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APPENDICES

APPENDIX A

EXPERIMENTAL CONDITION DURING OPERATING PERIOD

Table A-1 Sampling trial during experimental period

Trial	Date (dd-mm-yy)	Sampling
1 (At start-up)	23-02-2001	Influent # 1
2 (Sampling # 1)	04-03-2001	Influent # 2 / Effluent # 1 / Plant and Soil # 1
3 (Sampling # 2)	13-03-2001	Influent # 3 / Effluent # 2 / Plant and Soil # 2
4 (Sampling # 3)	22-03-2001	Influent # 4 / Effluent # 3 / Plant and Soil # 3
5 (Sampling # 4)	31-03-2001	Influent # 5 / Effluent # 4 / Plant and Soil # 4
6 (Sampling # 5)	09-04-2001	Influent # 6 / Effluent # 5 / Plant and Soil # 5
7 (Sampling # 6)	18-04-2001	Influent # 7 / Effluent # 6 / Plant and Soil # 6
8 (Sampling # 7)	27-04-2001	Influent # 8 / Effluent # 7 / Plant and Soil # 7
9 (Sampling # 8)	06-05-2001	Influent # 9 / Effluent # 8 / Plant and Soil # 8
10 (Sampling # 9)	15-05-2001	Influent # 10 / Effluent # 9 / Plant and Soil # 9
11 (Sampling # 10)	24-05-2001	Effluent # 10 / Plant and Soil # 10

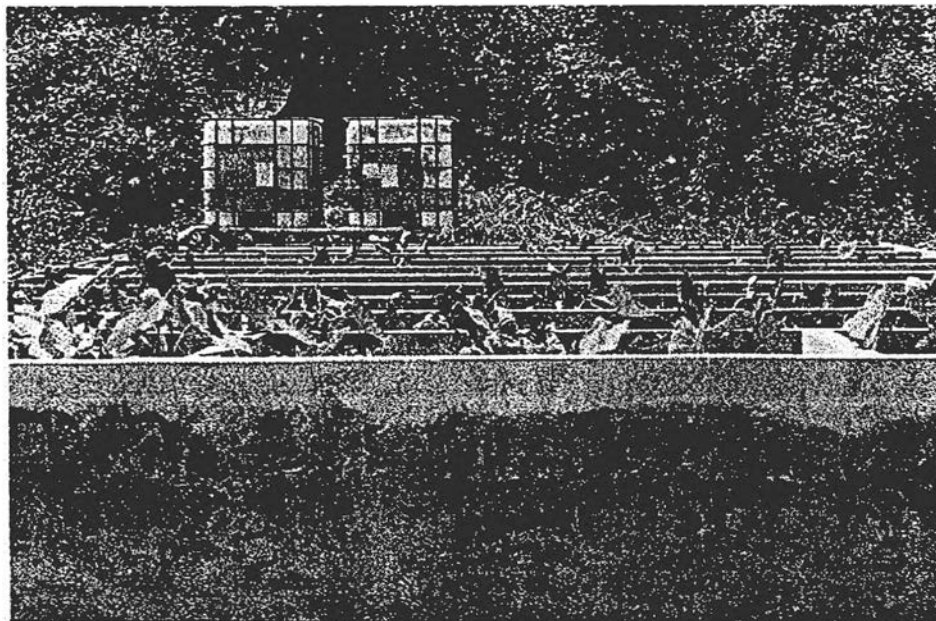
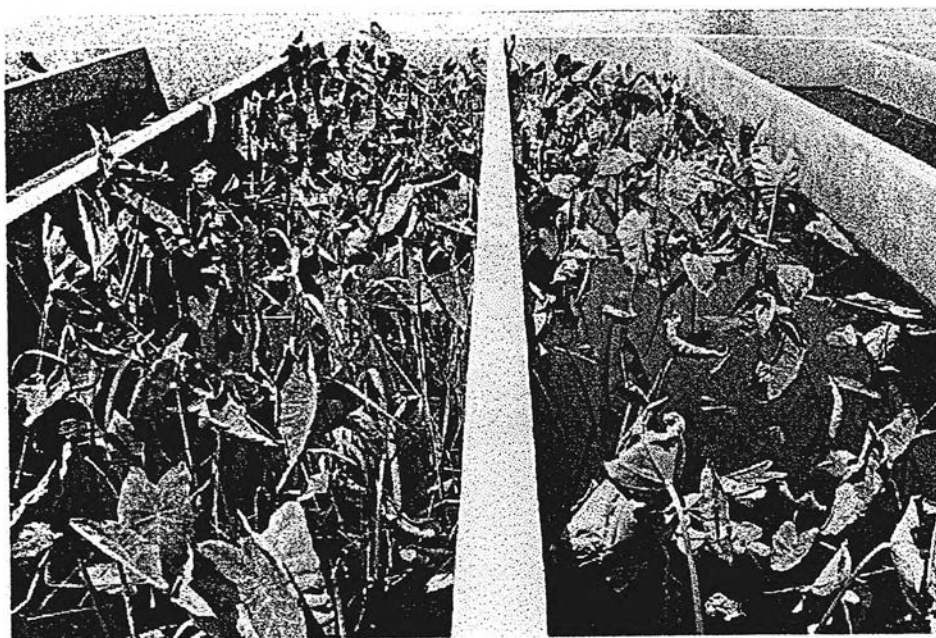


Figure A-1 Constructed wetland systems at experimental started-up (23-Feb-2001)



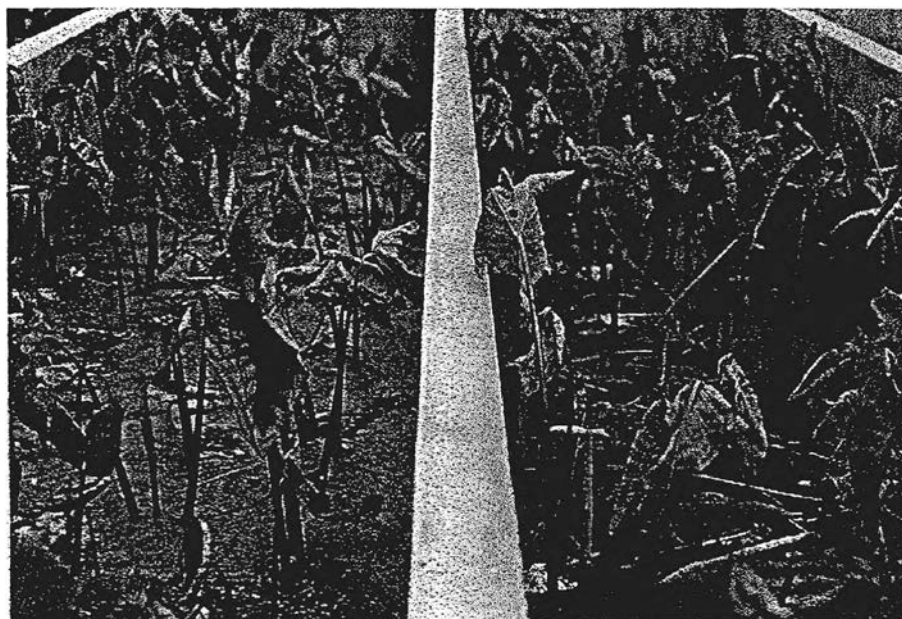
a)



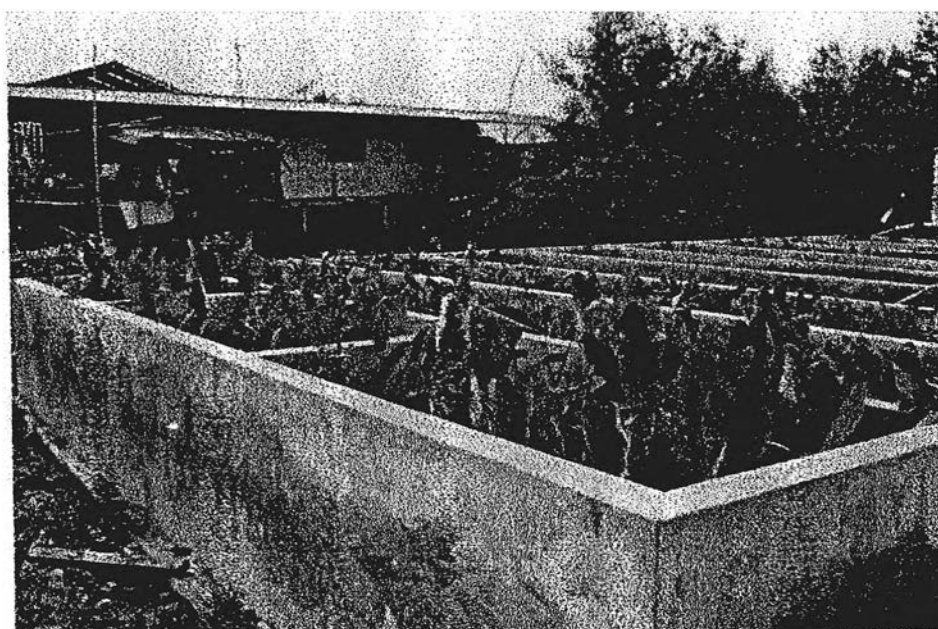
b)

Figure A-2 Constructed wetland systems at 30 days after start-up (22-Mar-2001)

a) Experimental units b) Plant-observed units



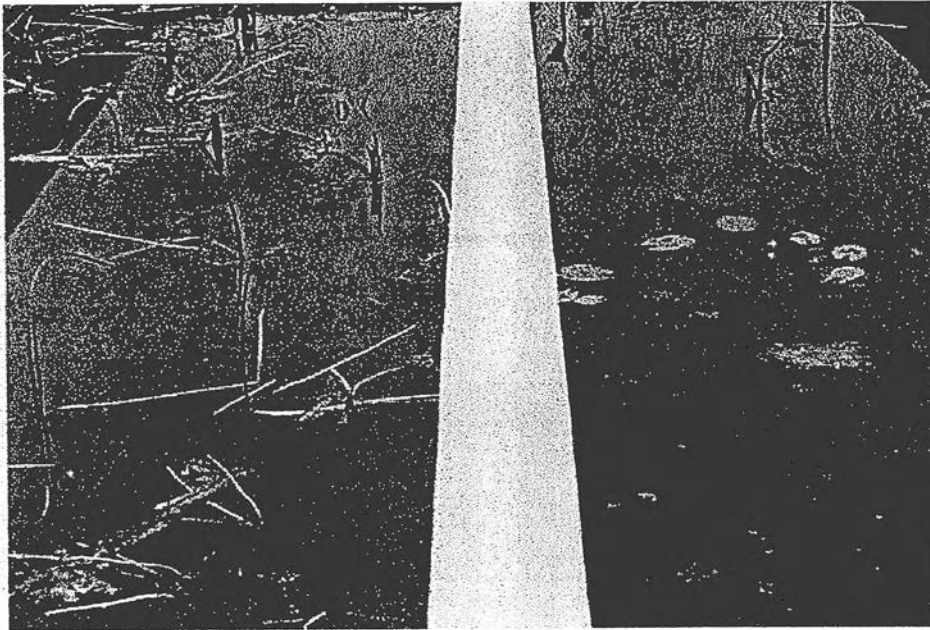
a)



b)

Figure A-3 Constructed wetland systems at 50 days after start-up (9-Apr-2001)

a) Experimental units b) Plant-observed units



a)



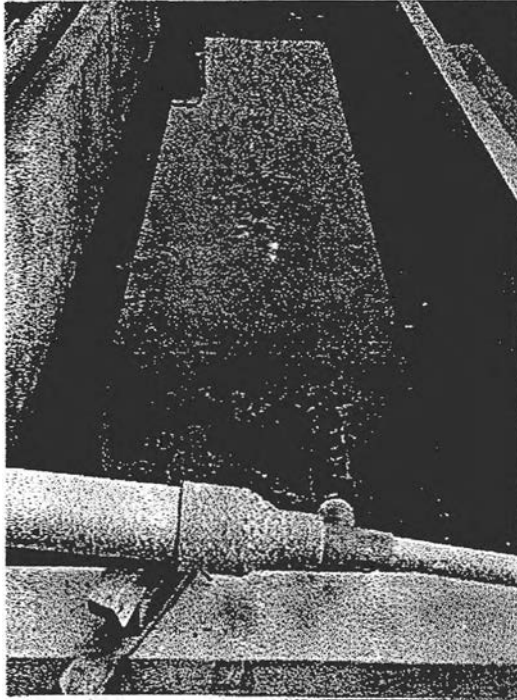
b)



Figure A-4 Constructed wetland systems at 70 days after start-up (27-Apr-2001)

a) Experimental and control units

b) Plant-observed units



a)



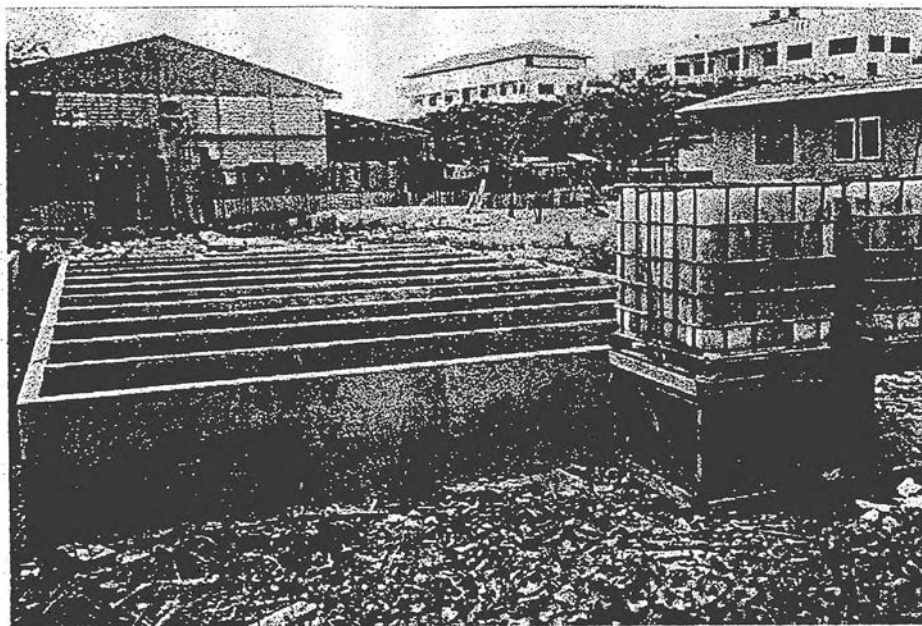
b)

Figure A-5 Constructed wetland systems at 90 days after start-up (15-May-2001)

a) Inner unit b) Overview



a)



b)

Figure A-6 Constructed wetland systems at 100 days (Finished operation) (24-May-2001)

a) Inner unit b) Overview

APPENDIX B

RAW DATA TABLES FOR DATA ANALYSIS

Table B-1 pH data of constructed wetland systems

Water Depths	0.15 m.						0.25 m.						0.35 m.					
Units	Experimental		Experimental		Control		Experimental		Experimental		Control		Experimental		Experimental		Control	
	Green		Violet				Green		Violet				Green		Violet			
days	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent
10	6.43	7.04	6.45	7.24	6.47	7.05	6.59	7.40	7.03	7.96	7.15	7.38	7.22	7.90	7.23	7.82	7.21	7.72
20	7.33	7.45	7.35	7.29	7.37	7.29	7.38	7.76	7.37	7.89	7.39	7.30	7.40	7.84	7.38	7.57	7.34	7.88
30	7.33	6.88	7.41	7.02	7.44	6.74	7.45	7.50	7.46	7.88	7.47	7.55	7.51	7.62	7.48	7.44	7.53	7.37
40	8.00	7.31	8.00	7.43	7.99	7.37	8.00	7.98	7.95	8.18	7.90	7.59	7.97	7.88	7.98	7.90	7.98	7.57
50	7.95	7.12	7.92	7.31	7.87	7.15	7.83	8.39	7.83	8.31	7.81	7.63	7.80	8.23	7.80	8.02	7.80	7.78
60	7.43	7.25	7.41	7.55	7.41	7.22	7.43	8.01	7.47	7.86	7.54	7.40	7.49	8.13	7.64	8.10	7.55	7.80
70	7.36	6.53	7.38	6.80	7.38	6.81	7.40	8.35	7.38	7.75	7.38	7.48	7.41	8.23	7.37	8.39	7.36	7.95
80	7.77	7.05	7.78	7.26	7.76	6.78	7.75	8.81	7.75	8.29	7.71	7.78	7.70	8.10	7.70	8.15	7.70	8.74
90	7.65	7.40	7.62	7.32	7.65	7.52	7.61	8.74	7.62	8.44	7.62	7.82	7.64	8.79	7.62	8.60	7.62	8.05
100	7.61	7.16	7.56	6.83	7.58	7.04	7.58	8.84	7.62	8.20	7.62	8.12	7.58	8.98	7.61	8.84	7.63	7.61
Average	7.49	7.12	7.49	7.21	7.49	7.10	7.50	8.18	7.55	8.08	7.56	7.61	7.57	8.17	7.58	8.08	7.57	7.85
Maximum	8.00	7.45	8.00	7.55	7.99	7.52	8.00	8.84	7.95	8.44	7.90	8.12	7.97	8.98	7.98	8.84	7.98	8.74
Minimum	6.43	6.53	6.45	6.80	6.47	6.74	6.59	7.40	7.03	7.75	7.15	7.30	7.22	7.62	7.23	7.44	7.21	7.37
SD	0.45	0.27	0.43	0.25	0.42	0.26	0.38	0.53	0.27	0.24	0.22	0.25	0.22	0.42	0.22	0.44	0.23	0.37

Table B-2 Temperature data of constructed wetland systems (°C)

