90	8.7	1566	11.0	20.3
Composter D	10% Sawdust	5/20/05	0.4800	0.2937	0.8113	6.6166	0.4499	0.2911	86.10	9760.00	17.41	229.90	8.8	1281	10.6	19.4
Composter D	30% Sawdust	5/20/05	0.4630	0.2794	0.7781	6.1952	0.4327	0.2655	82.20	9380.00	16.80	227.50	9.0	1290	14.4	19.8
Composter D	30% Sawdust	5/20/05	0.4620	0.2771	0.7647	6.3648	0.4295	0.2706	81.70	9105.00	16.85	212.50	8.9	410	13.8	18.9
Composter D	30% Sawdust	5/20/05	0.4660	0.2850	0.7801	6.4583	0.4430	0.2762	84.10	9851.00	17.31	222.60	8.9	740	13.2	18.5

Composter D	10% Peanut Hulls	5/20/05	0.1860	0.2919	0.8224	6.3621	0.4544	0.2882	86.00	9531.00	16.75	224.60	8.6	1650	9.9	18.9
Composter D	10% Peanut Hulls	5/20/05	0.4930	0.2984	0.8346	6.3098	0.4523	0.2526	87.90	9663.00	17.83	216.90	8.7	1467	9.3	19.7
Composter D	10% Peanut Hulls	5/20/05	0.5000	0.2956	0.8586	6.2767	0.4575	0.2756	87.00	9663.00	17.02	221.50	9.0	1580	10.0	20.0
Composter D	30% Peanut Hulls	5/20/05	0.5230	0.2914	0.8621	6.1785	0.4640	0.2623	85.60	9503.00	17.16	221.40	8.9	959	13.2	18.6
Composter D	30% Peanut Hulls	5/20/05	0.5070	0.2852	0.8162	6.0888	0.4539	0.2723	83.90	9352.00	16.79	219.30	8.8	618	13.1	18.5
Composter D	30% Peanut Hulls	5/20/05	0.4940	0.2833	0.8189	6.5864	0.4551	0.2399	83.50	9788.00	16.65	224.60	8.6	1590	12.2	18.9
Composter D	10% Wood Chips	5/20/05	0.4800	0.2995	0.8417	6.8594	0.4615	0.2934	88.40	10233.00	17.65	232.60	8.7	1412	8.8	20.0
Composter D	10% Wood Chips	5/20/05	0.4880	0.3038	0.8325	6.7671	0.4649	0.3030	88.80	9924.00	18.27	239.10	9.0	1344	9.0	19.8
Composter D	10% Wood Chips	5/20/05	0.4770	0.3022	0.8268	6.6908	0.4668	0.2802	89.70	9989.00	17.92	227.20	7.7	301	8.9	19.0
Composter D	30% Wood Chips	5/20/05	0.4730	0.2936	0.8189	6.6637	0.4623	0.2459	86.50	10203.00	16.68	256.80	8.9	943	9.2	18.4
Composter D	30% Wood Chips	5/20/05	0.4800	0.2881	0.7770	5.9173	0.4304	0.2842	81.20	9423.00	16.11	210.40	8.6	1437	9.2	19.5
Composter D	30% Wood Chips	5/20/05	0.4890	0.2908	0.8172	6.3375	0.4384	0.2815	82.40	9600.00	16.83	211.40	8.7	1432	9.4	19.9

Table 7. Sixty day analysis from Soil Control Laboratory.

