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SUPPLEMENTARY MATERIAL

Boóz *et al*. Neglected dipterans in stream studies.

Tab. S1. The number of studies found in the two databases through the searches and the number of hits matching the inclusion criteria. Keywords used in the first search were “macroinvertebrate” + “Diptera” + “stream”, while for the second search they were “macroinvertebrate” + “Diptera” + “stream” + “Europe”.

		Web of Science	Google Scholar
First search			
	All hits	414	~12 700
	Hits met criteria in title	123	74 (from the first 300 hits)
	Hits met all criteria	24	19 (from the first 300 hits)
Second search			
	All hits		~10 500
	Hits met criteria in title		53 (from the first 300 hits)
	Hits met all criteria		10 (from the first 300 hits)
Additional search			
	All hits		~16 100
	Hits met criteria in title		101 (from the first 500 hits)
	Hits met all criteria		8 (from the first 500 hits)

Tab. S2. List of processed papers with their citation, year of publication, Digital object identifier (DOI), and basic data derived from them: number of taxa & individuals for aquatic macroinvertebrates (minv) and for Diptera separately, percentage of the Diptera individuals ($\%_{Dip}$) in the macroinvertebrate community, and number of Diptera families (N_{fam}).

List of articles	Year	DOI	Number of minv taxa	Number of minv individuals	Number of Diptera taxa	Number of Diptera individuals	$\%_{Dip}$	N_{fam}
Aazami et al.	2020	https://doi.org/10.1007/s13762-020-02658-4	27	6917	9		86.82%	7
Abdelsalam and Tanida	2013	https://doi.org/10.1016/j.ejar.2013.03.003	65	2889	26	1606	55,59 %	3
Adámek et al.	2022	https://doi.org/10.1007/s10452-022-09964-8	99	3540	44	1473	41.61%	12
Akay & Dalkıran	2020	https://doi.org/10.2478/s11756-019-00387-9	58	10800	19			15
Alemneh et al.	2017	https://doi.org/10.1016/j.ecolind.2016.10.019	66	7856		3000	38.18%	
Arimoro et al.	2012	https://doi.org/10.1007/s10661-011-2432-9	55		17		36.60%	5
Arimoro et al.	2015	https://doi.org/10.1007/s10661-014-4251-2	73	2882	16	869	30,15 %	8
Bagatini et al.	2012	https://doi.org/10.1590/S1676-06032012000100023	103	33.067	37			7
Baker et al.	2016	https://doi.org/10.1002/ecs2.1479	119		22		38%	8
Bartošová et al.	2019	https://doi.org/10.1016/j.ecoleng.2019.05.023	180	74003	103	50144	67.76%	21
Boulaaba et al.	2014	https://doi.org/10.4081/jear. 2014.1936	32	786	5			3
Čanak Atlagić et al.	2021	https://doi.org/10.2298/ABS210314023C	75		12		42.18%	7
Chanut et al.	2018	https://doi.org/10.1002/eco.2095	18		5			5
Dalu et al.	2017	https://doi.org/10.1016/j.scitotenv.2017.06.267	54	17610				
Davies et al.	2010	https://doi.org/10.1007/s10452-009-9307-y	98		9			9
Debiasi et al.	2022	https://doi.org/10.23818/limn.41.10	33	34 959	12	29022	83.02%	12
de Donnová et al.	2022	https://doi.org/10.1007/s10750-022-04928-3	246	269040	101			15
Docherty et al.	2018	https://doi.org/10.1002/eco.1982	39	2667	35	1939	72.70%	6
Docile et al.	2016	https://doi.org/10.1007/s10661-016-5237-z	111	5370	40	3534	65.81%	9
Ertaş et al.	2022	https://doi.org/10.1007/s11756-021-00992-7	62	4595	7			5
Ezenwa et al.	2022	https://doi.org/10.1016/j.chnaes.2022.06.003	34	755	5	207	27.28%	2
Fekadu et al.	2022	http://doi.org/10.4194/TRJFAS18410	68	20040	15			10