Water Depths	0.15 m.						0.25 m.						0.35 m.					
Units	Experimental Green		Experimental Violet		Control		Experimental Green		Experimental Violet		Control		Experimental Green		Experimental Violet		Control	
	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent
10	34.0	28.6	34.1	28.5	34.2	28.5	33.8	28.5	33.6	28.6	33.4	28.7	33.3	28.7	33.3	28.7	33.3	28.8
20	30.6	27.3	30.6	27.3	30.6	27.2	30.4	27.6	30.6	27.8	30.7	26.8	31.1	27.1	30.8	27.4	30.9	27.6
30	28.6	28.5	28.8	28.5	28.5	28.6	28.4	28.4	29.3	28.5	28.8	28.5	28.3	28.5	29.0	28.5	28.5	28.7
40	29.0	34.2	29.0	34.2	29.2	34.1	29.6	34.3	30.0	34.4	30.1	33.4	30.5	34.2	30.3	34.1	30.4	33.7
50	36.0	35.8	36.9	35.6	38.7	35.5	38.8	36.5	39.3	34.9	39.4	34.5	40.7	36.0	39.8	35.3	35.9	34.6
60	37.3	36.3	39.0	37.5	40.1	37.4	39.4	37.0	39.1	36.2	41.3	35.8	37.4	34.5	44.0	36.3	41.4	35.4
70	36.2	32.6	36.1	32.1	36.9	31.6	36.9	31.6	37.4	31.6	38.2	31.4	44.7	31.1	41.1	31.1	39.5	31.3
80	33.9	34.5	34.4	35.7	35.2	35.4	36.0	34.6	37.2	34.2	38.9	34.2	40.2	33.1	40.5	33.2	40.0	33.6
90	34.5	33.9	36.0	33.7	37.4	33.4	38.4	33.2	38.6	33.2	38.7	32.9	39.1	35.5	39.4	33.3	39.4	33.2
100	37.0	30.6	38.0	31.2	38.6	30.9	39.1	30.9	37.3	31.1	36.9	30.9	42.2	30.2	39.9	30.9	37.1	30.9
Average	33.7	32.2	34.3	32.4	34.9	32.3	35.1	32.3	35.2	32.1	35.6	31.7	36.8	31.9	36.8	31.9	35.6	31.8
Maximum	37.3	36.3	39.0	37.5	40.1	37.4	39.4	37.0	39.3	36.2	41.3	35.8	44.7	36.0	44.0	36.3	41.4	35.4
Minimum	28.6	27.3	28.8	27.3	28.5	27.2	28.4	27.6	29.3	27.8	28.8	26.8	28.3	27.1	29.0	27.4	28.5	27.6
SD	3.23	3.25	3.66	3.50	4.19	3.45	4.24	3.40	3.98	2.99	4.49	2.97	5.58	3.19	5.38	3.04	4.59	2.73

Table B-3 Conductivity data of constructed wetland systems ($\mu\text{S}/\text{cm}$)

Water Depths	0.15 m.						0.25 m.						0.35 m.					
Units	Experimental Green		Experimental Violet		Control		Experimental Green		Experimental Violet		Control		Experimental Green		Experimental Violet		Control	
days	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent
10	9.07	15.00	8.60	14.60	8.83	14.40	6.80	13.20	7.43	13.80	6.45	11.80	5.37	9.98	6.54	12.90	7.55	12.80
20	14.70	12.90	14.70	11.40	14.80	11.70	14.70	10.90	14.80	12.80	14.70	11.10	15.00	8.18	14.80	11.20	14.90	11.40
30	14.60	12.40	14.60	11.70	14.60	12.10	14.50	11.40	14.30	12.50	14.50	11.20	14.60	9.84	14.50	11.90	14.50	12.00
40	14.30	11.60	14.30	11.40	14.40	11.80	14.30	11.00	14.20	12.10	14.40	11.40	14.30	9.47	14.30	11.20	14.30	12.10
50	13.40	14.80	13.40	14.60	13.50	14.50	13.60	13.40	13.50	14.50	13.50	12.70	13.50	12.80	13.50	13.90	13.50	13.90
60	13.00	17.60	12.90	17.60	13.00	17.00	13.00	15.80	13.00	16.50	12.30	14.50	13.10	14.60	11.70	16.10	12.30	15.50
70	12.70	19.50	12.50	20.60	12.60	20.00	12.30	19.10	12.40	18.20	12.50	16.50	12.60	17.30	12.50	18.00	12.40	16.60
80	10.80	9.79	10.90	11.40	10.80	11.80	10.80	10.80	11.10	13.60	10.90	11.90	10.90	11.30	11.10	11.40	11.00	13.00
90	12.20	11.60	12.20	11.50	12.20	12.20	12.20	10.50	12.20	12.50	12.20	11.70	12.20	11.10	12.20	11.10	12.20	12.80
100	12.80	8.73	12.80	9.05	12.80	9.69	12.90	7.97	12.90	9.98	12.80	9.25	12.80	9.50	12.70	9.50	12.90	11.40
Average	12.76	13.39	12.69	13.39	12.75	13.52	12.51	12.41	12.58	13.65	12.43	12.21	12.44	11.41	12.38	12.72	12.56	13.15
Maximum	14.70	19.50	14.70	20.60	14.80	20.00	14.70	19.10	14.80	18.20	14.70	16.50	15.00	17.30	14.80	18.00	14.90	16.60
Minimum	9.07	8.73	8.60	9.05	8.83	9.69	6.80	7.97	7.43	9.98	6.45	9.25	5.37	8.18	6.54	9.50	7.55	11.40
SD	1.76	3.37	1.86	3.49	1.84	3.05	2.34	3.15	2.12	2.33	2.42	2.00	2.77	2.77	2.40	2.60	2.13	1.73

Table B-4 Salinity data of constructed wetland systems (ppt)

Water Depths	0.15 m.						0.25 m.						0.35 m.					
Units	Experimental Green		Experimental Violet		Control		Experimental Green		Experimental Violet		Control		Experimental Green		Experimental Violet		Control	
days	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent
10	8.50	8.70	8.40	8.50	8.50	8.30	8.20	7.60	8.10	8.00	8.50	6.70	8.50	6.10	8.40	7.40	8.40	7.30
20	8.50	7.40	8.50	6.40	8.60	6.60	8.50	6.10	8.50	7.30	8.50	6.30	8.70	6.40	8.50	6.30	8.60	6.40
30	8.50	7.10	8.40	6.70	8.40	6.90	8.40	6.40	8.30	7.10	8.40	6.30	8.40	5.50	8.40	6.70	8.40	6.80
40	8.30	6.60	8.30	6.40	8.30	6.70	8.30	6.20	8.20	6.90	8.30	6.40	8.30	5.20	8.30	6.30	8.20	6.90
50	7.70	8.50	7.70	8.40	7.70	8.40	7.70	7.70	7.70	8.30	7.70	7.20	7.70	7.30	7.70	8.00	7.70	8.00
60	7.40	10.30	7.40	10.30	7.30	10.00	7.30	9.20	7.20	9.70	6.90	8.40	7.40	8.40	6.60	9.40	6.90	9.00
70	7.30	11.60	7.10	12.40	7.10	12.00	7.00	11.40	7.00	10.80	7.10	9.70	7.10	10.10	7.10	10.60	7.10	9.80
80	6.00	5.50	6.00	6.40	6.00	6.70	6.00	6.10	6.00	7.40	6.10	6.70	6.10	6.40	6.10	6.50	6.00	7.40
90	6.90	9.50	7.20	6.50	7.50	7.00	7.40	5.90	7.20	7.10	7.20	6.60	7.30	6.20	7.20	6.30	7.20	7.40
100	7.30	4.80	7.20	5.00	7.30	5.40	7.30	4.30	7.30	5.50	7.20	5.50	7.30	5.30	7.30	5.30	7.30	6.50
Average	7.64	8.00	7.62	7.70	7.67	7.80	7.61	7.09	7.55	7.81	7.59	6.98	7.68	6.69	7.56	7.28	7.58	7.55
Maximum	8.50	11.60	8.50	12.40	8.60	12.00	8.50	11.40	8.50	10.80	8.50	9.70	8.70	10.10	8.50	10.60	8.60	9.80
Minimum	6.00	4.80	6.00	5.00	6.00	5.40	6.00	4.30	6.00	5.50	6.10	5.50	6.10	5.20	6.10	5.30	6.00	6.40
SD	0.83	2.13	0.80	2.23	0.81	1.95	0.78	2.00	0.76	1.51	0.82	1.21	0.80	1.54	0.84	1.63	0.83	1.10

Table B-5 Total suspended solid data of constructed wetland systems (mg/l)

Water Depths	0.15 m.						0.25 m.						0.35 m.					
Units	Experimental		Experimental		Control		Experimental		Experimental		Control		Experimental		Experimental		Control	
	Green		Violet				Green		Violet				Green		Violet			
days	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent
10	96	23	94	34	92	39	74	43	72	34	70	31	76	22	74	35	72	42
20	49	35	48	30	53	33	63	39	65	51	58	26	53	46	67	37	61	45
30	44	26	28	14	39	18	108	13	58	14	86	42	78	22	90	13	95	47
40	44	24	17	9	17	9	69	8	51	7	30	12	19	8	76	6	39	16
50	30	12	55	22	19	11	50	25	62	52	25	17	49	22	31	17	35	20
60	34	12	38	31	45	18	89	43	64	53	32	24	110	32	33	27	31	17
70	16	14	29	7	18	8	17	14	36	16	20	11	97	23	37	27	60	33
80	25	5	40	2	22	14	43	8	50	8	5	3	107	8	41	11	19	9
90	45	7	58	14	68	49	59	37	67	22	63	37	415	44	60	16	78	38
100	67	6	87	42	78	42	119	30	77	29	69	37	143	87	75	48	84	49
Average	45	16	49	21	45	24	69	26	60	29	46	24	115	31	58	24	57	32
Maximum	96	35	94	42	92	49	119	43	77	53	86	42	415	87	90	48	95	49
Minimum	16	5	17	2	17	8	17	8	36	7	5	3	19	8	31	6	19	9
SD	22.83	10.06	25.06	13.29	27.17	15.19	30.41	14.32	11.96	18.20	26.64	12.99	111.31	23.32	21.24	13.38	25.36	14.80

Table B-6 Chromium concentration data of constructed wetland systems (mg/l)

Water Depths	0.15 m.						0.25 m.						0.35 m.					
Units	Experimental Green		Experimental Violet		Control		Experimental Green		Experimental Violet		Control		Experimental Green		Experimental Violet		Control	
days	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent
10	0.15	0.09	0.15	0.12	0.15	0.10	0.16	0.09	0.16	0.11	0.16	0.10	0.17	0.08	0.17	0.10	0.17	0.11
20	0.14	0.09	0.15	0.11	0.16	0.12	0.15	0.09	0.13	0.09	0.15	0.12	0.17	0.09	0.17	0.08	0.17	0.09
30	0.17	0.08	0.13	0.09	0.13	0.10	0.18	0.08	0.17	0.08	0.17	0.08	0.18	0.07	0.16	0.08	0.17	0.08
40	0.14	0.07	0.16	0.08	0.14	0.07	0.17	0.05	0.17	0.06	0.15	0.06	0.18	0.07	0.16	0.09	0.17	0.08
50	0.12	0.07	0.35	0.06	0.15	0.06	0.17	0.05	0.16	0.09	0.17	0.07	0.12	0.09	0.16	0.06	0.16	0.08
60	0.12	0.05	0.12	0.02	0.16	0.08	0.15	0.09	0.15	0.06	0.15	0.08	0.12	0.05	0.12	0.08	0.12	0.06
70	0.20	0.04	0.18	0.05	0.17	0.06	0.17	0.05	0.17	0.07	0.17	0.07	0.20	0.06	0.17	0.05	0.16	0.08
80	0.18	0.05	0.20	0.06	0.19	0.07	0.19	0.06	0.18	0.07	0.18	0.07	0.17	0.06	0.17	0.07	0.17	0.07
90	0.20	0.13	0.21	0.13	0.18	0.12	0.18	0.11	0.19	0.13	0.21	0.12	0.20	0.14	0.18	0.11	0.17	0.12
100	0.15	0.08	0.12	0.09	0.16	0.07	0.19	0.07	0.16	0.09	0.13	0.09	0.15	0.11	0.14	0.09	0.16	0.10
Average	0.16	0.07	0.18	0.08	0.16	0.08	0.17	0.07	0.16	0.08	0.16	0.08	0.16	0.08	0.16	0.08	0.16	0.09
Maximum	0.20	0.13	0.35	0.13	0.19	0.12	0.19	0.11	0.19	0.13	0.21	0.12	0.20	0.14	0.18	0.11	0.17	0.12
Minimum	0.12	0.04	0.12	0.02	0.13	0.06	0.15	0.05	0.13	0.06	0.13	0.06	0.12	0.05	0.12	0.05	0.12	0.06
SD	0.03	0.03	0.07	0.03	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.01	0.02

Table B-7 Total chromium amounts in wetland soil beds of constructed wetland systems ($\mu\text{g/g}$ (dry weight))

Water Depths	0.15 m.			0.25 m.			0.35 m.		
Units	Experimental		Control	Experimental		Control	Experimental		Control
	Green	Violet		Green	Violet		Green	Violet	
Days	<i>C. esculenta</i>	<i>C. esculenta</i>		<i>C. esculenta</i>	<i>C. esculenta</i>		<i>C. esculenta</i>	<i>C. esculenta</i>	
10	3.5329	3.5217	3.3145	5.8467	5.5548	5.4416	7.9978	7.4689	7.2109
20	3.5478	3.5379	3.3558	5.9898	5.7725	5.6385	8.8652	7.5318	7.2239
30	3.5897	3.5901	3.3625	6.2760	5.8228	5.9665	9.6988	7.6331	7.3597
40	3.6648	3.6458	3.3716	6.3897	5.9485	6.0054	9.8951	7.8775	7.4879
50	3.6919	3.6788	3.3879	6.4901	6.1999	6.2101	10.3268	7.9625	7.5871
60	3.7245	3.7014	3.4776	6.6679	6.2668	6.4997	10.6757	8.3024	7.7965
70	3.7597	3.7298	3.5698	6.9998	6.5019	6.5932	10.9849	8.4548	7.9221
80	3.7789	3.7668	3.5789	7.5597	6.7314	6.7903	11.5798	8.9778	8.0114
90	3.8562	3.8165	3.6276	7.6995	6.8245	6.8165	11.8996	9.4263	8.3549
100	3.9478	3.8997	3.6280	7.9275	7.0035	6.9939	11.9599	9.9856	8.7045
Average	3.7094	3.6889	3.4674	6.7847	6.2627	6.2956	10.3884	8.3621	7.7659
Maximum	3.9478	3.8997	3.6280	7.9275	7.0035	6.9939	11.9599	9.9856	8.7045
Minimum	3.5329	3.5217	3.3145	5.8467	5.5548	5.4416	7.9978	7.4689	7.2109
SD	0.1333	0.1207	0.1233	0.7316	0.4920	0.5265	1.3068	0.8546	0.4932

Table B-8 Total chromium amounts in various parts of *C. esculenta* in constructed wetland systems at 0.15 m wastewater level (mg/g(dry weight))

Water Depths	0.15 m.							
Treatments	Green <i>C. esculenta</i>				Violet <i>C. esculenta</i>			
Days	Lamina	Petiole	Corm	Root	Lamina	Petiole	Corm	Root
10	0.0850	0.0580	0.1185	0.3120	0.0827	0.0628	0.1230	0.2670
20	0.0797	0.0630	0.1220	0.2600	0.0843	0.0610	0.1130	0.2540
30	0.0787	0.0655	0.1150	0.2480	0.0797	0.0555	0.1085	0.2360
40	0.0787	0.0575	0.1050	0.2450	0.0803	0.0568	0.1145	0.2400
50	0.0773	0.0605	0.1125	0.2350	0.0787	0.0645	0.1140	0.2330
60	0.0780	0.0595	0.1055	0.2430	0.0750	0.0628	0.1090	0.2550
70	N.A.	N.A.	N.A.	N.A.	0.0833	0.0568	0.1085	0.2450
80	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
90	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
100	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Average	0.0796	0.0607	0.1131	0.2572	0.0806	0.0600	0.1129	0.2471
Maximum	0.0850	0.0655	0.1220	0.3120	0.0843	0.0645	0.1230	0.2670
Minimum	0.0773	0.0575	0.1050	0.2350	0.0750	0.0555	0.1085	0.2330
SD	0.0028	0.0031	0.0069	0.0281	0.0032	0.0036	0.0052	0.0121

Table B-9 Total chromium amounts in various parts of *C. esculenta* in constructed wetland systems at 0.25 m wastewater level (mg/g(dry weight))

Water Depths	0.25 m.							
Treatments	<i>Green C. esculenta</i>				<i>Violet C. esculenta</i>			
Days	Lamina	Petiole	Corm	Root	Lamina	Petiole	Corm	Root
10	0.0843	0.0585	0.1165	0.2590	0.0833	0.0653	0.1170	0.2580
20	0.0750	0.0650	0.1190	0.2410	0.0813	0.0678	0.1160	0.2560
30	0.0840	0.0613	0.1205	0.2590	0.0773	0.0578	0.1140	0.2460
40	0.0820	0.0655	0.1110	0.2430	0.0803	0.0573	0.1055	0.2400
50	0.0787	0.0588	0.1055	0.2490	0.0793	0.0623	0.1085	0.2410
60	0.0783	0.0615	0.1075	0.2590	0.0740	0.0575	0.1150	0.2290
70	0.0823	0.0618	0.1090	0.2500	N.A.	N.A.	N.A.	N.A.
80	0.0793	0.0628	0.1135	0.2150	N.A.	N.A.	N.A.	N.A.
90	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
100	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Average	0.0805	0.0619	0.1128	0.2469	0.0793	0.0613	0.1127	0.2450
Maximum	0.0843	0.0655	0.1205	0.2590	0.0833	0.0678	0.1170	0.2580
Minimum	0.0750	0.0585	0.1055	0.2150	0.0740	0.0573	0.1055	0.2290
SD	0.0032	0.0025	0.0055	0.0147	0.0033	0.0045	0.0046	0.0108