Sample ID	Carbon Source	Date	C:N ratio	OM content (% dw)	Soluble Salts (umhos/cm) 1:5 w/w	pH (units) 1:5 w/w	Total N (% dw)	Total P (mg/kg dw)	Total Ca (mg/kg dw)	Total Na (mg/kg dw)	Size <5/8"	Size <3/8"	Respiration (mg CO ₂ -C/gOM/d)	Cucumber Bioassay (% germ)	Cucumber Bioassay (% vigor)	% Moisture
Composter A	Control	6/17/05	12	8.80	1892	9.00	0.49	N/A	N/A	N/A	100.0	100.0	N/A	N/A	N/A	6/17/05
Composter A	Control	6/17/05	11	8.10	2090	8.97	0.44	N/A	N/A	N/A	100.0	100.0	N/A	N/A	N/A	6/17/05
Composter A	Control	6/17/05	11	8.63	2120	8.89	0.43	N/A	N/A	N/A	100.0	100.0	N/A	N/A	N/A	6/17/05
Composter A	10% Sawdust	6/17/05	13	9.94	1689	9.06	0.42	N/A	N/A	N/A	100.0	100.0	N/A	N/A	N/A	6/17/05
Composter A	10% Sawdust	6/17/05	13	10.00	1703	9.01	0.20	N/A	N/A	N/A	100.0	100.0	N/A	N/A	N/A	6/17/05
Composter A	10% Sawdust	6/17/05	13	11.24	1809	9.07	0.47	N/A	N/A	N/A	100.0	100.0	N/A	N/A	N/A	6/17/05
Composter A	30% Sawdust	6/17/05	17	14.55	1265	8.78	0.42	N/A	N/A	N/A	100.0	100.0	N/A	N/A	N/A	6/17/05
Composter A	30% Sawdust	6/17/05	16	14.54	1251	8.59	0.41	N/A	N/A	N/A	100.0	100.0	N/A	N/A	N/A	6/17/05
Composter A	30% Sawdust	6/17/05	14	16.19	1421	8.51	0.42	N/A	N/A	N/A	100.0	98.1	N/A	N/A	N/A	6/17/05
Composter A	10% Peanut Hulls	6/17/05	12	11.71	1919	8.94	0.49	N/A	N/A	N/A	100.0	100.0	N/A	N/A	N/A	6/17/05
Composter A	10% Peanut Hulls	6/17/05	12	10.73	1917	9.26	0.48	N/A	N/A	N/A	100.0	100.0	N/A	N/A	N/A	6/17/05
Composter A	10% Peanut Hulls	6/17/05	12	10.34	1817	9.28	0.46	N/A	N/A	N/A	100.0	97.4	N/A	N/A	N/A	6/17/05
Composter A	30% Peanut Hulls	6/17/05	14	14.28	1685	9.28	0.49	N/A	N/A	N/A	100.0	100.0	N/A	N/A	N/A	6/17/05
Composter A	30% Peanut Hulls	6/17/05	16	14.78	1535	9.35	0.43	N/A	N/A	N/A	100.0	100.0	N/A	N/A	N/A	6/17/05
Composter A	30% Peanut Hulls	6/17/05	14	13.47	1651	9.19	0.50	N/A	N/A	N/A	100.0	98.8	N/A	N/A	N/A	6/17/05
Composter A	10% Wood Chips	6/17/05	15	9.86	1912	9.18	0.45	N/A	N/A	N/A	100.0	98.9	N/A	N/A	N/A	6/17/05
Composter A	10% Wood Chips	6/17/05	15	14.93	1631	9.15	0.49	N/A	N/A	N/A	98.9	97.2	N/A	N/A	N/A	6/17/05
Composter A	10% Wood Chips	6/17/05	12	9.98	1742	9.14	0.47	N/A	N/A	N/A	100.0	100.0	N/A	N/A	N/A	6/17/05
Composter A	30% Wood Chips	6/17/05	12	14.53	1790	9.07	0.43	N/A	N/A	N/A	100.0	98.8	N/A	N/A	N/A	6/17/05
