

Supplementary Tables and Figures

Table S1. Mean \pm standard deviation of physicochemical variables between the Impacted, Restored and Control treatment during the “Before”, “During” and “After” biological control of *Salvinia molesta*. Where EC – conductivity; TDS – total dissolved solids; Water temp. – water temperature; DO – dissolved oxygen; NO₃ – nitrate; NH₄ – ammonium; P – phosphate.

Physicochemical variables	Impacted			Restored			Control		
	Before	During	After	Before	During	After	Before	During	After
pH	7.7 \pm 0.04	7.1 \pm 0.4	7.04 \pm 0.14	8.1 \pm 0.3	7.5 \pm 0.4	7.8 \pm 0.4	7.8 \pm 0.04	8.2 \pm 0.5	8.7 \pm 0.6
EC (μ S)	843.5 \pm 38.7	867.6 \pm 311.6	1071.9 \pm 422	850.5 \pm 25.3	772.5 \pm 291.3	821.5 \pm 260.6	901 \pm 68.6	871.8 \pm 269.1	1039.1 \pm 439.8
TDS (ppm)	598.3 \pm 27.4	602.8 \pm 223.6	762.1 \pm 297.7	603 \pm 17.6	547.9 \pm 206.8	582.3 \pm 185.7	642 \pm 53.3	641.2 \pm 159.2	726.5 \pm 294.8
Salinity (ppm)	429 \pm 19.8	456.3 \pm 140.9	540.4 \pm 211.7	433.8 \pm 13.2	390.3 \pm 150.9	413 \pm 132.8	462.3 \pm 39.5	457 \pm 116.9	512.6 \pm 206.7
Water temp. (°C)	22.5 \pm 0.5	16.8 \pm 3.10	19.8 \pm 3.4	24.6 \pm 0.3	17.8 \pm 2.4	21.8 \pm 2.5	23.4 \pm 0.46	17.1 \pm 2.9	20.9 \pm 2.9
DO (mg/l)	5.4 \pm 0.3	3.51 \pm 0.53	6.9 \pm 1.4	5.1 \pm 0.4	3.5 \pm 1.3	3.3 \pm 0.5	4.9 \pm 0.5	5.2 \pm 1.4	3.9 \pm 0.3
NO ₃ (mg/l)	16.6 \pm 5.3	5.7 \pm 3.2	3.3 \pm 1.9	2.6 \pm 0.6	4.9 \pm 2.9	3.3 \pm 2.6	6.9 \pm 2.9	20.8 \pm 19.4	11.2 \pm 8.2
NH ₄ (mg/l)	0.03 \pm 0.05	0.01 \pm 0.03	0.03 \pm 0.05	0.03 \pm 0.05	0.01 \pm 0.03	0.01 \pm 0.04	0 \pm 0	0 \pm 0	0 \pm 0
P (mg/l)	1 \pm 0.4	0.84 \pm 0.81	0.81 \pm 1.32	0.8 \pm 0.5	3.04 \pm 5.9	1.09 \pm 1.02	0.93 \pm 0.40	0.6 \pm 0.67	0.4 \pm 0.5
Water clarity (cm)	71.8 \pm 10.7	32.6 \pm 23	19.6 \pm 16.4	43.8 \pm 16.7	43.1 \pm 31.8	67.6 \pm 22.8	61.3 \pm 1.85	66.8 \pm 18	92.9 \pm 3.5
Periphyton biomass (mg/m ³)	15.3 \pm 13.9	17.8 \pm 23.8	9.4 \pm 7.5	17.6 \pm 14.9	21.6 \pm 27.7	60.5 \pm 29.3	23.4 \pm 19.2	23.6 \pm 20.8	63 \pm 54.9
Phytoplankton biomass (mg/m ³)	0.09 \pm 0.06	4.3 \pm 4.8	19.7 \pm 16.8	0.13 \pm 0.08	4.1 \pm 4.5	0.63 \pm 0.7	0.10 \pm 0.07	0.40 \pm 0.52	0.3 \pm 0.2

Table S2. Mean \pm standard deviation of dominant (>1000 cells per liter) epilithic algae species recorded between the Impacted, Restored and Control treatment during the “Before”, “During” and “After” biological control of *Salvinia molesta*.

