

Article - Supplementary material

Relationship of Photosynthetic Activity of *Polygonum acuminatum* and *Ludwigia lagunae* with Physicochemical Aspects of Greywater in a Zero-Liquid Discharge System

Karen Takahashi ¹, Gabriela Araújo ¹, Vali Pott ², Nídia Yoshida ³, Liana Lima ², Anderson Caires ⁴ and Paula Paulo ^{1,*}Table S1. Correlation data between *Fv/Fm* and physicochemical parameters for the four irrigation solutions used for *L. lagunae* and *P. acuminatum*.

	<i>P. acuminatum</i>															
	TW				TW*				GW _L				GW _L *			
	I		M		I		M		I		M		I		M	
	Rô de Spear-man	valor-p	Rô de Spear-man	valor-p	Rô de Spear-man	valor-p	Rô de Spear-man	valor-p	Rô de Spear-man	valor-p	Rô de Spear-man	valor-p	Rô de Spear-man	valor-p	Rô de Spear-man	valor-p
pH	-0.18	0.34	0.10	0.61	-0.26	0.15	-0.12	0.53	-0.29	0.12	-0.09	0.64	-0.06	0.78	0.13	0.50
TEMP	-0.35	0.06	-0.16	0.39	-0.13	0.47	-0.22	0.24	-0.71	0.00	-0.57	0.00	-0.04	0.83	0.16	0.40
EC	-0.32	0.09	0.25	0.20	0.33	0.07	0.09	0.63	-0.24	0.19	-0.48	0.01	0.09	0.65	0.14	0.47
SAL	-0.06	0.74	0.24	0.21	0.18	0.33	0.22	0.25	-0.35	0.05	-0.48	0.01	0.08	0.68	0.13	0.49
TDS	-0.07	0.73	0.14	0.47	0.19	0.33	0.10	0.60	-0.41	0.02	-0.20	0.29	0.00	0.98	0.12	0.54
ORP	0.14	0.46	0.02	0.92	0.04	0.83	0.07	0.72	0.12	0.53	0.80	0.00	-0.11	0.59	0.12	0.53
DO	-0.12	0.51	-0.06	0.75	-0.09	0.63	0.09	0.63	0.60	0.00	0.68	0.00	-0.32	0.11	-0.16	0.42
EVAPO			0.14	0.47			0.01	0.97			-0.11	0.58			-0.03	0.86

<i>L. lagunae</i>																
	TW				TW*				GW _L				GW _L *			
	I		M		I		M		I		M		I		M	
	Rô de Spear- man	valor- P	Rô de Spear- man	valor- P	Rô de Spear- man	valor- P	Rô de Spear- man	valor- P	Rô de Spear- man	valor- P	Rô de Spear- man	valor- P	Rô de Spear- man	valor- P	Rô de Spear- man	valor- P
pH	-0.08	0.68	-0.11	0.56	-0.65	0.00	-0.18	0.34	-0.26	0.40	-0.39	0.21	-0.51	0.00	-0.10	0.61
TEMP	-0.31	0.09	-0.26	0.15	-0.36	0.05	-0.29	0.12	0.24	0.43	0.18	0.59	-0.29	0.12	-0.16	0.38
EC	-0.45	0.01	-0.34	0.06	0.42	0.02	0.53	0.00	0.23	0.45	-0.85	0.00	0.42	0.22	-0.14	0.45
SAL	0.00	0.05	-0.30	0.10	0.44	0.01	0.41	0.02	0.14	0.65	-0.76	0.00	0.41	0.03	-0.10	0.58
TDS	-0.12	0.51	-0.07	0.72	0.65	0.00	0.73	0.00	-0.34	0.26	-0.29	0.37	0.17	0.39	0.30	0.11
ORP	-0.02	0.91	0.52	0.00	-0.01	0.95	0.49	0.01	-0.45	0.12	0.47	0.12	0.17	0.37	0.44	0.01
DO	-0.11	0.56	0.19	0.31	-0.36	0.05	0.65	0.00	0.50	0.08	0.78	0.00	-0.12	0.53	0.59	0.00
EVAPO			0.06	0.73			-0.42	0.02			-0.42	0.18			-0.27	0.15