Composter A	30% Wood Chips	6/17/05	23	15.46	1676	9.08	0.48	N/A	N/A	N/A	98.2	95.5	N/A	N/A	N/A	6/17/05
Composter A	30% Wood Chips	6/17/05	22	14.98	1514	9.23	0.43	N/A	N/A	N/A	98.6	95.3	N/A	N/A	N/A	6/17/05
Composter B	Control	6/17/05	14	13.66	2060	8.81	0.78	N/A	N/A	N/A	100.0	96.3	N/A	N/A	N/A	6/17/05
Composter B	Control	6/17/05	14	14.11	1935	8.75	0.75	N/A	N/A	N/A	100.0	94.2	N/A	N/A	N/A	6/17/05
Composter B	Control	6/17/05	15	15.49	2640	8.69	0.68	N/A	N/A	N/A	100.0	89.2	N/A	N/A	N/A	6/17/05
Composter B	10% Sawdust	6/17/05	15	16.01	1847	8.91	0.70	N/A	N/A	N/A	100.0	96.1	N/A	N/A	N/A	6/17/05
Composter B	10% Sawdust	6/17/05	15	15.60	1880	8.88	0.75	N/A	N/A	N/A	100.0	95.0	N/A	N/A	N/A	6/17/05
Composter B	10% Sawdust	6/17/05	17	15.93	1741	8.97	0.73	N/A	N/A	N/A	100.0	93.0	N/A	N/A	N/A	6/17/05
Composter B	30% Sawdust	6/17/05	18	16.65	1450	8.85	0.77	N/A	N/A	N/A	100.0	100.0	N/A	N/A	N/A	6/17/05
Composter B	30% Sawdust	6/17/05	17	19.29	1557	8.76	0.79	N/A	N/A	N/A	100.0	91.9	N/A	N/A	N/A	6/17/05
Composter B	30% Sawdust	6/17/05	15	16.46	1626	8.77	0.88	N/A	N/A	N/A	100.0	89.6	N/A	N/A	N/A	6/17/05
Composter B	10% Peanut Hulls	6/17/05	15	16.65	1871	8.45	0.89	N/A	N/A	N/A	100.0	92.5	N/A	N/A	N/A	6/17/05

Composter B	10% Peanut Hulls	6/17/05	14	14.97	1621	8.61	0.80	N/A	N/A	N/A	100.0	90.0	N/A	N/A	N/A	6/17/05
Composter B	10% Peanut Hulls	6/17/05	16	15.57	2010	8.64	0.98	N/A	N/A	N/A	100.0	93.7	N/A	N/A	N/A	6/17/05
Composter B	30% Peanut Hulls	6/17/05	17	19.00	1897	8.71	0.77	N/A	N/A	N/A	100.0	94.8	N/A	N/A	N/A	6/17/05
Composter B	30% Peanut Hulls	6/17/05	17	17.42	1998	8.50	1.04	N/A	N/A	N/A	100.0	95.2	N/A	N/A	N/A	6/17/05
Composter B	30% Peanut Hulls	6/17/05	15	18.01	1890	8.62	0.95	N/A	N/A	N/A	100.0	90.5	N/A	N/A	N/A	6/17/05
Composter B	10% Wood Chips	6/17/05	14	14.10	1838	8.77	0.92	N/A	N/A	N/A	100.0	91.0	N/A	N/A	N/A	6/17/05
Composter B	10% Wood Chips	6/17/05	14	13.86	2040	8.68	0.96	N/A	N/A	N/A	100.0	85.3	N/A	N/A	N/A	6/17/05
Composter B	10% Wood Chips	6/17/05	14	16.66	2220	8.60	0.84	N/A	N/A	N/A	100.0	92.8	N/A	N/A	N/A	6/17/05
Composter B	30% Wood Chips	6/17/05	16	20.45	1616	8.80	0.79	N/A	N/A	N/A	100.0	88.9	N/A	N/A	N/A	6/17/05
