

1 **Marques *et al.*, 2026. Rivers Under Threat: Assessing the Ecological Impact of Macro litter**  
 2 **in the Leça River, Portugal. *Limnetica* 45(1), 2026**

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4 **SUPPLEMENTARY MATERIAL**

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6 **Table S1** – Results of the physical and chemical elements: turbidity (Turb), organic dissolved  
 7 carbon (CDOC), volatile suspended solids (VSS), total dissolved solids (TDS), NH<sub>4</sub>N, NO<sub>2</sub>-N  
 8 and NO<sub>3</sub>-N, quantified in all sampling sites (P1, P2, P3, P4, P5, P6, P7) and seasons (autumn/23  
 9 (aut/23), winter/24 (win/24), spring/24 (spr/24)). *Resultados dos elementos físicos e químicos:*  
 10 *turbidez (Turb), carbono orgânico dissolvido (CDOC), sólidos suspensos voláteis (SSV), sólidos*  
 11 *dissolvidos totais (SDT), NH<sub>4</sub>N, NO<sub>2</sub><sup>-</sup>N e NO<sub>3</sub><sup>-</sup>N, quantificados em todos os locais de amostragem*  
 12 *(P1, P2, P3, P4, P5, P6, P7) e estações (outono/23 (aut/23), inverno/24 (win/24), primavera/24*  
 13 *(spr/24)).*

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Season	Site	NO <sub>3</sub> -N (mg/l)	NO <sub>2</sub> -N (µg/L)	NH <sub>4</sub> N (mg/L)	Turb (m <sup>-1</sup> )	CDOC (m <sup>-1</sup> )	TDS (mg/L)	VSS (mg/L)
aut/23	P1	0.60	29	0.02	1.84	10.81	103	13.36
	P2	4.20	35	0.04	3.22	14.26	230	17.00
	P3	6.20	53	0.07	1.61	7.59	243	18.20
	P4	0.02	400	27.50	7.59	29.44	808	14.36
	P5	4.60	900	40.50	6.21	24.15	955	21.02
	P6	0.70	1040	18.80	4.83	22.54	894	16.67
	P7	11.40	1080	23.00	4.37	21.85	899	15.49
win/24	P1	0.30	27	0.02	0.69	2.07	62	18.83
	P2	0.50	36	0.02	0.92	2.53	81	19.10
	P3	1.20	28	0.05	0.92	2.76	93	21.17
	P4	2.30	57	0.43	3.68	5.29	174	27.94
	P5	3.20	52	0.39	3.68	7.82	197	30.69
	P6	2.80	85	0.39	4.83	4.37	196	31.60
	P7	4.20	71	0.38	6.67	4.37	200	51.07
spr/24	P1	2.00	45	0.11	0.69	0.00	63	15.53
	P2	2.80	13	0.03	1.38	0.69	84	18.55
	P3	2.70	36	0.02	1.38	1.38	99	20.30
	P4	2.10	560	2.60	4.14	6.44	238	18.29
	P5	4.80	1020	3.00	2.30	6.90	312	18.43
	P6	5.60	640	2.80	20.70	7.59	302	23.14
	P7	5.40	600	2.22	11.50	7.36	304	21.13
sum/24	P1	0.60	24	0.02	1.84	3.91	77	15.28
	P2	1.90	42	0.02	1.15	5.98	118	15.13
	P3	1.30	36	0.05	0.69	5.75	138	14.43
	P4	4.10	560	10.00	6.21	14.72	344	28.31
	P5	4.00	620	10.00	9.20	15.41	433	21.93
	P6	5.80	860	10.40	5.29	14.26	451	21.50
	P7	6.10	900	9.40	8.05	17.48	410	22.69

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