Species	Impacted			Restored			Control		
	Before	During	After	Before	During	After	Before	During	After
<i>Anabaena</i> sp.	1268.8	82.3 ± 88.2		162.5 ± 211.9	48.7 ± 51.9	1114.3 ± 1260.1	12.2 ± 0.69	334.7 ± 706	
<i>Psuedanabaena</i> sp.		163.4 ± 375.6	40.8 ± 26.7		227.9 ± 621.9	11.9		307.4 ± 654.3	
<i>Amphora veneta</i>		164.4 ± 237.4	102.4 ± 89		9.9 ± 5.3	51.7 ± 43.9		77.1 ± 100	8.4
<i>Cocconeis</i> <i>placentula</i>		49.4 ± 98.8	42.2 ± 19.3		19 ± 19.8			85.3 ± 190.6	29.4 ± 29.5
<i>Cocconeis</i> <i>placentula</i>			1.3 ± 2.6					150.3 ± 387.6	
<i>Craticula bruderii</i>		88.5			24.3 ± 35.7			2994.1 ± 6669.9	5.6
<i>Diploneis oploneis</i>								243.9 ± 231.3	
<i>Epithemia adnata</i>		13.3 ± 16.4			24.3 ± 35.7	6.2		791.4 ± 2016	314.3 ± 312.9
<i>Fragilaria ulna</i> <i>var. acus</i>		10.9 ± 16.4	13.2 ± 7.2		73.5	118.5	7.3	820.5 ± 1620.4	4.9
<i>Nitzschia filiformis</i>		34.9 ± 42.8	57.3 ± 43.5		50.5 ± 67.5	80.9 ± 120.1		1557.8 ± 3099.3	
<i>Nitzschia linearis</i>		68.9 ± 91.2	29.1 ± 21.2		32.6 ± 55.1	50.9 ± 62.4		1641.4 ± 3559.8	10.6 ± 9
<i>Nitzschia palea</i>		30.3 ± 60.3	10.3 ± 7.7		90 ± 158	56.2 ± 89.6		324.2 ± 488.1	
<i>Rhopalodia gibba</i>	21.9	4.9 ± 3.6	48.8 ± 60.9		7.4 ± 2.3		13.9	65.1 ± 142.4	5.7 ± 0.13
<i>Peridinium</i> <i>umbonatum</i>		1.9 ± 3.4			29.9 ± 27.8	34.8 ± 34.6	11.7	605.2 ± 2014.4	56 ± 64.8
<i>Characiopsis</i> <i>turgida</i>						866.4 ± 1167			
<i>Cryptomonas erosa</i>		988.5 ± 1690.1			970.9 ± 1654.9			2.8 ± 4.8	
<i>Cryptomonas</i> <i>marssonii</i>					466.6 ± 747.8			3.2 ± 5.6	
<i>Cryptomonas</i> <i>ovalata</i>		10.7	24.5		1699.4 ± 2943.5			56.4 ± 79.3	
<i>Phacus appplanatus</i>					535.2 ± 857				
<i>Coelastrum</i> <i>sphaericum</i>					16.6			336.1 ± 646.4	45.9
<i>Oocystis</i> sp.		25.3			17.8 ± 10.2			471.6 ± 811.8	
<i>Oocystis marssonii</i>								127.2 ± 136.6	390.2 ± 495.9
<i>Characiopsis</i> <i>longipes</i>						565.2 ± 637.6			
<i>Closteriopsis</i> <i>acicularis</i>		11.9 ± 9.9			7735.8 ± 21498.5		23.3	176.6 ± 295.6	