Table B-10 Total chromium amounts in various parts of *C. esculenta* in constructed wetland systems at 0.35 m wastewater level (mg/g(dry weight))

Water Depths	0.35 m.							
Treatments	<i>Green C. esculenta</i>				<i>Violet C. esculenta</i>			
Days	Lamina	Petiole	Corm	Root	Lamina	Petiole	Corm	Root
10	0.0830	0.0608	0.1290	0.2600	0.0820	0.0600	0.1300	0.2490
20	0.0870	0.0633	0.1105	0.2620	0.0807	0.0623	0.1205	0.2880
30	0.0787	0.0575	0.1180	0.2670	0.0770	0.0638	0.1020	0.2470
40	0.0860	0.0593	0.1095	0.2340	0.0840	0.0608	0.1080	0.2450
50	0.0813	0.0630	0.1130	0.2500	0.0827	0.0570	0.1085	0.2270
60	0.0847	0.0613	0.1075	0.2630	N.A.	N.A.	N.A.	N.A.
70	0.0797	0.0613	0.1085	0.2520	N.A.	N.A.	N.A.	N.A.
80	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
90	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
100	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Average	0.0829	0.0609	0.1137	0.2554	0.0813	0.0608	0.1138	0.2512
Maximum	0.0870	0.0633	0.1290	0.2670	0.0840	0.0638	0.1300	0.2880
Minimum	0.0787	0.0575	0.1075	0.2340	0.0770	0.0570	0.1020	0.2270
SD	0.0032	0.0020	0.0076	0.0112	0.0027	0.0025	0.0113	0.0224

Table B-11 Total chromium accumulation data of *C. esculenta* in constructed wetland systems (mg/g(dry weight))

Water Depths	0.15 m.		0.25 m.		0.35 m.	
Treatments	Green	Violet	Green	Violet	Green	Violet
Days	<i>C. esculenta</i>	<i>C. esculenta</i>	<i>C. esculenta</i>	<i>C. esculenta</i>	<i>C. esculenta</i>	<i>C. esculenta</i>
10	0.5735	0.5354	0.5183	0.5236	0.5328	0.5210
20	0.5247	0.5123	0.5000	0.5211	0.5228	0.5514
30	0.5072	0.4797	0.5248	0.4951	0.5212	0.4898
40	0.4862	0.4916	0.5015	0.4831	0.4888	0.4978
50	0.4853	0.4902	0.4919	0.4911	0.5073	0.4752
60	0.4860	0.5018	0.5063	0.4755	0.5164	N.A.
70	N.A.	0.4936	0.5031	N.A.	0.5014	N.A.
80	N.A.	N.A.	0.4706	N.A.	N.A.	N.A.
90	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
100	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Average	0.5105	0.5006	0.5021	0.4982	0.5129	0.5070
Maximum	0.5735	0.5354	0.5248	0.5236	0.5328	0.5514
Minimum	0.4853	0.4797	0.4919	0.4755	0.4888	0.4752
SD	0.0347	0.0184	0.0165	0.0199	0.0148	0.0299

Table B-12 Fresh weight data of *Colocasia esculenta* (L.) Schott (green) at 0.15 m wastewater level (g)

Water Depths	0.15 m.							
Treatments	Experimental green <i>C. esculenta</i>				Plant-observed green <i>C. esculenta</i>			
Days	Lamina	Petiole	Corm	Root	Lamina	Petiole	Corm	Root
10	2.5656	54.8202	21.3525	33.0845	7.0446	60.4505	25.2281	37.4264
20	8.1011	106.9659	66.7984	56.7418	6.1923	75.9595	19.8209	27.0082
30	1.6512	41.3243	49.3567	33.9032	8.1764	94.1054	46.6675	45.2951
40	4.0075	59.5670	54.9843	31.3828	5.3040	81.0459	37.9250	33.2530
50	2.6059	55.4661	49.8370	18.5152	5.6507	99.5576	63.0214	60.0000
60	0.4260	30.6862	58.3060	7.0716	11.7622	119.7823	61.6767	30.4813
70	N.A.	N.A.	N.A.	N.A.	7.8464	81.3134	25.9611	24.4061
80	N.A.	N.A.	N.A.	N.A.	8.3583	82.5132	51.3873	47.4500
90	N.A.	N.A.	N.A.	N.A.	10.3000	84.0264	54.6333	46.1206
100	N.A.	N.A.	N.A.	N.A.	12.3665	92.3697	62.3596	60.3221
Average	1.9357	34.8830	30.0635	18.0699	8.3001	87.1124	44.8681	41.1763
Maximum	8.1011	106.9659	66.7984	56.7418	12.3665	119.7823	63.0214	60.3221
Minimum	0.4260	30.6862	21.3525	7.0716	5.3040	60.4505	19.8209	24.4061
SD	2.5927	35.8280	28.3284	19.9336	2.4667	15.7589	16.5928	12.8013

Table B-13 Fresh weight data of *Colocasia esculenta* (L.) Schott (green) at 0.25 m wastewater level (g)

Water Depths	0.25 m.							
Treatments	Experimental green <i>C. esculenta</i>				Plant-observed green <i>C. esculenta</i>			
Days	Lamina	Petiole	Corm	Root	Lamina	Petiole	Corm	Root
10	4.0350	71.5219	29.6941	81.6250	5.5059	67.1881	38.4738	10.1869
20	3.3181	47.0704	17.2279	19.8409	6.5334	87.5144	43.6495	16.8163
30	3.8517	49.1559	52.3685	26.8178	7.2964	110.0432	82.4795	19.5391
40	4.9543	61.4639	42.8724	39.4838	6.5602	74.7536	38.6132	20.1093
50	2.2183	41.7142	26.6288	29.8335	7.0750	88.6979	43.4637	15.3636
60	3.1344	58.8179	37.4213	10.9456	13.2845	191.1555	54.2674	59.2878
70	3.2170	46.1054	44.8527	20.2057	7.6341	89.6438	48.6207	22.9485
80	0.8752	18.1785	15.4384	13.5857	5.4543	75.9459	96.4120	48.1220
90	N.A.	N.A.	N.A.	N.A.	12.9128	109.5500	86.9026	45.3637
100	N.A.	N.A.	N.A.	N.A.	10.3254	102.5369	94.5689	52.3362
Average	2.5604	39.4028	26.6504	24.2338	8.2582	99.7029	62.7451	31.0073
Maximum	4.9543	71.5219	52.3685	81.6250	13.2845	191.1555	96.4120	59.2878
Minimum	0.8752	18.1785	15.4384	10.9456	5.4543	67.1881	38.4738	10.1869
SD	1.7313	25.0668	18.3065	23.7215	2.8908	35.2616	24.2635	18.1002

Table B-14 Fresh weight data of *Colocasia esculenta* (L.) Schott (green) at 0.35 m wastewater level (g)

Water Depths	0.35 m.							
Treatments	Experimental green <i>C. esculenta</i>				Plant-observed green <i>C. esculenta</i>			
Days	Lamina	Petiole	Corm	Root	Lamina	Petiole	Corm	Root
10	3.2878	62.1685	56.3738	26.9214	10.5936	100.2581	61.8203	23.6200
20	5.5395	149.6007	44.6820	35.4011	8.7460	80.9422	72.8326	24.4914
30	1.8048	52.7286	31.9928	24.1648	5.5610	136.8976	70.2350	42.0253
40	1.6523	63.9684	42.9258	9.2268	18.0116	181.3828	47.3789	66.2068
50	2.0160	81.0558	38.8971	38.8696	6.3339	157.2890	57.2980	18.9016
60	1.3830	43.1794	83.9462	6.3986	13.5352	163.7065	50.8706	72.4586
70	0.9234	38.6543	61.1527	17.1505	15.2507	170.7567	94.1350	68.3746
80	N.A.	N.A.	N.A.	N.A.	12.4400	133.0100	89.8665	45.4169
90	N.A.	N.A.	N.A.	N.A.	18.3326	229.7449	132.4556	117.1880
100	N.A.	N.A.	N.A.	N.A.	16.1116	173.7575	72.5941	101.8051
Average	1.6607	49.1356	35.9970	15.8133	12.4916	152.7745	74.9487	58.0488
Maximum	5.5395	149.6007	83.9462	38.8696	18.3326	229.7449	132.4556	117.1880
Minimum	0.9234	38.6543	31.9928	6.3986	5.5610	80.9422	47.3789	18.9016
SD	1.7235	45.8296	28.6403	14.8788	4.5944	42.4355	25.2844	33.4218

Table B-15 Fresh weight data of *Colocasia esculenta* (L.) Schott (violet) at 0.15 m wastewater level (g)

Water Depths	0.15 m.							
Treatments	Experimental violet <i>C. esculenta</i>				Plant-observed violet <i>C. esculenta</i>			
Days	Lamina	Petiole	Corm	Root	Lamina	Petiole	Corm	Root
10	5.0704	48.6075	29.4681	33.1150	2.4686	46.7605	14.4061	30.0707
20	5.7407	64.7373	56.8537	23.0674	5.7261	110.2578	30.6242	35.6721
30	3.2795	39.7149	32.0458	18.8490	2.4375	35.5508	20.0510	18.9705
40	3.1825	39.2657	46.0510	15.7488	7.6847	76.9176	58.4008	43.4952
50	2.2774	44.3043	67.4498	5.8858	10.0132	89.8651	69.6221	38.2474
60	1.3305	38.7467	39.6487	11.1887	8.2651	88.2928	78.2426	74.1186
70	0.7210	12.9900	101.1964	2.5370	5.1041	74.7843	60.3980	21.6739
80	N.A.	N.A.	N.A.	N.A.	6.8379	98.1408	83.8140	29.0651
90	N.A.	N.A.	N.A.	N.A.	5.9874	92.3665	76.2236	24.3256
100	N.A.	N.A.	N.A.	N.A.	7.3215	102.3654	88.8995	36.5214
Average	2.1602	28.8366	37.2714	11.0392	6.1846	81.5302	58.0682	35.2161
Maximum	5.7407	64.7373	101.1964	33.1150	10.0132	110.2578	88.8995	74.1186
Minimum	0.7210	12.9900	29.4681	2.5370	2.4375	35.5508	14.4061	18.9705
SD	2.1177	23.5468	32.8617	11.4487	2.4088	23.9391	27.0677	15.7172

Table B-16 Fresh weight data of *Colocasia esculenta* (L.) Schott (violet) at 0.25 m wastewater level (g)

Water Depths	0.25 m.							
Treatments	Experimental violet <i>C. esculenta</i>				Plant-observed violet <i>C. esculenta</i>			
Days	Lamina	Petiole	Corm	Root	Lamina	Petiole	Corm	Root
10	3.2209	40.7451	15.7468	28.4237	3.4773	60.1904	29.6035	29.3783
20	3.8527	85.4858	48.3341	27.3438	2.9227	57.8815	21.8294	12.2296
30	2.4954	42.1945	65.6605	32.0027	3.0132	62.3357	51.1295	38.9867
40	2.2830	52.1499	20.2560	25.2759	5.3160	81.9761	22.6079	25.0800
50	3.7987	57.7754	40.3523	25.4590	4.6144	79.0013	54.0252	25.0169
60	0.6758	36.9043	45.3489	7.4153	6.9630	76.1394	39.7574	37.9846
70	N.A.	N.A.	N.A.	N.A.	5.9478	55.7522	41.8307	34.4609
80	N.A.	N.A.	N.A.	N.A.	5.5829	65.9432	57.2358	24.1437
90	N.A.	N.A.	N.A.	N.A.	6.2354	78.3695	66.9874	24.3658
100	N.A.	N.A.	N.A.	N.A.	8.3225	76.3214	71.2335	39.2351
Average	1.6327	31.5255	23.5699	14.5920	5.2395	69.3911	45.6240	29.0882
Maximum	3.8527	85.4858	65.6605	32.0027	8.3225	81.9761	71.2335	39.2351
Minimum	0.6758	36.9043	15.7468	7.4153	2.9227	55.7522	21.8294	12.2296
SD	1.6629	30.2385	24.5746	14.1127	1.7611	9.9428	17.4781	8.6451

Table B-17 Fresh weight data of *Colocasia esculenta* (L.) Schott (violet) at 0.35 m wastewater level (g)

Water Depths	0.35 m.							
Treatments	Experimental violet <i>C. esculenta</i>				Plant-observed violet <i>C. esculenta</i>			
Days	Lamina	Petiole	Corm	Root	Lamina	Petiole	Corm	Root
10	3.4489	55.9162	47.6500	40.6525	4.3786	57.3805	60.0163	6.2450
20	1.3150	80.4142	47.4965	55.6356	5.5368	52.7736	16.9043	15.0931
30	2.0515	51.2380	24.1043	20.5714	11.3642	43.7251	25.2495	13.0248
40	0.7587	24.1023	27.3362	8.0872	3.0989	37.9050	20.1427	7.3363
50	1.2846	44.7458	46.1202	22.1116	3.7750	100.2644	53.3808	19.2516
60	N.A.	N.A.	N.A.	N.A.	10.1212	96.1050	101.1854	25.6397
70	N.A.	N.A.	N.A.	N.A.	15.8796	88.4639	63.3714	8.3480
80	N.A.	N.A.	N.A.	N.A.	18.9171	81.8283	55.7795	20.0119
90	N.A.	N.A.	N.A.	N.A.	20.3654	84.3215	37.3296	22.0014
100	N.A.	N.A.	N.A.	N.A.	23.3265	89.3254	49.7884	28.0145
Average	0.8859	25.6417	19.2707	14.7058	11.6763	73.2093	48.3148	16.4966
Maximum	3.4489	80.4142	47.6500	55.6356	23.3265	100.2644	101.1854	28.0145
Minimum	0.7587	24.1023	24.1043	8.0872	3.0989	37.9050	16.9043	6.2450
SD	1.1648	30.2335	21.7771	19.8965	7.5336	22.9257	25.1119	7.7168

Table B-18 Dry weight data of *Colocasia esculenta* (L.) Schott (green) at 0.15 m wastewater level (g)

Water Depths	0.15 m.							
Treatments	Experimental green <i>C. esculenta</i>				Plant-observed green <i>C. esculenta</i>			
Days	Lamina	Petiole	Corm	Root	Lamina	Petiole	Corm	Root
10	1.5272	3.4634	1.9643	1.8969	2.5406	4.9020	2.2921	3.1442
20	1.4291	5.6067	5.6510	4.8750	1.9592	4.9400	2.8001	2.5627
30	0.3398	2.7636	5.0118	2.3763	1.5740	7.2312	5.0587	3.5796
40	1.3181	4.6578	6.7305	3.5606	1.6156	7.2500	6.3545	3.3484
50	0.5439	3.5507	4.6135	1.2841	1.3215	9.8263	7.8073	4.9834
60	0.3921	2.1689	7.6013	0.5223	3.7151	9.7175	7.9801	2.5680
70	N.A.	N.A.	N.A.	N.A.	2.7407	6.4342	3.2087	2.3320
80	N.A.	N.A.	N.A.	N.A.	1.4140	5.5049	3.3425	0.8950
90	N.A.	N.A.	N.A.	N.A.	2.6684	5.0934	5.0661	1.5757
100	N.A.	N.A.	N.A.	N.A.	2.8995	5.1225	5.2236	1.7584
Average	0.5550	2.2211	3.1572	1.4515	2.2449	6.6022	4.9134	2.6747
Maximum	1.5272	5.6067	7.6013	4.8750	3.7151	9.8263	7.9801	4.9834
Minimum	0.3398	2.1689	1.9643	0.5223	1.3215	4.9020	2.2921	0.8950
SD	0.6322	2.1276	3.0839	1.7173	0.7869	1.8935	2.0196	1.1633

Table B-19 Dry weight data of *Colocasia esculenta* (L.) Schott (green) at 0.25 m wastewater level (g)

Water Depths	0.25 m.							
Treatments	Experimental green <i>C. esculenta</i>				Plant-observed green <i>C. esculenta</i>			
Days	Lamina	Petiole	Corm	Root	Lamina	Petiole	Corm	Root
10	1.6896	4.2640	2.6898	4.7650	1.6952	5.7031	3.3698	0.7572
20	0.7558	2.1976	1.3215	1.9495	0.6402	4.5458	1.5086	0.9605
30	1.0799	2.3810	5.7724	1.7854	1.3753	8.0587	8.2932	1.3950
40	1.0658	3.4248	4.3257	3.0781	1.0386	6.5970	3.9212	1.5306
50	1.0156	2.6471	2.6547	2.1039	1.7101	6.8237	3.3534	1.0788
60	0.5770	3.8368	3.7279	0.9479	3.5402	17.3673	7.1606	4.0932
70	1.0662	2.9280	4.4332	1.7665	1.1997	6.5922	5.7618	0.2536
80	0.2536	1.5597	1.8479	1.7897	1.5461	7.4642	15.2938	4.0651
90	N.A.	N.A.	N.A.	N.A.	1.0586	8.1159	8.4599	3.0855
100	N.A.	N.A.	N.A.	N.A.	1.1032	8.7451	9.3214	3.2558
Average	0.7504	2.3239	2.6773	1.8186	1.4907	8.0013	6.6444	2.0475
Maximum	1.6896	4.2640	5.7724	4.7650	3.5402	17.3673	15.2938	4.0932
Minimum	0.2536	1.5597	1.3215	0.9479	0.6402	4.5458	1.5086	0.2536
SD	0.5440	1.4583	1.9249	1.4041	0.7928	3.5142	4.0053	1.4333

Table B-20 Dry weight data of *Colocasia esculenta* (L.) Schott (green) at 0.35 m wastewater level (g)

