APPENDIX

Table A1 Selected macro nutrients and heavy metals supplied from three sludge rates to dryland maize, irrigated maize-oat rotation and dryland pasture during the 2004/05 to 2007/08 growing seasons.

Year	Selected macro nutrients supplied from three sludge rates								
	4 t ha^{-1}	8 t ha^{-1}	16 t ha^{-1}	4 t ha^{-1}	8 t ha^{-1}	16 t ha^{-1}	4 t ha^{-1}	8 t ha^{-1}	16 t ha^{-1}
	K			Ca			Mg		
	kg ha^{-1}								
2004/05	15.0	30.0	61.0	100.5	201	402	21.0	43.0	86.0
2005/06	3.0	6.0	12.0	52.0	104	208	2.4	4.7	9.5
2006/07	2.8	5.5	11.0	70.0	140	280	3.3	6.6	13.3
2007/08	5.4	10.8	21.6	40.0	80	160	4.6	9.0	18.0
Cumulative supply	26.2	52.3	105.6	262.5	525	1050	31.3	63.3	126.8

Year	Selected heavy metals supplied from three sludge rates											
	4 t ha^{-1}	8 t ha^{-1}	16 t ha^{-1}	4 t ha^{-1}	8 t ha^{-1}	16 t ha^{-1}	4 t ha^{-1}	8 t ha^{-1}	16 t ha^{-1}	4 t ha^{-1}	8 t ha^{-1}	16 t ha^{-1}
	Cd			Hg			Cr			As		
	kg ha^{-1}											
2004/05	0.0065	0.013	0.026	0.0068	0.014	0.027	0.21	0.42	0.83	0.028	0.057	0.11
2005/06	0.00028	0.00056	0.0012	0.00008	0.00016	0.00032	0.006	0.012	0.024	0.00072	0.00144	0.00288
2006/07	0.0006	0.0012	0.0024	0.00012	0.00024	0.00048	0.012	0.024	0.048	0.00092	0.00184	0.00368
2007/08	0.076	0.15	0.30	0.007	0.014	0.28	2	4	8	0.072	0.14	0.28
Cum. supply	0.08338	0.16476	0.3296	0.014	0.0284	0.3078	2.228	4.456	8.902	0.10164	0.20028	0.39656

Year	Selected heavy metals supplied from three sludge rates											
	4 t ha^{-1}	8 t ha^{-1}	16 t ha^{-1}	4 t ha^{-1}	8 t ha^{-1}	16 t ha^{-1}	4 t ha^{-1}	8 t ha^{-1}	16 t ha^{-1}	4 t ha^{-1}	8 t ha^{-1}	16 t ha^{-1}
	Pb			Zn			Ni			Cu		
	kg ha^{-1}											
2004/05	0.22	0.44	0.87	1.84	3.68	7.36	0.095	0.19	0.38	0.39	0.78	1.56
2005/06	0.038	0.075	0.15	0.017	0.035	0.069	0.0055	0.011	0.022	0.013	0.026	0.051
2006/07	0.00548	0.01096	0.022	0.0834	0.17	0.33	0.0039	0.0078	0.016	0.18	0.36	0.72
2007/08	0.4	0.8	1.6	9.3	18.7	37.2	0.58	1.16	2.3	2.11	4.21	8.42
Cum. supply	0.66348	1.32596	2.642	11.2404	22.585	44.959	0.6844	1.3688	2.718	2.693	5.376	10.751

Table A2 Selected macro nutrients and heavy metals supplied from three sludge rates to turfgrass sod production during the 2004/05 to 2005/06 growing seasons.

Year	Selected macro nutrients supplied from three sludge rates								
	33 t ha^{-1}	67 t ha^{-1}	100 t ha^{-1}	33 t ha^{-1}	67 t ha^{-1}	100 t ha^{-1}	33 t ha^{-1}	67 t ha^{-1}	100 t ha^{-1}
	K			Ca			Mg		
	kg ha^{-1}								
2004/05	126.00	255.00	380.00	828.83	1682.77	2511.60	176.81	358.99	535.80
2005/06	23.43	47.57	71.00	431.05	875.15	1306.20	19.50	39.60	59.10
Cumulative supply	149.43	302.57	451.00	1259.88	2557.92	3817.80	196.31	398.59	594.90

Year	Selected heavy metals supplied from three sludge rates											
	33 t ha^{-1}	67 t ha^{-1}	100 t ha^{-1}	33 t ha^{-1}	67 t ha^{-1}	100 t ha^{-1}	33 t ha^{-1}	67 t ha^{-1}	100 t ha^{-1}	33 t ha^{-1}	67 t ha^{-1}	100 t ha^{-1}
	Cd			Hg			Cr			As		
	kg ha^{-1}											
2004/05	0.0538	0.1092	0.163	0.0561	0.1139	0.17	1.71	3.48	5.19	0.23	0.47	0.71
2005/06	0.0023	0.0047	0.007	0.0007	0.0014	0.002	0.05	0.10	0.15	0.01	0.01	0.02
Cum. supply	0.0561	0.1139	0.170	0.0568	0.1153	0.172	1.76	3.58	5.34	0.24	0.48	0.73

Year	Selected heavy metals supplied from three sludge rates											
	33 t ha^{-1}	67 t ha^{-1}	100 t ha^{-1}	33 t ha^{-1}	67 t ha^{-1}	100 t ha^{-1}	33 t ha^{-1}	67 t ha^{-1}	100 t ha^{-1}	33 t ha^{-1}	67 t ha^{-1}	100 t ha^{-1}
	Pb			Zn			Ni			Cu		
	kg ha^{-1}											
2004/05	1.80	3.65	5.45	15.18	30.81	45.99	0.79	1.60	2.38	3.21	6.51	9.72
2005/06	0.31	0.63	0.94	0.14	0.29	0.43	0.05	0.09	0.14	0.11	0.22	0.32
Cum. supply	2.11	4.28	6.39	15.32	31.1	46.42	0.84	1.69	2.52	3.32	6.73	10.04

Table A3 Statistical parameters of the SWB model corroboration for weeping lovegrass (Soil water content updated after every hay cut) using combined data collected during the 2004/05 to 2007/08 growing seasons.

Variables	n	D	RMSE	MAE (%)	R^2
Weeping lovegrass control treatment					
LAI	34	0.83	0.44	29	0.90
Aboveground biomass	34	0.71	1.03	27	0.85
Aboveground biomass N uptake	10	0.60	22.8	20	0.99
Weeping lovegrass 8 Mg ha^{-1} per annum sludge treatment					
LAI	34	0.93	0.47	20	0.95
Aboveground biomass	34	0.87	0.94	17	0.92
Aboveground biomass N uptake (all data)	10	-0.27	35.00	25	0.37
Weeping lovegrass 16 Mg ha^{-1} per annum sludge treatment					
LAI	34	0.95	0.40	18	0.98
Aboveground biomass	34	0.84	1.28	19	0.91
Aboveground biomass N uptake	10	0.30	39.32	18	0.72