List of articles	Year	DOI	Number of minv taxa	Number of minv individuals	Number of Diptera taxa	Number of Diptera individuals	$\%_{Dip}$	N_{fam}
Fierro et al.	2021	https://doi.org/10.1007/s13744-021-00900-3	59	14321	8			7
Firmiano et al.	2020	https://doi.org/10.1111/jbi.14020	155		16			16
Gao et al.	2014	https://doi.org/10.1007/s10661-013-3545-0	192		50			23
González-Trujillo & Donato-Rondon	2016	https://doi.org/10.1051/limn/2016018	29	15 179	17			4
Grönroos et al.	2013	https://doi.org/10.1002/ece3.834	228	4032	123	2166	53.72%	11
Hamid et al.	2021	https://doi.org/10.1080/02757540.2021.1987419	64	15022	15			12
Hoang et al.	2010	https://doi.org/10.1080/02705060.2010.9664413	70		8			8
Käiro et al.	2011	https://doi.org/10.1002/rra.1406	166		14			10
Kavanagh & Harrison	2014	https://doi.org/10.3318/bioe.2014.16	208		48			
Keke et al.	2021	https://doi.org/10.1016/j.indic.2021.100157	49	6707	7			3
Ladrera et al.	2019	https://doi.org/10.1371/journal.pone.0218582	86	115137.5	16	29822.7	25.90%	13
Leitner et al.	2021	https://doi.org/10.1016/j.limno.2021.125941	251	24966	99.5		72.40%	5
Lencioni	2018	https://doi.org/10.1016/j.scitotenv.2017.11.266	114	181515				9
Li et al.	2018	https://doi.org/10.1016/j.ecoleng.2018.08.007	49	4311	18			
Linares et al.	2013	https://doi.org/10.1590/S1676-06032013000300006	18	743	2	314	42.26%	2
Marchamalo et al.	2018	https://doi.org/10.24275/uam/izt/dcbs/hidro/2018v28n2/Marchamalo	50	66182	11		72.00%	10
Marrochi et al.	2021	https://doi.org/10.1016/j.jenvman.2020.111608	48	2810	7	494	17.58%	6
Masese et al.	2014	https://doi.org/10.1086/675681	109	20757	23			14
Mesa et al.	2013	https://doi.org/10.1590/S0073-47212013000400002	105		13			10
Narangarvuu et al.	2014	https://doi.org/10.1016/j.aspen.2014.04.011	77		13		29.51%	8
Ono et al.	2020	https://doi.org/10.1007/s42974-020-00014-7	146	91787	16	51040	55.61%	13
Orendt et al.	2012	https://doi.org/10.2478/s11756-011-0158-3	309		166			13
Pace et al.	2011	https://doi.org/10.1016/j.ecolind.2010.09.008	77		13			11

List of articles	Year	DOI	Number of minv taxa	Number of minv individuals	Number of Diptera taxa	Number of Diptera individuals	$\%_{Dip}$	N_{fam}
Paula and Fonseca-Gessner	2010	https://doi.org/10.1590/S1519-69842010000400021	124	6331	37			11
Pešic et al.	2016	https://doi.org/10.1515/biolog-2016-0095	74	1159	28	343	30.00%	11
Piano et al.	2020	https://doi.org/10.1111/fwb.13605	70		12			12
Reid et al.	2010	https://doi.org/10.1016/j.foreco.2010.08.025	130		41			
Roine et al.	2021	https://doi.org/10.1111/fwb.13853	77		12			11
Sabha et al.	2022	https://doi.org/10.1007/s11270-022-05839-8	73	5737	19		26.91%	11
Scheibler et al.	2020	https://doi.org/10.1007/s11629-019-5813-0	31	4379	19			8
Shimba & Jonah	2016	https://doi.org/10.2989/16085914.2016.1230536	29	5460	6			4
Souto et al.	2011	https://doi.org/10.1590/S2179-975X2012005000008	46	53338	10	31842	59.69%	10
Straka	2012	https://doi.org/10.1007/s10750-012-1003-6	81	40347	26	16902	41,89 %	14
Sueyoshi et al.	2017	https://doi.org/10.1007/s00027-017-0547-y	31		9			5
Svobodová et al.	2012	https://doi.org/10.1080/01650424.2012.643048	171		81			12
Thomas Korte	2010	https://doi.org/10.1007/s10750-010-0291-y	68	17379	12	8092	46.56%	12
Vidal-Abarca et al.	2013	https://doi.org/10.1016/j.jaridenv.2013.09.008	41		9			7
Wang et al.	2012	https://doi.org/10.1007/s10750-011-0899-6	235		62			
Živić et al.	2013	https://doi.org/10.1016/j.jtherbio.2013.03.005	143		57			11