Water Depths	0.35 m.							
Treatments	Experimental green <i>C. esculenta</i>				Plant-observed green <i>C. esculenta</i>			
Days	Lamina	Petiole	Corm	Root	Lamina	Petiole	Corm	Root
10	1.9435	4.9787	4.9512	1.5348	2.6848	7.4650	7.4112	1.5447
20	1.7469	7.5325	4.1598	3.6482	1.7108	5.6817	8.5331	1.9910
30	0.3690	3.7434	3.1688	1.8275	2.5903	10.2910	6.6007	4.0233
40	0.7083	3.6485	4.2528	0.5870	3.7976	19.1324	6.7427	6.3451
50	1.1181	3.7846	3.3989	2.0956	2.4792	22.6600	7.4075	1.1947
60	0.2392	3.4593	8.2106	0.6128	3.7353	15.5508	8.7164	6.5016
70	0.3707	2.7732	6.9407	1.3704	5.2152	17.6895	10.2674	7.0181
80	N.A.	N.A.	N.A.	N.A.	3.0918	13.7962	15.5496	5.4840
90	N.A.	N.A.	N.A.	N.A.	5.2110	23.2849	16.3169	14.8105
100	N.A.	N.A.	N.A.	N.A.	5.0221	17.9884	12.3241	11.4434
Average	0.6496	2.9920	3.5083	1.1676	3.5538	15.3540	9.9870	6.0356
Maximum	1.9435	7.5325	8.2106	3.6482	5.2152	23.2849	16.3169	14.8105
Minimum	0.2392	2.7732	3.1688	0.5870	1.7108	5.6817	6.6007	1.1947
SD	0.7220	2.4338	2.8675	1.1719	1.2562	6.0262	3.5833	4.3695

Table B-21 Dry weight data of *Colocasia esculenta* (L.) Schott (violet) at 0.15 m wastewater level (g)

Water Depths	0.15 m.							
Treatments	Experimental violet <i>C. esculenta</i>				Plant-observed violet <i>C. esculenta</i>			
Days	Lamina	Petiole	Corm	Root	Lamina	Petiole	Corm	Root
10	1.2394	3.1018	2.2317	2.1430	1.4130	3.9314	1.5090	2.7106
20	1.2282	4.1824	5.2126	2.7886	1.1929	6.9772	3.5027	4.0951
30	0.7460	2.2500	2.3298	0.9991	0.4750	2.5152	2.0611	1.5242
40	1.3205	3.1321	4.2424	1.0786	2.5320	6.6044	7.4372	3.5487
50	1.0090	2.5404	4.6583	0.4248	2.7062	7.3101	6.9822	3.8663
60	0.7202	2.4119	3.2944	1.0567	2.0905	3.4877	7.7539	6.1818
70	0.1391	1.1366	9.3342	0.4055	1.6434	4.8308	6.9945	2.3751
80	N.A.	N.A.	N.A.	N.A.	1.2881	4.9275	8.4099	1.0005
90	N.A.	N.A.	N.A.	N.A.	1.0023	5.3214	7.6358	2.4558
100	N.A.	N.A.	N.A.	N.A.	1.6854	6.9987	8.9654	2.9854
Average	0.6402	1.8755	3.1303	0.8896	1.6029	5.2904	6.1252	3.0744
Maximum	1.3205	4.1824	9.3342	2.7886	2.7062	7.3101	8.9654	6.1818
Minimum	0.1391	1.1366	2.2317	0.4055	0.4750	2.5152	1.5090	1.0005
SD	0.5580	1.5046	2.9301	0.9474	0.6882	1.6570	2.7108	1.4631

Table B-22 Dry weight data of *Colocasia esculenta* (L.) Schott (violet) at 0.25 m wastewater level (g)

Water Depths	0.25 m.							
Treatments	Experimental violet <i>C. esculenta</i>				Plant-observed violet <i>C. esculenta</i>			
Days	Lamina	Petiole	Corm	Root	Lamina	Petiole	Corm	Root
10	1.7393	3.3180	2.3075	1.7543	1.7845	5.1489	3.5422	1.8492
20	1.4008	4.3360	4.0116	2.5087	0.8842	4.2983	2.4659	1.0642
30	0.5899	2.5238	4.5252	1.8071	0.7969	3.9096	3.8471	2.5186
40	0.8451	2.9693	2.9519	1.7208	1.6886	6.9590	2.7920	2.2527
50	0.9924	3.1185	3.5976	1.6580	2.0511	6.3275	8.6894	1.8414
60	0.6216	2.4014	4.4200	0.7124	1.2113	10.7667	4.0231	1.3036
70	N.A.	N.A.	N.A.	N.A.	1.4129	6.1818	4.8123	1.2025
80	N.A.	N.A.	N.A.	N.A.	1.6619	6.9952	6.3286	0.3628
90	N.A.	N.A.	N.A.	N.A.	1.5114	6.6654	4.4568	1.2114
100	N.A.	N.A.	N.A.	N.A.	1.7568	6.8779	5.2210	1.3547
Average	0.6189	1.8667	2.1814	1.0161	1.4760	6.4130	4.6178	1.4961
Maximum	1.7393	4.3360	4.5252	2.5087	2.0511	10.7667	8.6894	2.5186
Minimum	0.5899	2.4014	2.3075	0.7124	0.7969	3.9096	2.4659	0.3628
SD	0.6316	1.6879	1.9862	0.9735	0.4043	1.8935	1.8258	0.6287

Table B-23 Dry weight data of *Colocasia esculenta* (L.) Schott (violet) at 0.35 m wastewater level (g)

Water Depths	0.35 m.							
Treatments	Experimental violet <i>C. esculenta</i>				Plant-observed violet <i>C. esculenta</i>			
Days	Lamina	Petiole	Corm	Root	Lamina	Petiole	Corm	Root
10	1.6822	3.9474	4.2154	2.4681	1.4511	3.5161	5.4098	6.2450
20	0.3990	5.0912	4.6049	6.8115	1.2535	3.7939	2.1596	1.3605
30	0.3232	3.0415	2.9202	1.4563	1.0385	3.2247	2.9918	1.0328
40	0.1908	1.3648	2.8010	0.6445	0.7846	3.4187	2.6651	0.7868
50	1.0767	2.5696	5.2024	1.7577	1.5112	8.7337	8.7284	1.2152
60	N.A.	N.A.	N.A.	N.A.	2.3639	6.9057	11.4209	2.0325
70	N.A.	N.A.	N.A.	N.A.	2.3458	10.0296	8.8624	1.1934
80	N.A.	N.A.	N.A.	N.A.	1.7084	3.5876	8.5427	2.8080
90	N.A.	N.A.	N.A.	N.A.	1.2241	3.8745	5.2114	1.3331
100	N.A.	N.A.	N.A.	N.A.	1.3365	3.6698	6.3398	1.2114
Average	0.3672	1.6015	1.9744	1.3138	1.5018	5.0754	6.2332	1.9219
Maximum	1.6822	5.0912	5.2024	6.8115	2.3639	10.0296	11.4209	6.2450
Minimum	0.1908	1.3648	2.8010	0.6445	0.7846	3.2247	2.1596	0.7868
SD	0.5716	1.9314	2.1967	2.1305	0.5160	2.5200	3.1082	1.6249

Table B-24 Total fresh weight data of *Colocasia esculenta* (L.) Schott (green and violet) in constructed wetland systems (g)

Water Depths	0.15 m.				0.25 m.				0.35 m.			
Treatments	Experimental		Plant-observed		Experimental		Plant-observed		Experimental		Plant-observed	
	Green	Violet	Green	Violet	Green	Violet	Green	Violet	Green	Violet	Green	Violet
Days	<i>C. esculenta</i>		<i>C. esculenta</i>		<i>C. esculenta</i>		<i>C. esculenta</i>		<i>C. esculenta</i>		<i>C. esculenta</i>	
10	111.8228	116.2610	130.1496	93.7059	186.8760	88.1365	121.3547	122.6495	148.7515	147.6676	196.2920	128.0204
20	238.6072	150.3991	128.9809	182.2802	87.4573	165.0164	154.5136	94.8632	235.2233	184.8613	187.0122	90.3078
30	126.2354	93.8892	194.2444	77.0098	132.1939	142.3531	219.3582	155.4651	110.6910	97.9652	254.7189	93.3636
40	149.9416	104.2480	157.5279	186.4983	148.7744	99.9648	140.0363	134.9800	117.7733	60.2844	312.9801	68.4829
50	126.4242	119.9173	228.2297	207.7478	100.3948	127.3854	154.6002	162.6578	160.8385	114.2622	239.8225	176.6718
60	96.4898	90.9146	223.7025	248.9191	110.3192	90.3443	317.9952	160.8444	134.9072	N.A.	300.5709	233.0513
70	N.A.	117.4444	139.5270	161.9603	114.3808	N.A.	168.8471	137.9916	117.8809	N.A.	348.5170	176.0629
80	N.A.	N.A.	189.7088	217.8578	48.0778	N.A.	225.9342	152.9056	N.A.	N.A.	280.7334	176.5368
90	N.A.	N.A.	195.0803	198.9031	N.A.	N.A.	254.7291	175.9581	N.A.	N.A.	497.7211	164.0179
100	N.A.	N.A.	227.4179	235.1078	N.A.	N.A.	259.7674	195.1125	N.A.	N.A.	364.2683	190.4548
Average	84.9521	79.3074	181.4569	180.9990	92.8474	71.3201	201.7136	149.3428	102.6066	60.5041	298.2636	149.6970
Maximum	238.6072	150.3991	228.2297	248.9191	186.8760	165.0164	317.9952	195.1125	235.2233	184.8613	497.7211	233.0513
Minimum	96.4898	90.9146	128.9809	77.0098	48.0778	88.1365	121.3547	94.8632	110.6910	60.2844	187.0122	68.4829
SD	50.7306	39.7477	20.0246	56.5329	41.5182	63.5869	31.2062	28.2424	43.0956	91.4580	47.5705	52.4124

Table B-25 Total dry weight data of *Colocasia esculenta* (L.) Schott (green and violet) in constructed wetland systems (g)

Water Depths	0.15 m.				0.25 m.				0.35 m.			
Treatments	Experimental		Plant-observed		Experimental		Plant-observed		Experimental		Plant-observed	
	Green	Violet	Green	Violet	Green	Violet	Green	Violet	Green	Violet	Green	Violet
Days	<i>C. esculenta</i>		<i>C. esculenta</i>		<i>C. esculenta</i>		<i>C. esculenta</i>		<i>C. esculenta</i>		<i>C. esculenta</i>	
10	8.8518	8.7159	12.8789	9.5640	13.4084	9.1191	11.5253	12.3248	13.4082	12.3131	19.1057	16.6220
20	17.5618	13.4118	12.2620	15.7679	6.2244	12.2571	7.6551	8.7126	17.0874	16.9066	17.9166	8.5675
30	10.4915	6.3249	17.4435	6.5755	11.0187	9.4460	19.1222	11.0722	9.1087	7.7412	23.5053	8.2878
40	16.2670	9.7736	18.5685	20.1223	11.8944	8.4871	13.0874	13.6923	9.1966	5.0011	36.0178	7.6552
50	9.9922	8.6325	23.9385	20.8648	8.4213	9.3665	12.9660	18.9094	10.3972	10.6064	33.7414	20.1885
60	10.6846	7.4832	23.9807	19.5139	9.0896	8.1554	32.1613	17.3047	12.5219	N.A.	34.5041	22.7230
70	N.A.	11.0154	14.7156	15.8438	10.1939	N.A.	13.8073	13.6095	11.4550	N.A.	40.1902	22.4312
80	N.A.	N.A.	11.1564	15.6260	5.4509	N.A.	28.3692	15.3485	N.A.	N.A.	37.9216	16.6467
90	N.A.	N.A.	14.4036	16.4153	N.A.	N.A.	20.7199	13.8450	N.A.	N.A.	59.6233	11.6431
100	N.A.	N.A.	15.0040	20.6349	N.A.	N.A.	22.4255	15.2104	N.A.	N.A.	46.7780	12.5575
Average	7.3849	6.5357	16.4352	16.0928	7.5702	5.6831	18.1839	14.0029	8.3175	5.2568	34.9304	14.7323
Maximum	17.5618	13.4118	23.9807	20.8648	13.4084	12.2571	32.1613	18.9094	17.0874	16.9066	59.6233	22.7230
Minimum	8.8518	6.3249	11.1564	6.5755	5.4509	8.1554	7.6551	8.7126	9.1087	5.0011	17.9166	7.6552
SD	3.6474	4.5444	2.3453	4.7730	2.7319	7.8313	1.4558	2.9423	2.8025	12.7363	4.5330	5.8121

Table B-26 Length of *C. esculenta* petioles data from constructed wetland systems (cm)

Water Depths	0.15 m.				0.25 m.				0.35 m.			
Treatments	Experimental		Plant-observed		Experimental		Plant-observed		Experimental		Plant-observed	
	Green	Violet	Green	Violet	Green	Violet	Green	Violet	Green	Violet	Green	Violet
Days	<i>C. esculenta</i>		<i>C. esculenta</i>		<i>C. esculenta</i>		<i>C. esculenta</i>		<i>C. esculenta</i>		<i>C. esculenta</i>	
10	47.05	43.00	48.97	47.59	49.05	44.05	57.85	56.23	52.38	53.35	58.94	59.50
20	49.78	51.45	74.08	61.67	48.70	52.00	58.10	51.94	69.63	64.88	59.50	62.48
30	52.85	54.63	57.54	64.50	50.25	60.03	65.48	61.60	76.20	70.98	66.02	61.40
40	49.00	51.93	58.50	56.65	49.38	43.45	50.20	70.95	40.50	55.13	74.18	60.50
50	51.38	47.13	59.90	52.84	44.03	54.35	68.50	64.00	59.20	57.65	75.13	96.43
60	46.15	42.93	52.98	48.50	52.40	57.50	71.25	64.88	31.00	N.A.	69.04	68.10
70	N.A.	26.00	76.85	51.00	41.35	N.A.	65.50	58.75	60.50	N.A.	66.34	64.30
80	N.A.	N.A.	56.00	58.90	31.00	N.A.	66.50	51.25	N.A.	N.A.	64.80	54.41
90	N.A.	N.A.	52.87	56.45	N.A.	N.A.	69.80	52.26	N.A.	N.A.	71.25	52.32
100	N.A.	N.A.	61.48	59.42	N.A.	N.A.	72.60	52.00	N.A.	N.A.	77.80	54.00
Average	29.62	31.71	59.92	55.75	36.62	31.14	64.58	58.39	38.94	30.20	68.30	63.34
Maximum	52.85	54.63	76.85	64.50	52.40	60.03	72.60	70.95	76.20	70.98	77.80	96.43
Minimum	46.15	26.00	48.97	47.59	31.00	43.45	50.20	51.25	31.00	53.35	58.94	52.32
SD	2.54	9.01	9.62	5.64	6.94	7.08	6.88	6.81	15.82	6.39	7.37	12.62

APPENDIX C

STATISTICAL ANALYSIS

Oneway

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
SS removal Efficiency at 0.15 m Wastewater Level	Between Groups	886.353	2	443.177	1.062	.360
	Within Groups	11271.92	27	417.478		
	Total	12158.27	29			
SS removal Efficiency at 0.25 m Wastewater Level	Between Groups	743.947	2	371.973	.769	.473
	Within Groups	13055.63	27	483.542		
	Total	13799.57	29			
SS removal Efficiency at 0.35 m Wastewater Level	Between Groups	1643.970	2	821.985	1.936	.164
	Within Groups	11461.50	27	424.500		
	Total	13105.47	29			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Types of Unit	(J) Types of Unit	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
SS removal Efficiency at 0.15 m Wastewater Level	Green Colocasia sp. Unit	Violet Colocasia sp. Unit	.8410	9.1376	.996	-22.8257	24.5077
		Control Unit	11.9280	9.1376	.438	-11.7387	35.5947
	Violet Colocasia sp. Unit	Green Colocasia sp. Unit	-.8410	9.1376	.996	-24.5077	22.8257
		Control Unit	11.0870	9.1376	.488	-12.5797	34.7537
	Control Unit	Green Colocasia sp. Unit	-11.9280	9.1376	.438	-35.5947	11.7387
		Violet Colocasia sp. Unit	-11.0870	9.1376	.488	-34.7537	12.5797
SS removal Efficiency at 0.25 m Wastewater Level	Green Colocasia sp. Unit	Violet Colocasia sp. Unit	3.0350	9.8340	.954	-22.4355	28.5055
		Control Unit	11.7490	9.8340	.499	-13.7215	37.2195
	Violet Colocasia sp. Unit	Green Colocasia sp. Unit	-3.0350	9.8340	.954	-28.5055	22.4355
		Control Unit	8.7140	9.8340	.679	-16.7565	34.1845
	Control Unit	Green Colocasia sp. Unit	-11.7490	9.8340	.499	-37.2195	13.7215
		Violet Colocasia sp. Unit	-8.7140	9.8340	.679	-34.1845	16.7565
SS removal Efficiency at 0.35 m Wastewater Level	Green Colocasia sp. Unit	Violet Colocasia sp. Unit	8.9300	9.2141	.630	-14.9349	32.7949
		Control Unit	18.1320	9.2141	.164	-5.7329	41.9969
	Violet Colocasia sp. Unit	Green Colocasia sp. Unit	-8.9300	9.2141	.630	-32.7949	14.9349
		Control Unit	9.2020	9.2141	.613	-14.6629	33.0669
	Control Unit	Green Colocasia sp. Unit	-18.1320	9.2141	.164	-41.9969	5.7329
		Violet Colocasia sp. Unit	-9.2020	9.2141	.613	-33.0669	14.6629

Homogeneous Subsets

SS removal Efficiency at 0.15 m Wastewater Level

Scheffe^a

Types of Unit	N	Subset for alpha = .05
		1
Control Unit	10	46.4380
Violet Colocasia sp. Unit	10	57.5250
Green Colocasia sp. Unit	10	58.3660
Sig.		.438