<i>Closteriopsis longissima</i>	1609.4 ± 419.9	9.5	62.7 ± 72.2	962.3 ± 1892.6			
<i>Monoraphidium irregularе</i>	831.3 ± 810.9	2.1 ± 3.6	1180 ± 2246.7	84.3 ± 133.2	34.3 ± 17.5	127.2 ± 389.5	19.8 ± 19.7
<i>Monoraphidium contortum</i>	3003.7 ± 3131.7	7.9 ± 4.8	1613.5 ± 2696	423.9 ± 926.5	205 ± 317.5	211.8 ± 472.1	
<i>Monoraphidium graffithii</i>		6.3	5.2	173.9 ± 311	252.7 ± 433.1	99.9 ± 171	59.3 ± 101.5
<i>Scenedesmus communis</i>		8.9 ± 13.7		205.6 ± 490.4	209.1 ± 332.6		138.5 ± 250
<i>Scenedesmus dinorphus</i>	196.1 ± 162.9	18.2 ± 24.3	6.1	102.6 ± 59	41.1 ± 68.7	11.9	558.5 ± 584.3
<i>Micospora floccosa</i>		5.1					1443.4 ± 1907.3
<i>Zygnema</i> sp.		5.8	5.9 ± 0.5	438.8 ± 995.9	22.6		916.9 ± 833.9
<i>Cosmarium cyclicum</i>		78.5 ± 134.7	5.2	35.9 ± 70.8	22.6 ± 18.4		230.2 ± 617.2
<i>Cosmarium formosulum</i>						91.4 ± 112.4	6.6 2.8
<i>Cosmarium subcostatum</i>			153.3 ± 195.7		447.3 ± 499.1	7.2 ± 9.3	

Table S3. Mean \pm standard deviation of aquatic macroinvertebrates taxa recorded between the Impacted, Restored and Control treatment during the “Before”, “During” and “After” biological control of *Salvinia molesta*.

Lymnaeidae		1		1.3 ± 0.6	9 ± 1		7.5 ± 12.4	3 ± 2.5
Physidae	2.5 ± 2.1	18 ± 19.4	4.1 ± 3.2	1	34.9 ± 45.5	43.7 ± 51.2	22	38.4 ± 24.1
Chaoboridae		4.3 ± 3.2			1		1.6 ± 0.9	1.3 ± 0.5