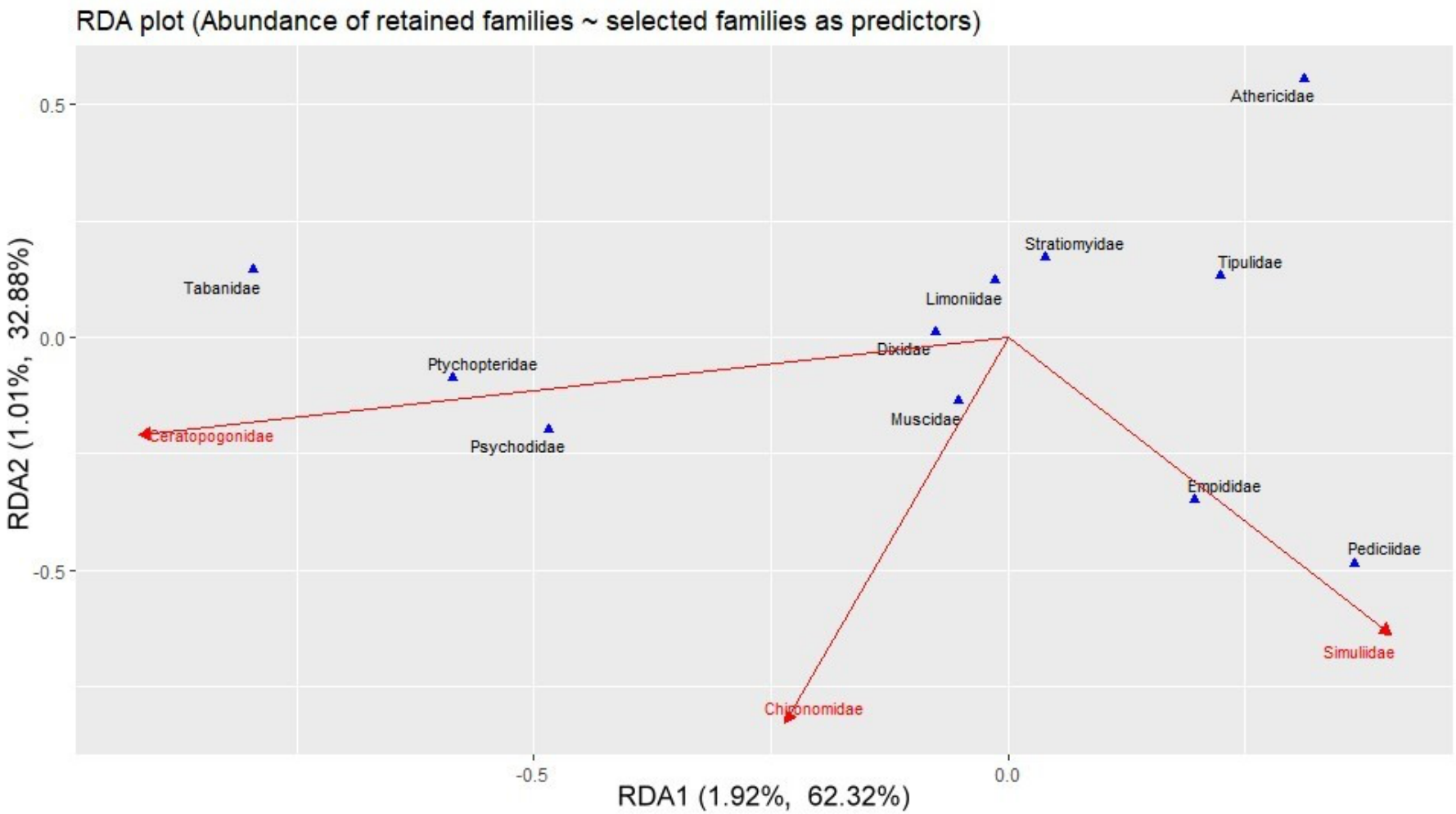

Fig. S1. Redundancy analysis scatterplot reveal very minor impact of the predictor families on abundances of several but not all families, indicating the lack of a general rule. On the individual axes, the fraction of the total variance explained by the given axis and the fraction of the total explained variance explained by the given axis are indicated in parentheses, respectively.