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

SS removal Efficiency at 0.25 m Wastewater Level

Scheffe^a

Types of Unit	N	Subset for alpha = .05
		1
Control Unit	10	45.1690
Violet Colocasia sp. Unit	10	53.8830
Green Colocasia sp. Unit	10	56.9180
Sig.		.499

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

SS removal Efficiency at 0.35 m Wastewater Level

Scheffe^a

Types of Unit	N	Subset for alpha = .05
		1
Control Unit	10	45.6000
Violet Colocasia sp. Unit	10	54.8020
Green Colocasia sp. Unit	10	63.7320
Sig.		.164

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Oneway

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
SS Removal Efficiency of Green Colocasia sp. unit	Between Groups	257.738	2	128.869	.210	.812
	Within Groups	16570.50	27	613.722		
	Total	16828.24	29			
SS Removal Efficiency of Violet Colocasia sp. unit	Between Groups	71.745	2	35.872	.059	.943
	Within Groups	16443.55	27	609.020		
	Total	16515.30	29			
SS Removal Efficiency of Control unit	Between Groups	8.328	2	4.164	.041	.960
	Within Groups	2774.992	27	102.777		
	Total	2783.320	29			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Depths	(J) Depths	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
SS Removal Efficiency of Green Colocasia sp. unit	At 0.15 m wastewater level	At 0.25 m wastewater level	1.4480	11.0790	.991	-27.2470	30.14
		At 0.35 m wastewater level	-5.3660	11.0790	.890	-34.0610	23.33
	At 0.25 m wastewater level	At 0.15 m wastewater level	-1.4480	11.0790	.991	-30.1430	27.25
		At 0.35 m wastewater level	-6.8140	11.0790	.829	-35.5090	21.88
	At 0.35 m wastewater level	At 0.15 m wastewater level	5.3660	11.0790	.890	-23.3290	34.06
		At 0.25 m wastewater level	6.8140	11.0790	.829	-21.8810	35.51
SS Removal Efficiency of Violet Colocasia sp. unit	At 0.15 m wastewater level	At 0.25 m wastewater level	3.6420	11.0365	.947	-24.9429	32.23
		At 0.35 m wastewater level	2.7230	11.0365	.970	-25.8619	31.31
	At 0.25 m wastewater level	At 0.15 m wastewater level	-3.6420	11.0365	.947	-32.2269	24.94
		At 0.35 m wastewater level	-.9190	11.0365	.997	-29.5039	27.67
	At 0.35 m wastewater level	At 0.15 m wastewater level	-2.7230	11.0365	.970	-31.3079	25.86
		At 0.25 m wastewater level	.9190	11.0365	.997	-27.6659	29.50
SS Removal Efficiency of Control unit	At 0.15 m wastewater level	At 0.25 m wastewater level	1.2690	4.5338	.962	-10.4737	13.01
		At 0.35 m wastewater level	.8380	4.5338	.983	-10.9047	12.58
	At 0.25 m wastewater level	At 0.15 m wastewater level	-1.2690	4.5338	.962	-13.0117	10.47
		At 0.35 m wastewater level	-.4310	4.5338	.995	-12.1737	11.31
	At 0.35 m wastewater level	At 0.15 m wastewater level	-.8380	4.5338	.983	-12.5807	10.90
		At 0.25 m wastewater level	.4310	4.5338	.995	-11.3117	12.17

Homogeneous Subsets

SS Removal Efficiency of Green Colocasia sp. unit

Scheffe^a

Depths	N	Subset for alpha = .05
		1
At 0.25 m wastewater level	10	56.9180
At 0.15 m wastewater level	10	58.3660
At 0.35 m wastewater level	10	63.7320
Sig.		.829

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

SS Removal Efficiency of Violet Colocasia sp. unit

Scheffe^a

Depths	N	Subset for alpha = .05
		1
At 0.25 m wastewater level	10	53.8830
At 0.35 m wastewater level	10	54.8020
At 0.15 m wastewater level	10	57.5250
Sig.		.947

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

SS Removal Efficiency of Control unit

Scheffe^a

Depths	N	Subset for alpha = .05
		1
At 0.25 m wastewater level	10	45.1690
At 0.35 m wastewater level	10	45.6000
At 0.15 m wastewater level	10	46.4380
Sig.		.962

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Oneway

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Chromium removal Efficiency at 0.15 m Wastewater Level	Between Groups	441.403	2	220.702	1.652	.211
	Within Groups	3607.803	27	133.622		
	Total	4049.207	29			
Chromium removal Efficiency at 0.25 m Wastewater Level	Between Groups	764.681	2	382.340	1.434	.256
	Within Groups	7200.964	27	266.702		
	Total	7965.645	29			
Chromium removal Efficiency at 0.35 m Wastewater Level	Between Groups	1461.863	2	730.931	2.961	.069
	Within Groups	6665.570	27	246.873		
	Total	8127.433	29			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Types of Unit	(J) Types of Unit	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Chromium removal Efficiency at 0.15 m Wastewater Level	Green Colocasia sp. Unit	Violet Colocasia sp. Unit	1.9760	5.1696	.930	-11.4134	15.3654
		Control Unit	8.9430	5.1696	.242	-4.4464	22.3324
	Violet Colocasia sp. Unit	Green Colocasia sp. Unit	-1.9760	5.1696	.930	-15.3654	11.4134
		Control Unit	6.9670	5.1696	.415	-6.4224	20.3564
	Control Unit	Green Colocasia sp. Unit	-8.9430	5.1696	.242	-22.3324	4.4464
		Violet Colocasia sp. Unit	-6.9670	5.1696	.415	-20.3564	6.4224
Chromium removal Efficiency at 0.25 m Wastewater Level	Green Colocasia sp. Unit	Violet Colocasia sp. Unit	7.7600	7.3035	.575	-11.1562	26.6762
		Control Unit	12.2190	7.3035	.264	-6.6972	31.1352
	Violet Colocasia sp. Unit	Green Colocasia sp. Unit	-7.7600	7.3035	.575	-26.6762	11.1562
		Control Unit	4.4590	7.3035	.831	-14.4572	23.3752
	Control Unit	Green Colocasia sp. Unit	-12.2190	7.3035	.264	-31.1352	6.6972
		Violet Colocasia sp. Unit	-4.4590	7.3035	.831	-23.3752	14.4572
Chromium removal Efficiency at 0.35 m Wastewater Level	Green Colocasia sp. Unit	Violet Colocasia sp. Unit	11.4530	7.0267	.282	-6.7464	29.6524
		Control Unit	16.7220	7.0267	.076	-1.4774	34.9214
	Violet Colocasia sp. Unit	Green Colocasia sp. Unit	-11.4530	7.0267	.282	-29.6524	6.7464
		Control Unit	5.2690	7.0267	.757	-12.9304	23.4684
	Control Unit	Green Colocasia sp. Unit	-16.7220	7.0267	.076	-34.9214	1.4774
		Violet Colocasia sp. Unit	-5.2690	7.0267	.757	-23.4684	12.9304

Homogeneous Subsets

Chromium removal Efficiency at 0.15 m Wastewater Level

Scheffe^a

Types of Unit	N	Subset for alpha = .05
		1
Control Unit	10	55.2390
Violet Colocasia sp. Unit	10	62.2060
Green Colocasia sp. Unit	10	64.1820
Sig.		.242

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Chromium removal Efficiency at 0.25 m Wastewater Level

Scheffe^a

Types of Unit	N	Subset for alpha = .05
		1
Control Unit	10	57.4530
Violet Colocasia sp. Unit	10	61.9120
Green Colocasia sp. Unit	10	69.6720
Sig.		.264

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Chromium removal Efficiency at 0.35 m Wastewater Level

Scheffe^a

Types of Unit	N	Subset for alpha = .05
		1
Control Unit	10	50.4570
Violet Colocasia sp. Unit	10	55.7260
Green Colocasia sp. Unit	10	67.1790
Sig.		.076

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Oneway

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Chromium Removal Efficiency of Green Colocasia sp. unit	Between Groups	151.124	2	75.562	.230	.796
	Within Groups	8877.400	27	328.793		
	Total	9028.524	29			
Chromium Removal Efficiency of Violet Colocasia sp. unit	Between Groups	267.811	2	133.906	.519	.601
	Within Groups	6960.897	27	257.811		
	Total	7228.709	29			
Chromium Removal Efficiency of Control unit	Between Groups	255.711	2	127.856	2.110	.141
	Within Groups	1636.040	27	60.594		
	Total	1891.751	29			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Depths	(J) Depths	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Chromium Removal Efficiency of Green Colocasia sp. unit	At 0.15 m wastewater level	At 0.25 m wastewater level	-5.4900	8.1092	.797	-26.4930	15.5130
		At 0.35 m wastewater level	-2.9970	8.1092	.934	-24.0000	18.0060
	At 0.25 m wastewater level	At 0.15 m wastewater level	5.4900	8.1092	.797	-15.5130	26.4930
		At 0.35 m wastewater level	2.4930	8.1092	.954	-18.5100	23.4960
	At 0.35 m wastewater level	At 0.15 m wastewater level	2.9970	8.1092	.934	-18.0060	24.0000
		At 0.25 m wastewater level	-2.4930	8.1092	.954	-23.4960	18.5100
Chromium Removal Efficiency of Violet Colocasia sp. unit	At 0.15 m wastewater level	At 0.25 m wastewater level	.2940	7.1807	.999	-18.3042	18.8922
		At 0.35 m wastewater level	6.4800	7.1807	.670	-12.1182	25.0782
	At 0.25 m wastewater level	At 0.15 m wastewater level	-.2940	7.1807	.999	-18.8922	18.3042
		At 0.35 m wastewater level	6.1860	7.1807	.693	-12.4122	24.7842
	At 0.35 m wastewater level	At 0.15 m wastewater level	-6.4800	7.1807	.670	-25.0782	12.1182
		At 0.25 m wastewater level	-6.1860	7.1807	.693	-24.7842	12.4122
Chromium Removal Efficiency of Control unit	At 0.15 m wastewater level	At 0.25 m wastewater level	-2.2140	3.4812	.818	-11.2304	6.8024
		At 0.35 m wastewater level	4.7820	3.4812	.402	-4.2344	13.7984
	At 0.25 m wastewater level	At 0.15 m wastewater level	2.2140	3.4812	.818	-6.8024	11.2304
		At 0.35 m wastewater level	6.9960	3.4812	.152	-2.0204	16.0124
	At 0.35 m wastewater level	At 0.15 m wastewater level	-4.7820	3.4812	.402	-13.7984	4.2344
		At 0.25 m wastewater level	-6.9960	3.4812	.152	-16.0124	2.0204

Homogeneous Subsets

Chromium Removal Efficiency of Green Colocasia sp. unit

Scheffe ^a

		Subset for alpha = .05
Depths	N	1
At 0.15 m wastewater level	10	64.1820
At 0.35 m wastewater level	10	67.1790
At 0.25 m wastewater level	10	69.6720
Sig.		.797

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Chromium Removal Efficiency of Violet Colocasia sp. unit

Scheffe ^a

		Subset for alpha = .05
Depths	N	1
At 0.35 m wastewater level	10	55.7260
At 0.25 m wastewater level	10	61.9120
At 0.15 m wastewater level	10	62.2060
Sig.		.670

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Chromium Removal Efficiency of Control unit

Scheffe ^a

		Subset for alpha = .05
Depths	N	1
At 0.35 m wastewater level	10	50.4570
At 0.15 m wastewater level	10	55.2390
At 0.25 m wastewater level	10	57.4530
Sig.		.152

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

T-Test

Group Statistics

	Types of Colocasia sp.	N	Mean	Std. Deviation	Std. Error Mean
At 0.15 m wastewater level	green Colocasia sp.	6	.510483	3.46621E-02	1.42E-02
	violet Colocasia sp.	7	.500657	1.83681E-02	6.94E-03
At 0.25 m wastewater level	green Colocasia sp.	8	.502062	1.64639E-02	5.82E-03
	violet Colocasia sp.	6	.498250	1.98639E-02	8.11E-03
At 0.35 m wastewater level	green Colocasia sp.	7	.512957	1.48299E-02	5.61E-03
	violet Colocasia sp.	5	.507040	2.98290E-02	1.33E-02

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
At 0.15 m wastewater level	Equal variances assumed	1.903	.195	.654	11	.527	9.826E-03	1.503E-02	-2.3E-02	4.29E-02
	Equal variances not assumed			.623	7.342	.552	9.826E-03	1.576E-02	-2.7E-02	4.67E-02
At 0.25 m wastewater level	Equal variances assumed	.767	.398	.393	12	.701	3.813E-03	9.699E-03	-1.7E-02	2.49E-02
	Equal variances not assumed			.382	9.650	.711	3.813E-03	9.982E-03	-1.9E-02	2.62E-02
At 0.35 m wastewater level	Equal variances assumed	3.274	.100	.458	10	.657	5.917E-03	1.293E-02	-2.3E-02	3.47E-02
	Equal variances not assumed			.409	5.424	.698	5.917E-03	1.447E-02	-3.0E-02	4.23E-02

Oneway

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Total chromium amounts in green Colocasia sp.	Between Groups	4.908E-04	2	2.454E-04	.479	.627
	Within Groups	9.224E-03	18	5.125E-04		
	Total	9.715E-03	20			
Total chromium amounts in violet Colocasia sp.	Between Groups	2.215E-04	2	1.108E-04	.220	.805
	Within Groups	7.556E-03	15	5.038E-04		
	Total	7.778E-03	17			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Depths	(J) Depths	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Total chromium amounts in green Colocasia sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	8.42083E-03	1.22E-02	.791	-2.417644E-02	4.10181E-02
		At 0.35 m wastewater level	-2.4738E-03	1.26E-02	.981	-3.605413E-02	3.11065E-02
	At 0.25 m wastewater level	At 0.15 m wastewater level	-8.4208E-03	1.22E-02	.791	-4.101810E-02	2.41764E-02
		At 0.35 m wastewater level	-1.0895E-02	1.17E-02	.656	-4.213309E-02	2.03438E-02
	At 0.35 m wastewater level	At 0.15 m wastewater level	2.47381E-03	1.26E-02	.981	-3.110651E-02	3.60541E-02
		At 0.25 m wastewater level	1.08946E-02	1.17E-02	.656	-2.034381E-02	4.21331E-02
Total chromium amounts in violet Colocasia sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	2.40714E-03	1.25E-02	.982	-3.147967E-02	3.62940E-02
		At 0.35 m wastewater level	-6.3829E-03	1.31E-02	.890	-4.204770E-02	2.92820E-02
	At 0.25 m wastewater level	At 0.15 m wastewater level	-2.4071E-03	1.25E-02	.982	-3.629396E-02	3.14797E-02
		At 0.35 m wastewater level	-8.7900E-03	1.36E-02	.814	-4.567242E-02	2.80924E-02
	At 0.35 m wastewater level	At 0.15 m wastewater level	6.38286E-03	1.31E-02	.890	-2.928199E-02	4.20477E-02
		At 0.25 m wastewater level	8.79000E-03	1.36E-02	.814	-2.809242E-02	4.56724E-02



Homogeneous Subsets

Total chromium amounts in green *Colocasia* sp.

Scheffe^{a,b}

Depths	N	Subset for alpha = .05
		1
At 0.25 m wastewater level	8	.502062
At 0.15 m wastewater level	6	.510483
At 0.35 m wastewater level	7	.512957
Sig.		.676

Means for groups in homogeneous subsets are displayed.

- Uses Harmonic Mean Sample Size = 6.904.
- The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Total chromium amounts in violet *Colocasia* sp.

Scheffe^{a,b}

Depths	N	Subset for alpha = .05
		1
At 0.25 m wastewater level	6	.498250
At 0.15 m wastewater level	7	.500657
At 0.35 m wastewater level	5	.507040
Sig.		.801

Means for groups in homogeneous subsets are displayed.