TW: tap water (control group); TW*: tap water + nutrients; GW_L: laundry greywater; GW_L*: laundry greywater + nutrients; TEMP: temperature; E.C.: electrical conductivity; SAL: salinity; ORP: oxi-reduction potential; DO: dissolved oxygen; TDS: total dissolved solids; EVAPO: evapotranspiration; I: irrigation solution; M: mesocosm (piezometer, SP1).

Table S1. Physicochemical data measured in the piezometer (SP1) and from the collected effluent samples (SP2).

		pH	Temp (°C)	EC (μS cm ⁻¹)	SAL (%)	TDS (mg L ⁻¹)
<i>P. acuminatum</i>	TW	7.08±0.50 (31)	24.44±3.86 (31)	228.61±103.52 (29)	0.46±0.19 (29)	117.22±35.55 (29)
	TW*	6.81±0.35 (31)	24.08±3.74 (31)	1408.02±1342.33 (31)	2.65±2.13 (30)	807.19±728.00 (30)
	GW	7.09±0.31 (31)	24.34±4.45 (31)	504.08±214.97 (31)	1.01±0.39 (31)	270.63±87.73 (30)
	GW*	6.91±0.27 (31)	23.93±4.17 (31)	1832.55±1243.88 (31)	3.54±2.40 (31)	979.56±676.38 (31)

<i>L. lagunae</i>	TW	7.02±0.56 (31)	24.70±4.06 (31)	232.06±94.82 (31)	0.45±0.18 (31)	122.54±42.79 (31)
	TW*	6.62±0.29 (28)	25.09±4.44 (28)	1310.31±1414.81 (26)	2.60±2.65 (26)	925.81±1334.23 (27)
	GW	7.15±0.28 (31)	24.76±4.34 (31)	483.05±166.22 (31)	0.99±0.31 (31)	260.20±72.78 (31)
	GW*	6.86±0.33 (31)	24.79±4.45 (31)	2765.29±1193.73 (31)	5.54±2.20 (31)	1512.58±624.26 (31)
		ORP (mV)	DO (mg L⁻¹)	COD (mg L⁻¹)	TS (mg L⁻¹)	
<i>P. acuminatum</i>	TW	160.78±219.24 (31)	4.45±0.87 (31)	23.94±19.38 (24)	246.45±112.33 (23)	
	TW*	179.70±210.41 (31)	3.62±0.80 (31)	49.72±48.56 (30)	1363.04±1153.57 (28)	
	GW	109.55±220.87 (31)	2.96±0.94 (31)	51.00±49.14 (26)	381.77±93.57 (22)	
	GW*	74.17±284.00 (31)	2.21±1.21 (31)	78.00±45.05 (30)	1434.42±963.28 (24)	
<i>L. lagunae</i>	TW	213.60±164.73 (31)	4.04±0.96 (31)	18.83±13.82 (20)	217.13±67.09 (22)	
	TW*	199.87±201.10 (27)	3.41±1.37 (28)	118.73±107.35 (23)	1342.78±1109.60 (22)	
	GW	183.68±170.57 (31)	2.85±0.86 (31)	53.10±50.56 (26)	343.64±98.29 (23)	
	GW*	111.38±223.28 (31)	2.70±1.47 (31)	203.70±152.29 (26)	2027.53±812.36 (24)	

TW: tap water (control group); TW*: tap water + nutrients; GW_L: laundry greywater; GW_L*: laundry greywater + nutrients; TEMP: temperature; E.C.: electrical conductivity; SAL: salinity; TDS: total dissolved solids; ORP: oxi-reduction potential; DO: dissolved oxygen.