

**Gómez-Arcusa et al., 2025. Invasion of temperate riparian forests by *Acacia dealbata* affects macroinvertebrate community structure in streams. *Limnetica* 44(1), 2025.**

**SUPPLEMENTARY INFORMATION**

**Table S1.** Benthic macroinvertebrate abundance in streams flowing through native forests (native streams) and in streams flowing through forests heavily invaded by *A. dealbata* (invaded streams) in Serra da Lousã, central Portugal, in February 2019. *Abundancia de macroinvertebrados bentónicos en arroyos que fluyen a través de bosques nativos (arroyos nativos) y en arroyos que fluyen a través de bosques fuertemente invadidos por A. dealbata (arroyos invadidos) en Serra da Lousã, Portugal central, en febrero de 2019.*

Higher taxonomic level	Lower taxonomic level	FFG	Native streams									Invaded streams																			
			Maior1	Maior2	Maior3	Cerdeira1	Cerdeira2	Cerdeira3	Candal1	Candal2	Candal3	Piedade1	Piedade2	Piedade3	Fiscal1	Fiscal2	Fiscal3	Sotão1	Sotão2	Sotão3											
<b>Nematemlintha</b>																															
Nematoda		Predators																			1										
<b>Tricladida</b>		Predators																			7										
Dugesiidae	<i>Dugesia</i> spp.	Predators	26	15	26	2		6				2				42	30														
Planariidae	<i>Polycelis</i> spp.	Predators	18	19	36	6		6							1	33	16	42													
Planariidae		Predators																			1										
<b>Oligochaeta</b>																															
Enchytraeidae		Gatherers/Collectors																			6		2								
Lumbricidae	<i>Eiseniella tetraedra</i>	Gatherers/Collectors																			1		1								
Lumbricidae		Gatherers/Collectors																			2		1	2	3						
Lumbriculiidae		Gatherers/Collectors	5	18	22	116		14	38	10	23	11	15	2	46	22	6	34	136	114											
Tubificidae		Gatherers/Collectors																			751		1								
<b>Hirudinea</b>		Predators																													
Erpobdellidae	<i>Erpobdella</i> sp.	Predators	1				7	4	20	4				1				1													
Glossiphoniidae	<i>Haementeria costata</i>	Predators				3	1	2																							
<b>Gastropoda</b>																															
Ancylidae	<i>Ancylus fluviatilis</i>	Grazers/Scrapers	1				1		7				2	3	14	1	1														
Hydrobiidae	<i>Bithynella</i> sp.	Grazers/Scrapers																			3	3	10	10							
<b>Bivalvia</b>																															
Sphaeriidae	<i>Sphaerium</i> sp.	Filter feeders				2				1				7	2	1	1	4	1	5	7										
<b>Arachnida</b>																															
Hydracarina		Predators			1	1											1	2													
<b>Megaloptera</b>																															
Sialidae	<i>Sialis</i> sp.	Predators																			3				1						
<b>Ephemeroptera</b>																															
Baetidae	<i>Baetis</i> sp.	Gatherers/Collectors	5	14	21	7	43	17	6				6				8	4													
Baetidae	<i>Acentrella sinaica</i>	Gatherers/Collectors	58	68	22	7	5	33	77	5	1	60	52	1	6	7				26	5										
Ephemerellidae	<i>Ephemerella</i> sp.	Gatherers/Collectors	4	6	16				14	1	2				1				3	4	1										
Ephemeridae	<i>Ephemera</i> sp.	Filter feeders																			1	1	10	18	13	12	16	12	6	8	26
Heptageniidae	<i>Ecdyonurus</i> sp.	Grazers/Scrapers	25	27	19	83	22	29	4	14	4	2	3	1	22	32	52														
Heptageniidae	<i>Heptagenia</i> sp.	Grazers/Scrapers	5	12	11	6				6	5	3							4												
Heptageniidae	<i>Epeorus</i> sp.	Grazers/Scrapers	13	45	7	1				28	13	1	15	21				2													
Heptageniidae	<i>Rithrogena</i> sp.	Grazers/Scrapers	3	13	7	38				37	41	8	10	4				5	9												
Leptophlebiidae	<i>Paraleptophlebia</i> sp.	Gatherers/Collectors				130	106				1	2	3	4	32	28	89														
Leptophlebiidae	<i>Habrophlebia</i> sp.	Gatherers/Collectors																			3										
Leptophlebiidae	<i>Habroleptoides</i> sp.	Gatherers/Collectors	115	224	252	59	41	184																							
<b>Plecoptera</b>																															
Capniidae	<i>Capnia</i> sp.	Shredders																			1	1	2								
Chloroperlidae	<i>Chloroperla</i> sp.	Predators	23	55	84	40	8	26	3	1	6																				
Leuctridae		Shredders																			3				75			24			
Leuctridae	<i>Leuctra</i> sp.	Shredders																			1	5	12	5	7	2	2	1	1	12	
Nemouridae	<i>Protonemura</i> sp.	Shredders				2	2	6	11				6	5	2				7	7	1										
Nemouridae	<i>Amphinemura</i> sp.	Shredders	67	36	128	79	7	180	9	7	13				2				1												
Nemouridae	<i>Nemoura</i> sp.	Shredders																			4										
Perlidae	<i>Perla</i> sp.	Predators	1	8	8	1				7																					
<b>Odonata</b>																															
Aeshnidae	<i>Boyeria irene</i>	Predators	1	2											2	1															