- Uses Harmonic Mean Sample Size = 5.888.
- The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Oneway

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Total chromium amounts in various parts of green Colocasia sp. at 0.15 m wastewater level	Between Groups	.143	3	4.757E-02	223.323	.000
	Within Groups	4.260E-03	20	2.130E-04		
	Total	.147	23			
Total chromium amounts in various parts of green Colocasia sp. at 0.25 m wastewater level	Between Groups	.168	3	5.591E-02	846.429	.000
	Within Groups	1.849E-03	28	6.605E-05		
	Total	.170	31			
Total chromium amounts in various parts of green Colocasia sp. at 0.35 m wastewater level	Between Groups	.161	3	5.362E-02	1084.129	.000
	Within Groups	1.187E-03	24	4.946E-05		
	Total	.162	27			
Total chromium amounts in various parts of violet Colocasia sp. at 0.15 m wastewater level	Between Groups	.149	3	4.961E-02	1007.287	.000
	Within Groups	1.182E-03	24	4.925E-05		
	Total	.150	27			
Total chromium amounts in various parts of violet Colocasia sp. at 0.25 m wastewater level	Between Groups	.124	3	4.140E-02	975.406	.000
	Within Groups	8.489E-04	20	4.244E-05		
	Total	.125	23			
Total chromium amounts in various parts of violet Colocasia sp. at 0.35 m wastewater level	Between Groups	.110	3	3.680E-02	229.686	.000
	Within Groups	2.564E-03	16	1.602E-04		
	Total	.113	19			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Various parts of Colocasia antiquorum Schott	(J) Various parts of Colocasia antiquorum Schott	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Total chromium amounts in various parts of green Colocasia sp. at 0.15 m wastewater level	Lamina	Petiole	1.88917E-02	8.427E-03	.204	-6.799255E-03	4.45826E-02
		Corm	-3.35250E-02*	8.427E-03	.008	-5.921592E-02	-7.834078E-03
		Root	-.177608*	8.427E-03	.000	-.203299	-.151917
	Petiole	Lamina	-1.88917E-02	8.427E-03	.204	-4.458259E-02	6.79926E-03
		Corm	-5.24167E-02*	8.427E-03	.000	-7.810759E-02	-2.672574E-02
		Root	-.196500*	8.427E-03	.000	-.222191	-.170809
	Corm	Lamina	3.35250E-02*	8.427E-03	.008	7.83408E-03	5.92159E-02
		Petiole	5.24167E-02*	8.427E-03	.000	2.67257E-02	7.81076E-02
		Root	-.144083*	8.427E-03	.000	-.169774	-.118392
	Root	Lamina	.177608*	8.427E-03	.000	.151917	.203299
		Petiole	.196500*	8.427E-03	.000	.170809	.222191
		Corm	.144083*	8.427E-03	.000	.118392	.169774
Total chromium amounts in various parts of green Colocasia sp. at 0.25 m wastewater level	Lamina	Petiole	1.86288E-02*	4.064E-03	.001	6.54669E-03	3.07108E-02
		Corm	-3.23088E-02*	4.064E-03	.000	-4.439081E-02	-2.022669E-02
		Root	-.166371*	4.064E-03	.000	-.178453	-.154289
	Petiole	Lamina	-1.86288E-02*	4.064E-03	.001	-3.071081E-02	-6.546691E-03
		Corm	-5.09375E-02*	4.064E-03	.000	-6.301956E-02	-3.885544E-02
		Root	-.185000*	4.064E-03	.000	-.197082	-.172918
	Corm	Lamina	3.23088E-02*	4.064E-03	.000	2.02267E-02	4.43908E-02
		Petiole	5.09375E-02*	4.064E-03	.000	3.88554E-02	6.30196E-02
		Root	-.134062*	4.064E-03	.000	-.146145	-.121980
	Root	Lamina	.166371*	4.064E-03	.000	.154289	.178453
		Petiole	.185000*	4.064E-03	.000	.172918	.197082
		Corm	.134062*	4.064E-03	.000	.121980	.146145

Multiple Comparisons

Scheffe

Dependent Variable	(I) Various parts of Colocasia antiquorum Schott	(J) Various parts of Colocasia antiquorum Schott	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Total chromium amounts in various parts of green Colocasia sp. at 0.35 m wastewater level	Lamina	Petiole	2.20143E-02*	3.759E-03	.000	1.07207E-02	3.33079E-02
		Corm	-3.08071E-02*	3.759E-03	.000	-4.210074E-02	-1.951354E-02
		Root	-.172521*	3.759E-03	.000	-.183815	-.161228
	Petiole	Lamina	-2.20143E-02*	3.759E-03	.000	-3.330788E-02	-1.072069E-02
		Corm	-5.28214E-02*	3.759E-03	.000	-6.411503E-02	-4.152783E-02
		Root	-.194536*	3.759E-03	.000	-.205829	-.183242
	Corm	Lamina	3.08071E-02*	3.759E-03	.000	1.95135E-02	4.21007E-02
		Petiole	5.28214E-02*	3.759E-03	.000	4.15278E-02	6.41150E-02
		Root	-.141714*	3.759E-03	.000	-.153008	-.130421
	Root	Lamina	.172521*	3.759E-03	.000	.161228	.183815
		Petiole	.194536*	3.759E-03	.000	.183242	.205829
		Corm	.141714*	3.759E-03	.000	.130421	.153008
Total chromium amounts in various parts of violet Colocasia sp. at 0.15 m wastewater level	Lamina	Petiole	2.05757E-02*	3.751E-03	.000	9.30513E-03	3.18463E-02
		Corm	-3.23529E-02*	3.751E-03	.000	-4.362344E-02	-2.108227E-02
		Root	-.166567*	3.751E-03	.000	-.177838	-.155297
	Petiole	Lamina	-2.05757E-02*	3.751E-03	.000	-3.184630E-02	-9.305128E-03
		Corm	-5.29286E-02*	3.751E-03	.000	-6.419916E-02	-4.165799E-02
		Root	-.187143*	3.751E-03	.000	-.198413	-.175872
	Corm	Lamina	3.23529E-02*	3.751E-03	.000	2.10823E-02	4.36234E-02
		Petiole	5.29286E-02*	3.751E-03	.000	4.16580E-02	6.41992E-02
		Root	-.134214*	3.751E-03	.000	-.145485	-.122944
	Root	Lamina	.166567*	3.751E-03	.000	.155297	.177838
		Petiole	.187143*	3.751E-03	.000	.175872	.198413
		Corm	.134214*	3.751E-03	.000	.122944	.145485

Multiple Comparisons

Scheffe

Dependent Variable	(I) Various parts of Colocasia antiquorum Schott	(J) Various parts of Colocasia antiquorum Schott	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Total chromium amounts in various parts of violet Colocasia sp. at 0.25 m wastewater level	Lamina	Petiole	1.79917E-02*	3.761E-03	.001	6.52396E-03	2.94594E-02
		Corm	-3.33833E-02*	3.761E-03	.000	-4.485104E-02	-2.191562E-02
		Root	-.165717*	3.761E-03	.000	-.177184	-.154249
	Petiole	Lamina	-1.79917E-02*	3.761E-03	.001	-2.945938E-02	-6.523956E-03
		Corm	-5.13750E-02*	3.761E-03	.000	-6.284271E-02	-3.990729E-02
		Root	-.183708*	3.761E-03	.000	-.195176	-.172241
	Corm	Lamina	3.33833E-02*	3.761E-03	.000	2.19156E-02	4.48510E-02
		Petiole	5.13750E-02*	3.761E-03	.000	3.99073E-02	6.28427E-02
		Root	-.132333*	3.761E-03	.000	-.143801	-.120866
	Root	Lamina	.165717*	3.761E-03	.000	.154249	.177184
		Petiole	.183708*	3.761E-03	.000	.172241	.195176
		Corm	.132333*	3.761E-03	.000	.120866	.143801
Total chromium amounts in various parts of violet Colocasia sp. at 0.35 m wastewater level	Lamina	Petiole	2.05180E-02	8.005E-03	.129	-4.436295E-03	4.54723E-02
		Corm	-3.25320E-02*	8.005E-03	.009	-5.748630E-02	-7.577705E-03
		Root	-.169932*	8.005E-03	.000	-.194886	-.144978
	Petiole	Lamina	-2.05180E-02	8.005E-03	.129	-4.547230E-02	4.43630E-03
		Corm	-5.30500E-02*	8.005E-03	.000	-7.800430E-02	-2.809570E-02
		Root	-.190450*	8.005E-03	.000	-.215404	-.165496
	Corm	Lamina	3.25320E-02*	8.005E-03	.009	7.57770E-03	5.74863E-02
		Petiole	5.30500E-02*	8.005E-03	.000	2.80957E-02	7.80043E-02
		Root	-.137400*	8.005E-03	.000	-.162354	-.112446
	Root	Lamina	.169932*	8.005E-03	.000	.144978	.194886
		Petiole	.190450*	8.005E-03	.000	.165496	.215404
		Corm	.137400*	8.005E-03	.000	.112446	.162354

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Total chromium amounts in various parts of green *Colocasia* sp. at 0.15 m wastewater level

Scheffe^a

Various parts of <i>Colocasia antiquorum</i> Schott	N	Subset for alpha = .05		
		1	2	3
Petiole	6	6.07E-02		
Lamina	6	7.96E-02		
Corm	6		.113083	
Root	6			.257167
Sig.		.204	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

Total chromium amounts in various parts of green *Colocasia* sp. at 0.25 m wastewater level

Scheffe^a

Various parts of <i>Colocasia antiquorum</i> Schott	N	Subset for alpha = .05			
		1	2	3	4
Petiole	8	6.19E-02			
Lamina	8		8.05E-02		
Corm	8			.112813	
Root	8				.246875
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 8.000.

Total chromium amounts in various parts of green *Colocasia* sp. at 0.35 m wastewater level

Scheffe^a

Various parts of <i>Colocasia antiquorum</i> Schott	N	Subset for alpha = .05			
		1	2	3	4
Petiole	7	6.09E-02			
Lamina	7		8.29E-02		
Corm	7			.113714	
Root	7				.255429
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 7.000.

Homogeneous Subsets (CONT.)

Total chromium amounts in various parts of violet *Colocasia* sp. at 0.15 m wastewater level

Scheffe^a

Various parts of <i>Colocasia antiquorum</i> Schott	N	Subset for alpha = .05			
		1	2	3	4
Petiole	7	6.00E-02			
Lamina	7		8.06E-02		
Corm	7			.112929	
Root	7				.247143
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 7.000.

Total chromium amounts in various parts of violet *Colocasia* sp. at 0.25 m wastewater level

Scheffe^a

Various parts of <i>Colocasia antiquorum</i> Schott	N	Subset for alpha = .05			
		1	2	3	4
Petiole	6	6.13E-02			
Lamina	6		7.93E-02		
Corm	6			.112667	
Root	6				.245000
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

Total chromium amounts in various parts of violet *Colocasia* sp. at 0.35 m wastewater level

Scheffe^a

Various parts of <i>Colocasia antiquorum</i> Schott	N	Subset for alpha = .05		
		1	2	3
Petiole	5	6.08E-02		
Lamina	5	8.13E-02		
Corm	5		.113800	
Root	5			.251200
Sig.		.129	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.

Oneway

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Total chromium amounts in lamina of green Colocasia sp.	Between Groups	4.006E-05	2	2.003E-05	2.112	.150
	Within Groups	1.707E-04	18	9.483E-06		
	Total	2.107E-04	20			
Total chromium amounts in petiole of green Colocasia sp.	Between Groups	6.130E-06	2	3.065E-06	.471	.632
	Within Groups	1.170E-04	18	6.502E-06		
	Total	1.232E-04	20			
Total chromium amounts in corm of green Colocasia sp.	Between Groups	3.132E-06	2	1.566E-06	.036	.965
	Within Groups	7.931E-04	18	4.406E-05		
	Total	7.962E-04	20			
Total chromium amounts in root of green Colocasia sp.	Between Groups	4.432E-04	2	2.216E-04	.642	.538
	Within Groups	6.215E-03	18	3.453E-04		
	Total	6.659E-03	20			
Total chromium amounts in lamina of violet Colocasia sp.	Between Groups	1.192E-05	2	5.959E-06	.625	.548
	Within Groups	1.429E-04	15	9.528E-06		
	Total	1.548E-04	17			
Total chromium amounts in petiole of violet Colocasia sp.	Between Groups	5.580E-06	2	2.790E-06	.203	.818
	Within Groups	2.059E-04	15	1.373E-05		
	Total	2.115E-04	17			
Total chromium amounts in corm of violet Colocasia sp.	Between Groups	3.777E-06	2	1.889E-06	.037	.964
	Within Groups	7.738E-04	15	5.159E-05		
	Total	7.776E-04	17			
Total chromium amounts in root of violet Colocasia sp.	Between Groups	1.068E-04	2	5.339E-05	.231	.797
	Within Groups	3.472E-03	15	2.314E-04		
	Total	3.578E-03	17			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Depth	(J) Depth	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Total chromium amounts in lamina of green Colocasia sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	-9.20833E-04	1.663E-03	.859	-5.355079E-03	3.51341E-03
		At 0.35 m wastewater level	-3.34762E-03	1.713E-03	.177	-7.915591E-03	1.22035E-03
	At 0.25 m wastewater level	At 0.15 m wastewater level	9.20833E-04	1.663E-03	.859	-3.513413E-03	5.35508E-03
		At 0.35 m wastewater level	-2.42679E-03	1.594E-03	.336	-6.676189E-03	1.82262E-03
	At 0.35 m wastewater level	At 0.15 m wastewater level	3.34762E-03	1.713E-03	.177	-1.220353E-03	7.91559E-03
		At 0.25 m wastewater level	2.42679E-03	1.594E-03	.336	-1.822618E-03	6.67619E-03
Total chromium amounts in petiole of green Colocasia sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	-1.23333E-03	1.377E-03	.675	-4.904965E-03	2.43830E-03
		At 0.35 m wastewater level	-2.61905E-04	1.419E-03	.983	-4.044263E-03	3.52045E-03
	At 0.25 m wastewater level	At 0.15 m wastewater level	1.23333E-03	1.377E-03	.675	-2.438298E-03	4.90496E-03
		At 0.35 m wastewater level	9.71429E-04	1.320E-03	.766	-2.547150E-03	4.49001E-03
	At 0.35 m wastewater level	At 0.15 m wastewater level	2.61905E-04	1.419E-03	.983	-3.520454E-03	4.04426E-03
		At 0.25 m wastewater level	-9.71429E-04	1.320E-03	.766	-4.490007E-03	2.54715E-03
Total chromium amounts in corm of green Colocasia sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	2.70833E-04	3.585E-03	.997	-9.287461E-03	9.82913E-03
		At 0.35 m wastewater level	-6.30952E-04	3.693E-03	.986	-1.047750E-02	9.21560E-03
	At 0.25 m wastewater level	At 0.15 m wastewater level	-2.70833E-04	3.585E-03	.997	-9.829128E-03	9.28746E-03
		At 0.35 m wastewater level	-9.01786E-04	3.435E-03	.966	-1.006164E-02	8.25807E-03
	At 0.35 m wastewater level	At 0.15 m wastewater level	6.30952E-04	3.693E-03	.986	-9.215597E-03	1.04775E-02
		At 0.25 m wastewater level	9.01786E-04	3.435E-03	.966	-8.258070E-03	1.00616E-02
Total chromium amounts in root of green Colocasia sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	1.02917E-02	1.004E-02	.600	-1.646612E-02	3.70495E-02
		At 0.35 m wastewater level	1.73810E-03	1.034E-02	.986	-2.582664E-02	2.93028E-02
	At 0.25 m wastewater level	At 0.15 m wastewater level	-1.02917E-02	1.004E-02	.600	-3.704946E-02	1.64661E-02
		At 0.35 m wastewater level	-8.55357E-03	9.617E-03	.679	-3.419596E-02	1.70888E-02
	At 0.35 m wastewater level	At 0.15 m wastewater level	-1.73810E-03	1.034E-02	.986	-2.930283E-02	2.58266E-02
		At 0.25 m wastewater level	8.55357E-03	9.617E-03	.679	-1.708882E-02	3.41960E-02

Multiple Comparisons

Scheffe

Dependent Variable	(I) Depth	(J) Depth	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Total chromium amounts in lamina of violet <i>Colocasia</i> sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	1.32143E-03	1.717E-03	.748	-3.338932E-03	5.98179E-03
		At 0.35 m wastewater level	-7.08571E-04	1.807E-03	.926	-5.613460E-03	4.19632E-03
	At 0.25 m wastewater level	At 0.15 m wastewater level	-1.32143E-03	1.717E-03	.748	-5.981790E-03	3.33893E-03
		At 0.35 m wastewater level	-2.03000E-03	1.869E-03	.567	-7.102339E-03	3.04234E-03
	At 0.35 m wastewater level	At 0.15 m wastewater level	7.08571E-04	1.807E-03	.926	-4.196317E-03	5.61346E-03
		At 0.25 m wastewater level	2.03000E-03	1.869E-03	.567	-3.042339E-03	7.10234E-03
Total chromium amounts in petiole of violet <i>Colocasia</i> sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	-1.30476E-03	2.061E-03	.821	-6.898754E-03	4.28923E-03
		At 0.35 m wastewater level	-7.51429E-04	2.169E-03	.942	-6.638935E-03	5.13608E-03
	At 0.25 m wastewater level	At 0.15 m wastewater level	1.30476E-03	2.061E-03	.821	-4.289230E-03	6.89875E-03
		At 0.35 m wastewater level	5.53333E-04	2.244E-03	.970	-5.535169E-03	6.64184E-03
	At 0.35 m wastewater level	At 0.15 m wastewater level	7.51429E-04	2.169E-03	.942	-5.136078E-03	6.63894E-03
		At 0.25 m wastewater level	-5.53333E-04	2.244E-03	.970	-6.641836E-03	5.53517E-03
Total chromium amounts in corm of violet <i>Colocasia</i> sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	2.61905E-04	3.996E-03	.998	-1.058248E-02	1.11063E-02
		At 0.35 m wastewater level	-8.71429E-04	4.206E-03	.979	-1.228481E-02	1.05420E-02
	At 0.25 m wastewater level	At 0.15 m wastewater level	-2.61905E-04	3.996E-03	.998	-1.110629E-02	1.05825E-02
		At 0.35 m wastewater level	-1.13333E-03	4.349E-03	.967	-1.293637E-02	1.06697E-02
	At 0.35 m wastewater level	At 0.15 m wastewater level	8.71429E-04	4.206E-03	.979	-1.054196E-02	1.22848E-02
		At 0.25 m wastewater level	1.13333E-03	4.349E-03	.967	-1.066970E-02	1.29364E-02
Total chromium amounts in root of violet <i>Colocasia</i> sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	2.14286E-03	8.464E-03	.969	-2.082633E-02	2.51120E-02
		At 0.35 m wastewater level	-4.05714E-03	8.908E-03	.902	-2.823151E-02	2.01172E-02
	At 0.25 m wastewater level	At 0.15 m wastewater level	-2.14286E-03	8.464E-03	.969	-2.511204E-02	2.08263E-02
		At 0.35 m wastewater level	-6.20000E-03	9.212E-03	.800	-3.119967E-02	1.87997E-02
	At 0.35 m wastewater level	At 0.15 m wastewater level	4.05714E-03	8.908E-03	.902	-2.011723E-02	2.82315E-02
		At 0.25 m wastewater level	6.20000E-03	9.212E-03	.800	-1.879967E-02	3.11997E-02

Homogeneous Subsets

Total chromium amounts in lamina of green *Colocasia* sp.

Scheffe^{a,b}

Depth	N	Subset for alpha = .05
		1
At 0.15 m wastewater level	6	7.95667E-02
At 0.25 m wastewater level	8	8.04875E-02
At 0.35 m wastewater level	7	8.29143E-02
Sig.		.159

Means for groups in homogeneous subsets are displayed.