Composter B	30% Wood Chips	6/17/05	16	16.59	1663	9.16	0.89	N/A	N/A	N/A	99.0	89.1	N/A	N/A	N/A	6/17/05
Composter B	30% Wood Chips	6/17/05	17	22.36	1358	9.22	0.76	N/A	N/A	N/A	98.9	91.7	N/A	N/A	N/A	6/17/05
Composter C	Control	6/17/05	11	7.93	2250	8.06	0.44	N/A	N/A	N/A	100.0	96.5	N/A	N/A	N/A	6/17/05
Composter C	Control	6/17/05	11	7.55	2400	7.94	0.51	N/A	N/A	N/A	100.0	96.6	N/A	N/A	N/A	6/17/05
Composter C	Control	6/17/05	11	8.89	2730	7.87	0.44	N/A	N/A	N/A	100.0	96.9	N/A	N/A	N/A	6/17/05
Composter C	10% Sawdust	6/17/05	13	8.61	2050	7.91	0.44	N/A	N/A	N/A	100.0	98.0	N/A	N/A	N/A	6/17/05
Composter C	10% Sawdust	6/17/05	13	7.54	1990	7.92	0.47	N/A	N/A	N/A	100.0	90.5	N/A	N/A	N/A	6/17/05
Composter C	10% Sawdust	6/17/05	13	6.92	2040	7.90	0.49	N/A	N/A	N/A	100.0	99.1	N/A	N/A	N/A	6/17/05
Composter C	30% Sawdust	6/17/05	17	10.61	1293	8.81	0.49	N/A	N/A	N/A	100.0	94.3	N/A	N/A	N/A	6/17/05
Composter C	30% Sawdust	6/17/05	15	9.82	1217	8.77	0.45	N/A	N/A	N/A	100.0	100.0	N/A	N/A	N/A	6/17/05
Composter C	30% Sawdust	6/17/05	17	10.30	1146	8.77	0.45	N/A	N/A	N/A	100.0	97.0	N/A	N/A	N/A	6/17/05
Composter C	10% Peanut Hulls	6/17/05	13	9.16	2370	8.02	0.49	N/A	N/A	N/A	100.0	97.5	N/A	N/A	N/A	6/17/05
Composter C	10% Peanut Hulls	6/17/05	13	9.06	2270	7.92	0.51	N/A	N/A	N/A	100.0	96.4	N/A	N/A	N/A	6/17/05
Composter C	10% Peanut Hulls	6/17/05	13	8.82	2090	7.88	0.52	N/A	N/A	N/A	100.0	95.6	N/A	N/A	N/A	6/17/05
Composter C	30% Peanut Hulls	6/17/05	14	12.38	1729	7.90	0.46	N/A	N/A	N/A	100.0	98.8	N/A	N/A	N/A	6/17/05
Composter C	30% Peanut Hulls	6/17/05	14	12.58	2100	7.79	0.52	N/A	N/A	N/A	100.0	94.5	N/A	N/A	N/A	6/17/05
Composter C	30% Peanut Hulls	6/17/05	15	12.88	2030	7.82	0.54	N/A	N/A	N/A	100.0	95.5	N/A	N/A	N/A	6/17/05
Composter C	10% Wood Chips	6/17/05	13	8.23	2070	7.78	0.44	N/A	N/A	N/A	99.4	92.1	N/A	N/A	N/A	6/17/05
Composter C	10% Wood Chips	6/17/05	12	7.93	1807	7.84	0.50	N/A	N/A	N/A	97.5	92.3	N/A	N/A	N/A	6/17/05
Composter C	10% Wood Chips	6/17/05	11	8.42	2170	7.77	0.48	N/A	N/A	N/A	100.0	98.8	N/A	N/A	N/A	6/17/05
Composter C	30% Wood Chips	6/17/05	12	7.70	1426	7.91	0.41	N/A	N/A	N/A	100.0	96.0	N/A	N/A	N/A	6/17/05
Composter C	30% Wood Chips	6/17/05	13	9.54	1810	7.92	0.42	N/A	N/A	N/A	100.0	96.2	N/A	N/A	N/A	6/17/05