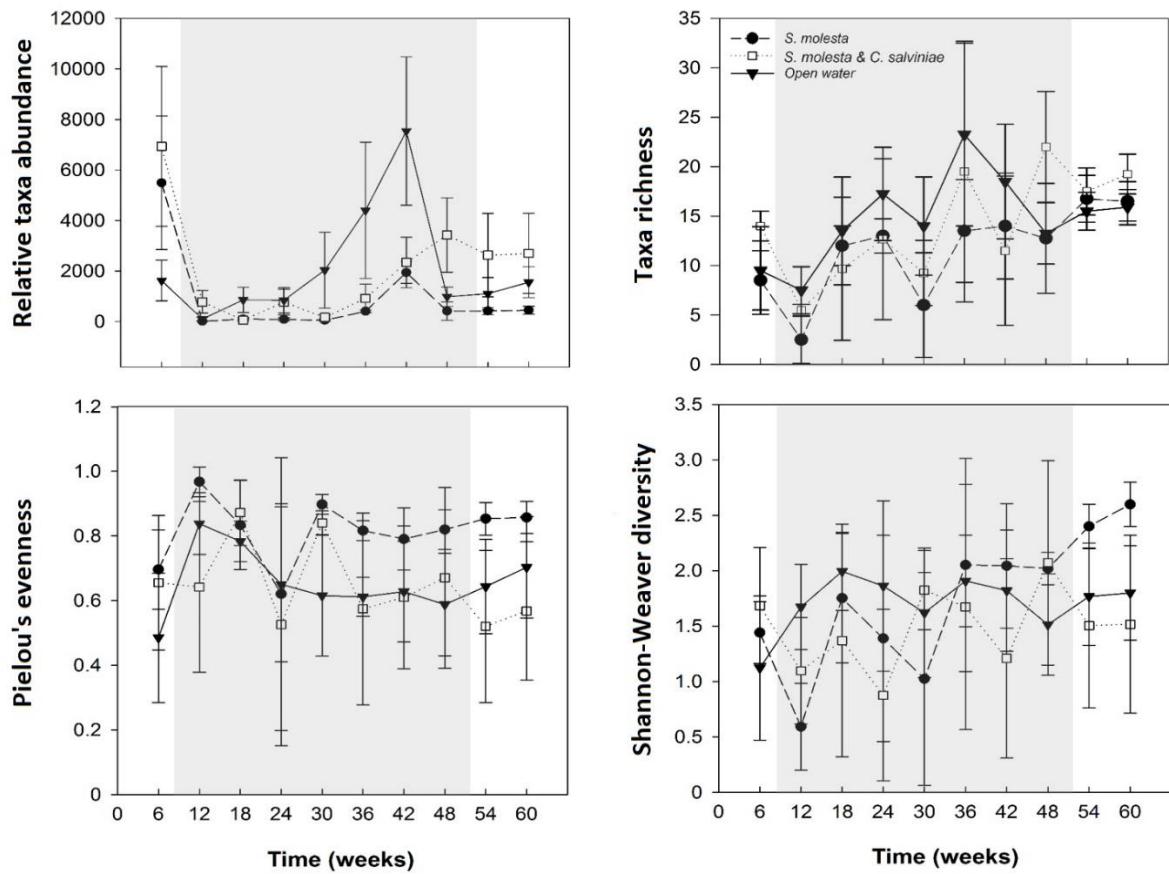


Figure S1. Epilithic algae biodiversity indices (mean and standard deviation) between treatments and invasion phase per week for 60 weeks. Where *S. molesta* – Impacted treatment; *S. molesta* & *C. salviniae* – Restored treatment; Open water – Control treatment.

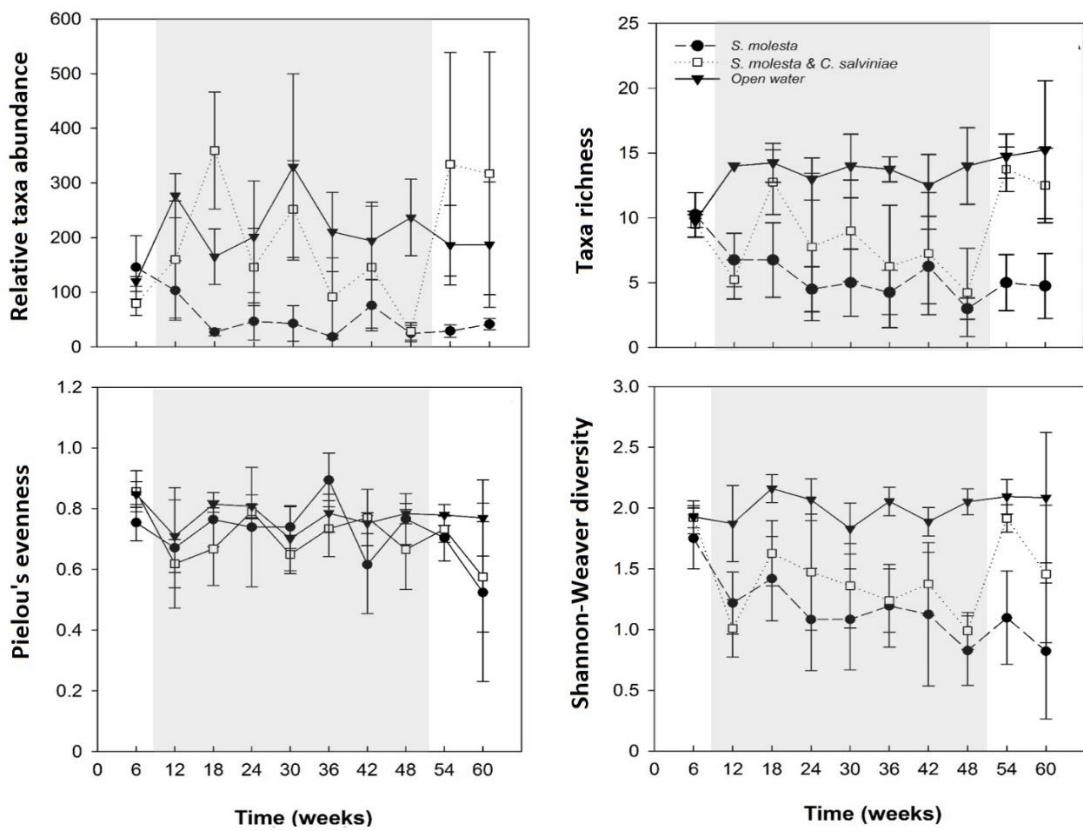


Figure S2. Aquatic macroinvertebrates biodiversity indices (mean and standard deviation) between treatments and invasion phase per week for 60 weeks. Where *S. molesta* – Impacted treatment; *S. molesta* & *C. salviniae* – Restored treatment; Open water – Control treatment.