- Uses Harmonic Mean Sample Size = 6.904.
- The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Total chromium amounts in petiole of green *Colocasia* sp.

Scheffe^{a,b}

Depth	N	Subset for alpha = .05
		1
At 0.15 m wastewater level	6	6.06667E-02
At 0.35 m wastewater level	7	6.09286E-02
At 0.25 m wastewater level	8	6.19000E-02
Sig.		.674

Means for groups in homogeneous subsets are displayed.

- Uses Harmonic Mean Sample Size = 6.904.
- The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Total chromium amounts in corm of green *Colocasia* sp.

Scheffe^{a,b}

Depth	N	Subset for alpha = .05
		1
At 0.25 m wastewater level	8	.112813
At 0.15 m wastewater level	6	.113083
At 0.35 m wastewater level	7	.113714
Sig.		.969

Means for groups in homogeneous subsets are displayed.

- Uses Harmonic Mean Sample Size = 6.904.
- The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Total chromium amounts in root of green *Colocasia* sp.

Scheffe^{a,b}

Depth	N	Subset for alpha = .05
		1
At 0.25 m wastewater level	8	.246875
At 0.35 m wastewater level	7	.255429
At 0.15 m wastewater level	6	.257167
Sig.		.598

Means for groups in homogeneous subsets are displayed.

- Uses Harmonic Mean Sample Size = 6.904.
- The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Homogeneous Subsets (CONT.)

Total chromium amounts in lamina of violet *Colocasia* sp.

Scheffe^{a,b}

Depth	N	Subset for alpha = .05
		1
At 0.25 m wastewater level	6	7.92500E-02
At 0.15 m wastewater level	7	8.05714E-02
At 0.35 m wastewater level	5	8.12800E-02
Sig.		.543

Means for groups in homogeneous subsets are displayed.

- Uses Harmonic Mean Sample Size = 5.888.
- The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Total chromium amounts in petiole of violet *Colocasia* sp.

Scheffe^{a,b}

Depth	N	Subset for alpha = .05
		1
At 0.15 m wastewater level	7	6.00286E-02
At 0.35 m wastewater level	5	6.07800E-02
At 0.25 m wastewater level	6	6.13333E-02
Sig.		.835

Means for groups in homogeneous subsets are displayed.

- Uses Harmonic Mean Sample Size = 5.888.
- The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Total chromium amounts in corm of violet *Colocasia* sp.

Scheffe^{a,b}

Depth	N	Subset for alpha = .05
		1
At 0.25 m wastewater level	6	.112667
At 0.15 m wastewater level	7	.112929
At 0.35 m wastewater level	5	.113800
Sig.		.964

Means for groups in homogeneous subsets are displayed.

- Uses Harmonic Mean Sample Size = 5.888.
- The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Total chromium amounts in root of violet *Colocasia* sp.

Scheffe^{a,b}

Depth	N	Subset for alpha = .05
		1
At 0.25 m wastewater level	6	.245000
At 0.15 m wastewater level	7	.247143
At 0.35 m wastewater level	5	.251200
Sig.		.786

Means for groups in homogeneous subsets are displayed.

- Uses Harmonic Mean Sample Size = 5.888.
- The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Oneway

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Total fresh weight of Colocasia sp. at 0.15 m wastewater level	Between Groups	98364.946	3	32788.315	8.853	.000
	Within Groups	133324.551	36	3703.460		
	Total	231689.497	39			
Total fresh weight of Colocasia sp. at 0.25 m wastewater level	Between Groups	103349.314	3	34449.771	10.694	.000
	Within Groups	115965.695	36	3221.269		
	Total	219315.009	39			
Total fresh weight of Colocasia sp. at 0.35 m wastewater level	Between Groups	322072.140	3	107357.380	19.140	.000
	Within Groups	201927.738	36	5609.104		
	Total	523999.878	39			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Treatment types	(J) Treatment types	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Total fresh weight of Colocasia sp. at 0.15 m wastewater level	Experimental green Colocasia sp.	Experimental violet Colocasia sp.	5.644740	27.215656	.998	-74.161647	85.451127
		Observed green Colocasia sp.	-96.504800*	27.215656	.012	-176.311187	-16.698413
		Observed violet Colocasia sp.	-96.046910*	27.215656	.013	-175.853297	-16.240523
	Experimental violet Colocasia sp.	Experimental green Colocasia sp.	-5.644740	27.215656	.998	-85.451127	74.161647
		Observed green Colocasia sp.	-102.149540*	27.215656	.007	-181.955927	-22.343153
		Observed violet Colocasia sp.	-101.691650*	27.215656	.008	-181.498037	-21.885263
	Observed green Colocasia sp.	Experimental green Colocasia sp.	96.504800*	27.215656	.012	16.698413	176.311187
		Experimental violet Colocasia sp.	102.149540*	27.215656	.007	22.343153	181.955927
		Observed violet Colocasia sp.	.457890	27.215656	1.000	-79.348497	80.264277
	Observed violet Colocasia sp.	Experimental green Colocasia sp.	96.046910*	27.215656	.013	16.240523	175.853297
		Experimental violet Colocasia sp.	101.691650*	27.215656	.008	21.885263	181.498037
		Observed green Colocasia sp.	-.457890	27.215656	1.000	-80.264277	79.348497

Multiple Comparisons

Scheffe

Dependent Variable	(I) Treatment types	(J) Treatment types	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Total fresh weight of Colocasia sp. at 0.25 m wastewater level	Experimental green Colocasia sp.	Experimental violet Colocasia sp.	21.527370	25.382156	.868	-52.902516	95.957256
		Observed green Colocasia sp.	-108.866180*	25.382156	.002	-183.296066	-34.436294
		Observed violet Colocasia sp.	-56.495360	25.382156	.195	-130.925246	17.934526
	Experimental violet Colocasia sp.	Experimental green Colocasia sp.	-21.527370	25.382156	.868	-95.957256	52.902516
		Observed green Colocasia sp.	-130.393550*	25.382156	.000	-204.823436	-55.963664
		Observed violet Colocasia sp.	-78.022730*	25.382156	.037	-152.452616	-3.592844
	Observed green Colocasia sp.	Experimental green Colocasia sp.	108.866180*	25.382156	.002	34.436294	183.296066
		Experimental violet Colocasia sp.	130.393550*	25.382156	.000	55.963664	204.823436
		Observed violet Colocasia sp.	52.370820	25.382156	.253	-22.059066	126.800706
	Observed violet Colocasia sp.	Experimental green Colocasia sp.	56.495360	25.382156	.195	-17.934526	130.925246
		Experimental violet Colocasia sp.	78.022730*	25.382156	.037	3.592844	152.452616
		Observed green Colocasia sp.	-52.370820	25.382156	.253	-126.800706	22.059066

Multiple Comparisons

Scheffe

Dependent Variable	(I) Treatment types	(J) Treatment types	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Total fresh weight of Colocasia sp. at 0.35 m wastewater level	Experimental green Colocasia sp.	Experimental violet Colocasia sp.	42.102500	33.493593	.667	-56.113123	140.318123
		Observed green Colocasia sp.	-195.657070*	33.493593	.000	-293.872693	-97.441447
		Observed violet Colocasia sp.	-47.090450	33.493593	.583	-145.306073	51.125173
	Experimental violet Colocasia sp.	Experimental green Colocasia sp.	-42.102500	33.493593	.667	-140.318123	56.113123
		Observed green Colocasia sp.	-237.759570*	33.493593	.000	-335.975193	-139.543947
		Observed violet Colocasia sp.	-89.192950	33.493593	.087	-187.408573	9.022673
	Observed green Colocasia sp.	Experimental green Colocasia sp.	195.657070*	33.493593	.000	97.441447	293.872693
		Experimental violet Colocasia sp.	237.759570*	33.493593	.000	139.543947	335.975193
		Observed violet Colocasia sp.	148.566620*	33.493593	.001	50.350997	246.782243
	Observed violet Colocasia sp.	Experimental green Colocasia sp.	47.090450	33.493593	.583	-51.125173	145.306073
		Experimental violet Colocasia sp.	89.192950	33.493593	.087	-9.022673	187.408573
		Observed green Colocasia sp.	-148.566620*	33.493593	.001	-246.782243	-50.350997

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Total fresh weight of Colocasia sp. at 0.15 m wastewater level

Scheffe^a

Treatment types	N	Subset for alpha = .05	
		1	2
Experimental violet Colocasia sp.	10	79.30736	
Experimental green Colocasia sp.	10	84.95210	
Observed violet Colocasia sp.	10		180.9990
Observed green Colocasia sp.	10		181.4569
Sig.		.998	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Total fresh weight of Colocasia sp. at 0.25 m wastewater level

Scheffe^a

Treatment types	N	Subset for alpha = .05		
		1	2	3
Experimental violet Colocasia sp.	10	71.32005		
Experimental green Colocasia sp.	10	92.84742	92.84742	
Observed violet Colocasia sp.	10		149.3428	149.3428
Observed green Colocasia sp.	10			201.7136
Sig.		.868	.195	.253

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Total fresh weight of Colocasia sp. at 0.35 m wastewater level

Scheffe^a

Treatment types	N	Subset for alpha = .05	
		1	2
Experimental violet Colocasia sp.	10	60.50407	
Experimental green Colocasia sp.	10	102.6066	
Observed violet Colocasia sp.	10	149.6970	
Observed green Colocasia sp.	10		298.2636
Sig.		.087	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Oneway

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Total fresh weight of experimental green Colocasia sp.	Between Groups	1564.191	2	782.096	.140	.870
	Within Groups	150862.14	27	5587.487		
	Total	152426.33	29			
Total fresh weight of experimental violet Colocasia sp.	Between Groups	1781.154	2	890.577	.211	.811
	Within Groups	113800.27	27	4214.825		
	Total	115581.42	29			
Total fresh weight of observed green Colocasia sp.	Between Groups	77920.195	2	38960.098	8.356	.001
	Within Groups	125889.63	27	4662.579		
	Total	203809.83	29			
Total fresh weight of observed violet Colocasia sp.	Between Groups	6606.857	2	3303.428	1.470	.248
	Within Groups	60665.949	27	2246.887		
	Total	67272.806	29			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Wastewater level	(J) Wastewater level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Total fresh weight of experimental green <i>Colocasia</i> sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	-7.895320	33.42899	.973	-94.477445	78.686805
		At 0.35 m wastewater level	-17.654470	33.42899	.870	-104.236595	68.927655
	At 0.25 m wastewater level	At 0.15 m wastewater level	7.895320	33.42899	.973	-78.686805	94.477445
		At 0.35 m wastewater level	-9.759150	33.42899	.958	-96.341275	76.822975
	At 0.35 m wastewater level	At 0.15 m wastewater level	17.654470	33.42899	.870	-68.927655	104.236595
		At 0.25 m wastewater level	9.759150	33.42899	.958	-76.822975	96.341275
Total fresh weight of experimental violet <i>Colocasia</i> sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	7.987310	29.03386	.963	-67.211290	83.185910
		At 0.35 m wastewater level	18.803290	29.03386	.812	-56.395310	94.001890
	At 0.25 m wastewater level	At 0.15 m wastewater level	-7.987310	29.03386	.963	-83.185910	67.211290
		At 0.35 m wastewater level	10.815980	29.03386	.933	-64.382620	86.014580
	At 0.35 m wastewater level	At 0.15 m wastewater level	-18.803290	29.03386	.812	-94.001890	56.395310
		At 0.25 m wastewater level	-10.815980	29.03386	.933	-86.014580	64.382620
Total fresh weight of observed green <i>Colocasia</i> sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	-20.256700	30.53712	.804	-99.348798	58.835398
		At 0.35 m wastewater level	-116.806740*	30.53712	.003	-195.898838	-37.714642
	At 0.25 m wastewater level	At 0.15 m wastewater level	20.256700	30.53712	.804	-58.835398	99.348798
		At 0.35 m wastewater level	-96.550040*	30.53712	.014	-175.642138	-17.457942
	At 0.35 m wastewater level	At 0.15 m wastewater level	116.806740*	30.53712	.003	37.714642	195.898838
		At 0.25 m wastewater level	96.550040*	30.53712	.014	17.457942	175.642138
Total fresh weight of observed violet <i>Colocasia</i> sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	31.656230	21.19852	.343	-23.248608	86.561068
		At 0.35 m wastewater level	31.301990	21.19852	.350	-23.602848	86.206828
	At 0.25 m wastewater level	At 0.15 m wastewater level	-31.656230	21.19852	.343	-86.561068	23.248608
		At 0.35 m wastewater level	-.354240	21.19852	1.000	-55.259078	54.550598
	At 0.35 m wastewater level	At 0.15 m wastewater level	-31.301990	21.19852	.350	-86.206828	23.602848
		At 0.25 m wastewater level	.354240	21.19852	1.000	-54.550598	55.259078

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Total fresh weight of experimental green *Colocasia* sp.

Scheffe^a

Wastewater level	N	Subset for alpha = .05	
		1	
At 0.15 m wastewater level	10	84.952100	
At 0.25 m wastewater level	10	92.847420	
At 0.35 m wastewater level	10	102.606570	
Sig.		.870	

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Total fresh weight of experimental violet *Colocasia* sp.

Scheffe^a

Wastewater level	N	Subset for alpha = .05	
		1	
At 0.35 m wastewater level	10	60.504070	
At 0.25 m wastewater level	10	71.320050	
At 0.15 m wastewater level	10	79.307360	
Sig.		.812	

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Total fresh weight of observed green *Colocasia* sp.

Scheffe^a

Wastewater level	N	Subset for alpha = .05	
		1	2
At 0.15 m wastewater level	10	181.4569	
At 0.25 m wastewater level	10	201.7136	
At 0.35 m wastewater level	10		298.2636
Sig.		.804	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Total fresh weight of observed violet *Colocasia* sp.

Scheffe^a

Wastewater level	N	Subset for alpha = .05	
		1	
At 0.25 m wastewater level	10	149.342780	
At 0.35 m wastewater level	10	149.697020	
At 0.15 m wastewater level	10	180.999010	
Sig.		.343	

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Oneway

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Total dry weight of Colocasia sp. at 0.15 m wastewater level	Between Groups	3	289.926	10.064	.000
	Within Groups	36	28.807		
	Total	39			
Total dry weight of Colocasia sp. at 0.25 m wastewater level	Between Groups	3	333.803	11.431	.000
	Within Groups	36	29.203		
	Total	39			
Total dry weight of Colocasia sp. at 0.35 m wastewater level	Between Groups	3	1780.860	25.997	.000
	Within Groups	36	68.503		
	Total	39			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Treatment types	(J) Treatment types	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Total dry weight of Colocasia sp. at 0.15 m wastewater level	Experimental green Colocasia sp.	Experimental violet Colocasia sp.	.849160	2.400310	.988	-6.189437	7.887757
		Observed green Colocasia sp.	-9.050280*	2.400310	.007	-16.088877	-2.011683
		Observed violet Colocasia sp.	-8.707950*	2.400310	.010	-15.746547	-1.669353
	Experimental violet Colocasia sp.	Experimental green Colocasia sp.	-.849160	2.400310	.988	-7.887757	6.189437
		Observed green Colocasia sp.	-9.899440*	2.400310	.003	-16.938037	-2.860843
		Observed violet Colocasia sp.	-9.557110*	2.400310	.004	-16.595707	-2.518513
	Observed green Colocasia sp.	Experimental green Colocasia sp.	9.050280*	2.400310	.007	2.011683	16.088877
		Experimental violet Colocasia sp.	9.899440*	2.400310	.003	2.860843	16.938037
		Observed violet Colocasia sp.	.342330	2.400310	.999	-6.696267	7.380927
	Observed violet Colocasia sp.	Experimental green Colocasia sp.	8.707950*	2.400310	.010	1.669353	15.746547
		Experimental violet Colocasia sp.	9.557110*	2.400310	.004	2.518513	16.595707
		Observed green Colocasia sp.	-.342330	2.400310	.999	-7.380927	6.696267

Multiple Comparisons

Scheffe

Dependent Variable	(I) Treatment types	(J) Treatment types	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Total dry weight of Colocasia sp. at 0.25 m wastewater level	Experimental green Colocasia sp.	Experimental violet Colocasia sp.	1.887040	2.416722	.893	-5.199684	8.973764
		Observed green Colocasia sp.	-10.613760*	2.416722	.001	-17.700484	-3.527036
		Observed violet Colocasia sp.	-6.432780	2.416722	.088	-13.519504	.653944
	Experimental violet Colocasia sp.	Experimental green Colocasia sp.	-1.887040	2.416722	.893	-8.973764	5.199684
		Observed green Colocasia sp.	-12.500800*	2.416722	.000	-19.587524	-5.414076
		Observed violet Colocasia sp.	-8.319820*	2.416722	.016	-15.406544	-1.233096
	Observed green Colocasia sp.	Experimental green Colocasia sp.	10.613760*	2.416722	.001	3.527036	17.700484
		Experimental violet Colocasia sp.	12.500800*	2.416722	.000	5.414076	19.587524
		Observed violet Colocasia sp.	4.180980	2.416722	.405	-2.905744	11.267704
	Observed violet Colocasia sp.	Experimental green Colocasia sp.	6.432780	2.416722	.088	-.653944	13.519504
		Experimental violet Colocasia sp.	8.319820*	2.416722	.016	1.233096	15.406544
		Observed green Colocasia sp.	-4.180980	2.416722	.405	-11.267704	2.905744