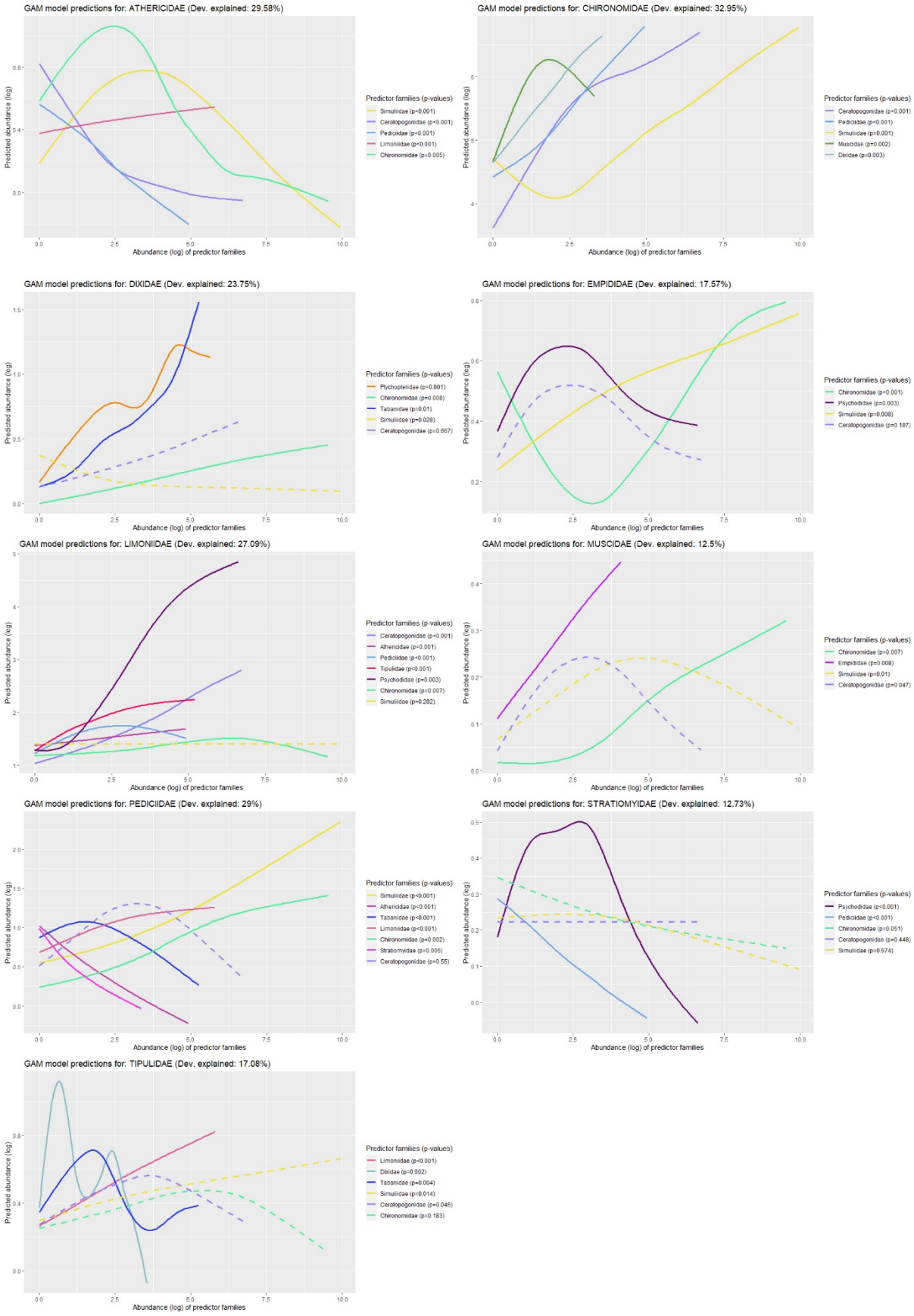

Fig. S2. Results of the Generalized Additive Models for families where best models show lower explanatory power.