Composter C	30% Wood Chips	6/17/05	19	9.87	1826	8.10	0.42	N/A	N/A	N/A	97.3	87.9	N/A	N/A	N/A	6/17/05
Composter D	Control	6/17/05	11	7.43	2020	8.60	0.44	N/A	N/A	N/A	100.0	91.7	N/A	N/A	N/A	6/17/05
Composter D	Control	6/17/05	12	7.77	1885	8.71	0.40	N/A	N/A	N/A	100.0	99.3	N/A	N/A	N/A	6/17/05
Composter D	Control	6/17/05	12	8.22	1804	8.75	0.47	N/A	N/A	N/A	100.0	98.8	N/A	N/A	N/A	6/17/05
Composter D	10% Sawdust	6/17/05	14	9.00	1280	8.87	0.44	N/A	N/A	N/A	100.0	99.7	N/A	N/A	N/A	6/17/05
Composter D	10% Sawdust	6/17/05	13	8.61	1405	8.83	0.44	N/A	N/A	N/A	100.0	90.3	N/A	N/A	N/A	6/17/05
Composter D	10% Sawdust	6/17/05	14	8.66	1251	8.88	0.44	N/A	N/A	N/A	100.0	94.6	N/A	N/A	N/A	6/17/05
Composter D	30% Sawdust	6/17/05	17	10.76	1259	8.30	0.41	N/A	N/A	N/A	100.0	89.6	N/A	N/A	N/A	6/17/05

Composter D	30% Sawdust	6/17/05	17	11.52	896	8.47	0.41	N/A	N/A	N/A	91.2	91.2	N/A	N/A	N/A	6/17/05
Composter D	30% Sawdust	6/17/05	19	10.01	977	8.57	0.45	N/A	N/A	N/A	97.6	89.7	N/A	N/A	N/A	6/17/05
Composter D	10% Peanut Hulls	6/17/05	14	8.13	1657	8.64	0.45	N/A	N/A	N/A	100.0	89.5	N/A	N/A	N/A	6/17/05
Composter D	10% Peanut Hulls	6/17/05	14	9.78	1695	8.68	0.43	N/A	N/A	N/A	98.1	89.4	N/A	N/A	N/A	6/17/05
Composter D	10% Peanut Hulls	6/17/05	13	8.57	2370	8.64	0.42	N/A	N/A	N/A	100.0	97.5	N/A	N/A	N/A	6/17/05
Composter D	30% Peanut Hulls	6/17/05	17	12.30	1915	8.58	0.50	N/A	N/A	N/A	100.0	99.4	N/A	N/A	N/A	6/17/05
Composter D	30% Peanut Hulls	6/17/05	19	10.87	1670	8.65	0.45	N/A	N/A	N/A	95.5	95.5	N/A	N/A	N/A	6/17/05
Composter D	30% Peanut Hulls	6/17/05	14	13.49	1748	8.69	0.45	N/A	N/A	N/A	100.0	98.9	N/A	N/A	N/A	6/17/05
Composter D	10% Wood Chips	6/17/05	13	9.42	1856	8.66	0.43	N/A	N/A	N/A	100.0	97.2	N/A	N/A	N/A	6/17/05
Composter D	10% Wood Chips	6/17/05	13	8.77	1625	8.69	0.42	N/A	N/A	N/A	100.0	98.6	N/A	N/A	N/A	6/17/05
Composter D	10% Wood Chips	6/17/05	13	9.24	1526	8.72	0.38	N/A	N/A	N/A	100.0	92.4	N/A	N/A	N/A	6/17/05
Composter D	30% Wood Chips	6/17/05	13	10.95	1584	8.73	0.40	N/A	N/A	N/A	99.6	94.9	N/A	N/A	N/A	6/17/05
Composter D	30% Wood Chips	6/17/05	17	9.46	1584	8.79	0.38	N/A	N/A	N/A	99.3	97.7	N/A	N/A	N/A	6/17/05
Composter D	30% Wood Chips	6/17/05	14	11.26	1884	8.69	0.44	N/A	N/A	N/A	99.6	94.6	N/A	N/A	N/A	6/17/05