Multiple Comparisons

Scheffe

Dependent Variable	(I) Treatment types	(J) Treatment types	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Total dry weight of Colocasia sp. at 0.35 m wastewater level	Experimental green Colocasia sp.	Experimental violet Colocasia sp.	3.060660	3.701420	.876	-7.793276	13.914596
		Observed green Colocasia sp.	-26.612900*	3.701420	.000	-37.466836	-15.758964
		Observed violet Colocasia sp.	-6.414750	3.701420	.403	-17.268686	4.439186
	Experimental violet Colocasia sp.	Experimental green Colocasia sp.	-3.060660	3.701420	.876	-13.914596	7.793276
		Observed green Colocasia sp.	-29.673560*	3.701420	.000	-40.527496	-18.819624
		Observed violet Colocasia sp.	-9.475410	3.701420	.107	-20.329346	1.378526
	Observed green Colocasia sp.	Experimental green Colocasia sp.	26.612900*	3.701420	.000	15.758964	37.466836
		Experimental violet Colocasia sp.	29.673560*	3.701420	.000	18.819624	40.527496
		Observed violet Colocasia sp.	20.198150*	3.701420	.000	9.344214	31.052086
	Observed violet Colocasia sp.	Experimental green Colocasia sp.	6.414750	3.701420	.403	-4.439186	17.268686
		Experimental violet Colocasia sp.	9.475410	3.701420	.107	-1.378526	20.329346
		Observed green Colocasia sp.	-20.198150*	3.701420	.000	-31.052086	-9.344214

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Total dry weight of Colocasia sp. at 0.15 m wastewater level

Scheffe^a

Treatment types	N	Subset for alpha = .05	
		1	2
Experimental violet Colocasia sp.	10	6.535730	
Experimental green Colocasia sp.	10	7.384890	
Observed violet Colocasia sp.	10		16.09284
Observed green Colocasia sp.	10		16.43517
Sig.		.988	.999

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Total dry weight of Colocasia sp. at 0.25 m wastewater level

Scheffe^a

Treatment types	N	Subset for alpha = .05		
		1	2	3
Experimental violet Colocasia sp.	10	5.683120		
Experimental green Colocasia sp.	10	7.570160	7.570160	
Observed violet Colocasia sp.	10		14.00294	14.00294
Observed green Colocasia sp.	10			18.18392
Sig.		.893	.088	.405

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Total dry weight of Colocasia sp. at 0.35 m wastewater level

Scheffe^a

Treatment types	N	Subset for alpha = .05	
		1	2
Experimental violet Colocasia sp.	10	5.256840	
Experimental green Colocasia sp.	10	8.317500	
Observed violet Colocasia sp.	10	14.73225	
Observed green Colocasia sp.	10		34.93040
Sig.		.107	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Oneway

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Total dry weight of experimental green Colocasia sp.	Between Groups	4.875	2	2.438	.068	.935
	Within Groups	969.221	27	35.897		
	Total	974.096	29			
Total dry weight of experimental violet Colocasia sp.	Between Groups	8.481	2	4.240	.143	.867
	Within Groups	800.521	27	29.649		
	Total	809.002	29			
Total dry weight of observed green Colocasia sp.	Between Groups	2085.254	2	1042.627	12.809	.000
	Within Groups	2197.741	27	81.398		
	Total	4282.995	29			
Total dry weight of observed violet Colocasia sp.	Between Groups	22.503	2	11.251	.518	.602
	Within Groups	586.975	27	21.740		
	Total	609.477	29			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Wastewater level	(J) Wastewater level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Total dry weight of experimental green Colocasia sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	-.185270	2.679443	.998	-7.125111	6.754571
		At 0.35 m wastewater level	-.932610	2.679443	.941	-7.872451	6.007231
	At 0.25 m wastewater level	At 0.15 m wastewater level	.185270	2.679443	.998	-6.754571	7.125111
		At 0.35 m wastewater level	-.747340	2.679443	.962	-7.687181	6.192501
	At 0.35 m wastewater level	At 0.15 m wastewater level	.932610	2.679443	.941	-6.007231	7.872451
		At 0.25 m wastewater level	.747340	2.679443	.962	-6.192501	7.687181
Total dry weight of experimental violet Colocasia sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	.852610	2.435115	.941	-5.454414	7.159634
		At 0.35 m wastewater level	1.278890	2.435115	.872	-5.028134	7.585914
	At 0.25 m wastewater level	At 0.15 m wastewater level	-.852610	2.435115	.941	-7.159634	5.454414
		At 0.35 m wastewater level	.426280	2.435115	.985	-5.880744	6.733304
	At 0.35 m wastewater level	At 0.15 m wastewater level	-1.278890	2.435115	.872	-7.585914	5.028134
		At 0.25 m wastewater level	-.426280	2.435115	.985	-6.733304	5.880744
Total dry weight of observed green Colocasia sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	-1.748750	4.034794	.911	-12.198993	8.701493
		At 0.35 m wastewater level	-18.495230*	4.034794	.000	-28.945473	-8.044987
	At 0.25 m wastewater level	At 0.15 m wastewater level	1.748750	4.034794	.911	-8.701493	12.198993
		At 0.35 m wastewater level	-16.746480*	4.034794	.001	-27.196723	-6.296237
	At 0.35 m wastewater level	At 0.15 m wastewater level	18.495230*	4.034794	.000	8.044987	28.945473
		At 0.25 m wastewater level	16.746480*	4.034794	.001	6.296237	27.196723
Total dry weight of observed violet Colocasia sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	2.089900	2.085177	.611	-3.310773	7.490573
		At 0.35 m wastewater level	1.360590	2.085177	.810	-4.040083	6.761263
	At 0.25 m wastewater level	At 0.15 m wastewater level	-2.089900	2.085177	.611	-7.490573	3.310773
		At 0.35 m wastewater level	-.729310	2.085177	.941	-6.129983	4.671363
	At 0.35 m wastewater level	At 0.15 m wastewater level	-1.360590	2.085177	.810	-6.761263	4.040083
		At 0.25 m wastewater level	.729310	2.085177	.941	-4.671363	6.129983

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Total dry weight of experimental green *Colocasia* sp.

Scheffe^a

Wastewater level	N	Subset for alpha = .05	
		1	
At 0.15 m wastewater level	10	7.384890	
At 0.25 m wastewater level	10	7.570160	
At 0.35 m wastewater level	10	8.317500	
Sig.		.941	

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Total dry weight of experimental violet *Colocasia* sp.

Scheffe^a

Wastewater level	N	Subset for alpha = .05	
		1	
At 0.35 m wastewater level	10	5.256840	
At 0.25 m wastewater level	10	5.683120	
At 0.15 m wastewater level	10	6.535730	
Sig.		.872	

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Total dry weight of observed green *Colocasia* sp.

Scheffe^a

Wastewater level	N	Subset for alpha = .05	
		1	2
At 0.15 m wastewater level	10	16.43517	
At 0.25 m wastewater level	10	18.18392	
At 0.35 m wastewater level	10		34.93040
Sig.		.911	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Total dry weight of observed violet *Colocasia* sp.

Scheffe^a

Wastewater level	N	Subset for alpha = .05	
		1	
At 0.25 m wastewater level	10	14.002940	
At 0.35 m wastewater level	10	14.732250	
At 0.15 m wastewater level	10	16.092840	
Sig.		.611	

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Oneway

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Length of Colocasia sp. at 0.15 m wastewater level	Between Groups	7490.854	3	2496.951	7.642	.000
	Within Groups	11762.571	36	326.738		
	Total	19253.424	39			
Length of Colocasia sp. at 0.25 m wastewater level	Between Groups	7962.107	3	2654.036	8.487	.000
	Within Groups	11257.547	36	312.710		
	Total	19219.654	39			
Length of Colocasia sp. at 0.35 m wastewater level	Between Groups	10271.798	3	3423.933	6.440	.001
	Within Groups	19138.733	36	531.631		
	Total	29410.530	39			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Types of emergent plant	(J) Types of emergent plant	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Length of Colocasia sp. at 0.15 m wastewater level	Experimental green Colocasia sp.	Experimental violet Colocasia sp.	-2.0860	8.0838	.995	-25.7907	21.6187
		Observed green Colocasia sp.	-30.2960*	8.0838	.007	-54.0007	-6.5913
		Observed violet Colocasia sp.	-26.1310*	8.0838	.026	-49.8357	-2.4263
	Experimental violet Colocasia sp.	Experimental green Colocasia sp.	2.0860	8.0838	.995	-21.6187	25.7907
		Observed green Colocasia sp.	-28.2100*	8.0838	.014	-51.9147	-4.5053
		Observed violet Colocasia sp.	-24.0450*	8.0838	.046	-47.7497	-.3403
	Observed green Colocasia sp.	Experimental green Colocasia sp.	30.2960*	8.0838	.007	6.5913	54.0007
		Experimental violet Colocasia sp.	28.2100*	8.0838	.014	4.5053	51.9147
		Observed violet Colocasia sp.	4.1650	8.0838	.966	-19.5397	27.8697
	Observed violet Colocasia sp.	Experimental green Colocasia sp.	26.1310*	8.0838	.026	2.4263	49.8357
		Experimental violet Colocasia sp.	24.0450*	8.0838	.046	.3403	47.7497
		Observed green Colocasia sp.	-4.1650	8.0838	.966	-27.8697	19.5397

Multiple Comparisons

Scheffe

Dependent Variable	(I) Types of emergent plant	(J) Types of emergent plant	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Length of Colocasia sp. at 0.25 m wastewater level	Experimental green Colocasia sp.	Experimental violet Colocasia sp.	5.4780	7.9083	.923	-17.7122	28.6682
		Observed green Colocasia sp.	-27.9620*	7.9083	.012	-51.1522	-4.7718
		Observed violet Colocasia sp.	-21.7700	7.9083	.073	-44.9602	1.4202
	Experimental violet Colocasia sp.	Experimental green Colocasia sp.	-5.4780	7.9083	.923	-28.6682	17.7122
		Observed green Colocasia sp.	-33.4400*	7.9083	.002	-56.6302	-10.2498
		Observed violet Colocasia sp.	-27.2480*	7.9083	.015	-50.4382	-4.0578
	Observed green Colocasia sp.	Experimental green Colocasia sp.	27.9620*	7.9083	.012	4.7718	51.1522
		Experimental violet Colocasia sp.	33.4400*	7.9083	.002	10.2498	56.6302
		Observed violet Colocasia sp.	6.1920	7.9083	.893	-16.9982	29.3822
	Observed violet Colocasia sp.	Experimental green Colocasia sp.	21.7700	7.9083	.073	-1.4202	44.9602
		Experimental violet Colocasia sp.	27.2480*	7.9083	.015	4.0578	50.4382
		Observed green Colocasia sp.	-6.1920	7.9083	.893	-29.3822	16.9982

Multiple Comparisons

Scheffe

Dependent Variable	(I) Types of emergent plant	(J) Types of emergent plant	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Length of Colocasia sp. at 0.35 m wastewater level	Experimental green Colocasia sp.	Experimental violet Colocasia sp.	8.7420	10.3115	.868	-21.4950	38.9790
		Observed green Colocasia sp.	-29.3590	10.3115	.060	-59.5960	.8780
		Observed violet Colocasia sp.	-24.4030	10.3115	.153	-54.6400	5.8340
	Experimental violet Colocasia sp.	Experimental green Colocasia sp.	-8.7420	10.3115	.868	-38.9790	21.4950
		Observed green Colocasia sp.	-38.1010*	10.3115	.008	-68.3380	-7.8640
		Observed violet Colocasia sp.	-33.1450*	10.3115	.027	-63.3820	-2.9080
	Observed green Colocasia sp.	Experimental green Colocasia sp.	29.3590	10.3115	.060	-.8780	59.5960
		Experimental violet Colocasia sp.	38.1010*	10.3115	.008	7.8640	68.3380
		Observed violet Colocasia sp.	4.9560	10.3115	.972	-25.2810	35.1930
	Observed violet Colocasia sp.	Experimental green Colocasia sp.	24.4030	10.3115	.153	-5.8340	54.6400
		Experimental violet Colocasia sp.	33.1450*	10.3115	.027	2.9080	63.3820
		Observed green Colocasia sp.	-4.9560	10.3115	.972	-35.1930	25.2810

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Length of Colocasia sp. at 0.15 m wastewater level

Scheffe^a

Types of emergent plant	N	Subset for alpha = .05	
		1	2
Experimental green Colocasia sp.	10	29.6210	
Experimental violet Colocasia sp.	10	31.7070	
Observed violet Colocasia sp.	10		55.7520
Observed green Colocasia sp.	10		59.9170
Sig.		.995	.966

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Length of Colocasia sp. at 0.25 m wastewater level

Scheffe^a

Types of emergent plant	N	Subset for alpha = .05		
		1	2	3
Experimental violet Colocasia sp.	10	31.1380		
Experimental green Colocasia sp.	10	36.6160	36.6160	
Observed violet Colocasia sp.	10		58.3860	58.3860
Observed green Colocasia sp.	10			64.5780
Sig.		.923	.073	.893

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Length of Colocasia sp. at 0.35 m wastewater level

Scheffe^a

Types of emergent plant	N	Subset for alpha = .05	
		1	2
Experimental violet Colocasia sp.	10	30.1990	
Experimental green Colocasia sp.	10	38.9410	38.9410
Observed violet Colocasia sp.	10		63.3440
Observed green Colocasia sp.	10		68.3000
Sig.		.868	.060

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Oneway

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Length of experimental green Colocasia sp.	Between Groups	470.660	2	235.330	.362	.700
	Within Groups	17571.079	27	650.781		
	Total	18041.739	29			
Length of experimental violet Colocasia sp.	Between Groups	11.598	2	5.799	.007	.993
	Within Groups	20901.316	27	774.123		
	Total	20912.915	29			
Length of observed green Colocasia sp.	Between Groups	352.843	2	176.421	3.077	.063
	Within Groups	1548.278	27	57.344		
	Total	1901.121	29			
Length of observed violet Colocasia sp.	Between Groups	297.194	2	148.597	1.876	.173
	Within Groups	2138.177	27	79.192		
	Total	2435.371	29			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Wastewater level	(J) Wastewater level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Length of experimental green <i>Colocasia</i> sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	-6.9950	11.4086	.830	-36.5436	22.5536
		At 0.35 m wastewater level	-9.3200	11.4086	.719	-38.8686	20.2286
	At 0.25 m wastewater level	At 0.15 m wastewater level	6.9950	11.4086	.830	-22.5536	36.5436
		At 0.35 m wastewater level	-2.3250	11.4086	.979	-31.8736	27.2236
	At 0.35 m wastewater level	At 0.15 m wastewater level	9.3200	11.4086	.719	-20.2286	38.8686
		At 0.25 m wastewater level	2.3250	11.4086	.979	-27.2236	31.8736
Length of experimental violet <i>Colocasia</i> sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	.5690	12.4429	.999	-31.6584	32.7964
		At 0.35 m wastewater level	1.5080	12.4429	.993	-30.7194	33.7354
	At 0.25 m wastewater level	At 0.15 m wastewater level	-.5690	12.4429	.999	-32.7964	31.6584
		At 0.35 m wastewater level	.9390	12.4429	.997	-31.2884	33.1664
	At 0.35 m wastewater level	At 0.15 m wastewater level	-1.5080	12.4429	.993	-33.7354	30.7194
		At 0.25 m wastewater level	-.9390	12.4429	.997	-33.1664	31.2884
Length of observed green <i>Colocasia</i> sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	-4.6610	3.3866	.400	-13.4323	4.1103
		At 0.35 m wastewater level	-8.3830	3.3866	.063	-17.1543	.3883
	At 0.25 m wastewater level	At 0.15 m wastewater level	4.6610	3.3866	.400	-4.1103	13.4323
		At 0.35 m wastewater level	-3.7220	3.3866	.554	-12.4933	5.0493
	At 0.35 m wastewater level	At 0.15 m wastewater level	8.3830	3.3866	.063	-.3883	17.1543
		At 0.25 m wastewater level	3.7220	3.3866	.554	-5.0493	12.4933
Length of observed violet <i>Colocasia</i> sp.	At 0.15 m wastewater level	At 0.25 m wastewater level	-2.6340	3.9797	.805	-12.9417	7.6737
		At 0.35 m wastewater level	-7.5920	3.9797	.181	-17.8997	2.7157
	At 0.25 m wastewater level	At 0.15 m wastewater level	2.6340	3.9797	.805	-7.6737	12.9417
		At 0.35 m wastewater level	-4.9580	3.9797	.470	-15.2657	5.3497
	At 0.35 m wastewater level	At 0.15 m wastewater level	7.5920	3.9797	.181	-2.7157	17.8997
		At 0.25 m wastewater level	4.9580	3.9797	.470	-5.3497	15.2657

Homogeneous Subsets

Length of experimental green *Colocasia* sp.

Scheffe^a

Wastewater level	N	Subset for alpha = .05
		1
At 0.15 m wastewater level	10	29.6210
At 0.25 m wastewater level	10	36.6160
At 0.35 m wastewater level	10	38.9410
Sig.		.719

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Length of experimental violet *Colocasia* sp.

Scheffe^a

Wastewater level	N	Subset for alpha = .05
		1
At 0.35 m wastewater level	10	30.1990
At 0.25 m wastewater level	10	31.1380
At 0.15 m wastewater level	10	31.7070
Sig.		.993

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Length of observed green *Colocasia* sp.

Scheffe^a

Wastewater level	N	Subset for alpha = .05
		1
At 0.15 m wastewater level	10	59.9170
At 0.25 m wastewater level	10	64.5780
At 0.35 m wastewater level	10	68.3000
Sig.		.063

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.

Length of observed violet *Colocasia* sp.

Scheffe^a

Wastewater level	N	Subset for alpha = .05
		1
At 0.15 m wastewater level	10	55.7520
At 0.25 m wastewater level	10	58.3860
At 0.35 m wastewater level	10	63.3440
Sig.		.181

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 10.000.



BIOGRAPHY

Sorawit Ngampromphun was born on 16th of March 1978 in Bangkok. He entered Chulalongkorn University in 1994 and graduated a Bachelor Degree of Science in 1998 from Department of General Science, Faculty of Science, Chulalongkorn University. Then, he continued his further education at Inter-department of Environmental science, Chulalongkorn University.