Calopterygidae	<i>Calopteryx</i> sp.	Predators	1		3					1													
Cordulegasteridae	<i>Cordulegaster boltonii</i>	Predators	3		6	1			2		1	1	2	1	1	1	2			3			
Gomphidae	<i>Onychogomphus</i> sp.	Predators	2	2	5	2						3	1	1	1	1	1	1	1	3			
<b>Coleoptera</b>																							
Elmidae	<i>Esolus</i> sp.	Grazers/Scrapers	3	28	10	4			3										2	2	2		
Elmidae	<i>Dupophilus</i> cf. <i>brevis</i>	Grazers/Scrapers		1																1	2		
Elmidae	<i>Elmis</i> sp.	Grazers/Scrapers				2						3									1		
Elmidae	<i>Limnius</i> sp.	Grazers/Scrapers			4																		
Gyrinidae	<i>Orectochilus villosus</i>	Predators				1																	
Hydraenidae	<i>Hydraena</i> sp.	Grazers/Scrapers		1	1				3				2				2			6	3	1	
Scirtidae	<i>Hydrocyphon</i> sp.	Gatherers/Collectors		1		26	1	154	1	1		3	3			15	9	10					
<b>Trichoptera</b>																							
Beraeidae	<i>Beraea</i> sp.	Grazers/Scrapers	7	12	118	32			32									1		4	2		
Brachycentridae	<i>Micrasema moestum</i> <i>Calamoceras marsupus</i>	Shredders	2																				
Calamoceratidae	<i>Glossosoma</i> sp.	Shredders			2			5		3			1	1		1					2		
Glossosomatidae		Grazers/Scrapers																		2	8		
Glossosomatidae	<i>Synagapetus</i> sp.	Grazers/Scrapers	1																				
Glossosomatidae	<i>Larcasia partita</i>	Grazers/Scrapers	33	32	38	9			49	5		1	1	1					1		1		
Goeridae	<i>Helicopsyche helicifex</i>	Grazers/Scrapers							1											3	8	13	9
Helicopsychidae	<i>Diplectrona felix</i>	Filter feeders	1			6				53	3	21	2	2						1	1	3	
Hydropsychidae	<i>Hydropsyche</i> sp.	Filter feeders	1	18	19	22	3	92	13	2	9	9	25			5	5	7	17	17	27	25	
Lepidostomatidae	<i>Lepidostoma hirtum</i>	Shredders	34		20	10	57	36	3	2			6	1						9	3	4	
Leptoceridae	<i>Oecetis</i> sp.	Shredders	6				1						9	4						8		3	
Leptoceridae	<i>Adicela reducta</i>	Shredders			3					8		1											
Limnephilidae	<i>Allogamus</i> sp.	Shredders					108	5															
Limnephilidae		Shredders										1											
Philopotamidae	<i>Philopotamus</i> sp.	Filter feeders								1													
Philopotamidae	<i>Wormaldia</i> sp.	Filter feeders	3	3	2			9	1		1		2			3			3		9		
Polycentropodidae	<i>Plectrocnemia</i> sp.	Predators	1	1	3	8	7	4		2			5			2	1					2	
Psychomyiidae	<i>Lype</i> sp.	Grazers/Scrapers	1				2							1		3					2	4	
Rhyacophilidae	<i>Rhyacophila</i> spp.	Predators	1	7	2	3	2	8	2		1		3							3	1	2	
Sericostomatidae	<i>Sericostoma</i> sp.	Shredders	2	4	3	19	10	12	8	1	1	3	4			3	5	3	2	2	4	8	
Uenoidae	<i>Thremma</i> sp.	Grazers/Scrapers	8	10	18	6		6	1	1	1				1	1	2			1	1	2	
<b>Diptera</b>																							
Athericidae	<i>Atherix</i> sp.	Predators	12	8	7	19	7	12	5	4	11	3	7	3	6	2	2	17	14	14			
Blephariceridae		Grazers/Scrapers							1			3	4										
Ceratopogonidae		Predators				1					1				3		1	3	2		1		
Chironomidae	Orthoclaadiinae	Gatherers/Collectors	3	1	11		18	33	3	5	15	7	15	2	1	1	3	9	4	5			
Chironomidae	Tanypodinae	Gatherers/Collectors	1				7	1		2	1		2			11	1						
Chironomidae	Chironomini	Gatherers/Collectors					28		2	2		1		3	1								
Chironomidae	Tanytarsini	Gatherers/Collectors	5	1	8	48	24	107	18	2	19	5	15	4	11	4	17	11	11	10			
Chironomidae		Gatherers/Collectors							2			2				1							
Empididae		Predators		5	15		1	24	1		1	2								2	1		
Limoniidae		Predators		1		1		1	1	1	1				2	1				1			
Psychodidae		Shredders						1															
Rhagionidae			1	1				2	4	2				1						2	2		
Simuliidae		Filter feeders		7	2	1		2	1		2	69	57		1		3	34	74	27			
Stratiomyidae		Shredders						1															
Tabanidae		Predators	1			1						1	7							1	1		
Tipulidae	<i>Tipula</i> sp.	Shredders						1	2		1				1		1	3	9	2			
Abundance (no. ind./sample)			504	712	969	815	1283	1246	354	89	186	242	333	53	203	218	293	322	415	362			
Taxa richness (no. taxa/sample)			41	38	40	42	31	48	37	24	35	29	39	21	30	30	30	37	34	33			

## FFG, Functional feeding groups