

Table 1. The results of the binary logistic regression (BLR). Z and p values of the chosen metrics between natural and altered highly humic lakes.

Metric	Z values	p values
Abundance [ind/m ²]	3.467619	0.000525
Number of Taxa	3.160496	0.001575
oligo [%]	-0.71326	0.475686
beta-meso [%]	-0.83561	0.403376
alpha-meso [%]	-0.13457	0.892955
BMWP Score	2.83641	0.004562
Average score per Taxon	0.9929	0.320759
BMWP Score (Spanish version)	2.133274	0.032902
BMWP Score (Hungarian version)	2.866715	0.004148
Average score per Taxon (Hungaria version)	1.025711	0.305028
BMWP Score (Czech version)	2.915703	0.003549
Average score per Taxon (Czech version)	0.470234	0.638188
BMWP Score (Polish version)	1.506363	0.131974
BMWP Score (Greek version)	3.212641	0.001315
IBE Aqem	0.857425	0.39121
Quality Class	-1.06727	0.28585
Diversity (Simpson-Index)	1.996385	0.045892
Diversity (Shannon-Wiener-Index)	1.71877	0.085656
Diversity (Margalef Index)	2.176288	0.029534
Evenness	0.59473	0.552024
Acid Index (Hendrikson & Medin)	2.528142	0.011467
Abundance of scored taxa/all taxa [%]	-2.09278	0.036368
r-Dominance	-1.64036	0.100931
r/K relationship	-3.23775	0.001205
Portuguese Index	-0.62895	0.52938
Number of sensitive taxa (Austria)	-2.26827	0.023313
[%] littoral	-3.42525	0.000614
[%] profundal	-2.8654	0.004165
[%] littoral + profundal	-3.8105	0.000139
[%] littoral (scored taxa = 100%)	-2.50811	0.012138
[%] Type LB	-2.65309	0.007976
[%] Type LP	0.693813	0.487799
[%] Type IN	-2.71217	0.006684
[%] Type Pel	-1.80686	0.070783
[%] Type Arg	0.987216	0.323537
[%] Type Psa	-1.01269	0.311206
[%] Type Aka	-0.61794	0.536615
[%] Type Lit	0.943553	0.345398
[%] Type Phy	-1.81857	0.068978
[%] Type Pom	-0.30942	0.757004
[%] Type Oth	-3.35499	0.000794
[%] Type Aka + Lit + Psa	0.250928	0.80187
[%] Type Pel (scored taxa = 100%)	1.416779	0.156548
[%] Type Psa (scored taxa = 100%)	-0.60763	0.543434
[%] Type Aka (scored taxa = 100%)	-0.35089	0.72567
[%] Type Lit (scored taxa = 100%)	1.364048	0.172552
[%] Type Phy (scored taxa = 100%)	-0.15615	0.875914
[%] Type Aka+Lit+Psa (scored taxa = 100%)	0.787837	0.430792

[%] Grazers and scrapers	-1.94809	0.051405
[%] Miners	-1.33815	0.180848
[%] Shredders	-0.82605	0.408774
[%] Gatherers/Collectors	-1.4564	0.145283
[%] Active filter feeders	-1.64153	0.100687
[%] Passive filter feeders	1.502277	0.133026
[%] Predators	-2.04438	0.040916
[%] Parasites	-0.91669	0.359303
[%] (Grazers + Scrapers)/(GatherersCollectors + FilterFeeders)	0.292252	0.770094
[%] Xyloph. + Shred. + ActFiltFee. + PasFiltFee	-2.32834	0.019894
[%] Shredders (scored taxa = 100%)	-0.78527	0.432293
[%] Gatherers/Collectors (scored taxa = 100%)	-0.3281	0.742838
[%] swimming/skating	-2.09836	0.035873
[%] swimming/diving	-2.83444	0.004591
[%] burrowing/boring	0.531858	0.594824
[%] sprawling/walking	-1.20503	0.228193
[%] (semi)sessil	-1.40267	0.160717
[%] others (e.g. climbing)	-1.63439	0.102177
Turbellaria [%]	-0.01072	0.991445
Nematoda [%]	0.964519	0.334786
Oligochaeta [%]	-0.981	0.326595
Hirudinea [%]	0.010722	0.991445
Crustacea [%]	0.567776	0.570187
Araneae [%]	0.381458	0.702863
Ephemeroptera [%]	-0.73825	0.460364
Odonata [%]	1.633283	0.10241
Heteroptera [%]	1.797366	0.072278
Trichoptera [%]	0.600282	0.548318
Coleoptera [%]	3.514217	0.000441
Diptera [%]	-2.75817	0.005813
Hydrachnidia [%]	0.038264	0.969477
EPT-Taxa [%]	-0.36676	0.713796
EP [%]	-0.73825	0.460364
EPind/Totind [%]	-0.73825	0.460364
EPT [%] (abundance classes)	0.069861	0.944305
hololimnic [%]	0.149505	0.881156
Turbellaria (taxa)	-0.01072	0.991445
Nematoda (taxa)	1.372566	0.169887
Oligochaeta (taxa)	-0.2955	0.767613
Hirudinea (taxa)	0.010722	0.991445
Crustacea (taxa)	1.007915	0.313495
Araneae (taxa)	1.191963	0.233276
Ephemeroptera (taxa)	-1.02523	0.305254
Odonata (taxa)	2.436645	0.014824
Heteroptera (taxa)	2.532416	0.011328
Trichoptera (taxa)	2.210379	0.027079
Coleoptera (taxa)	2.68112	0.007338
Diptera (taxa)	-1.27435	0.20254
Hydrachnidia (taxa)	-0.6213	0.534403
EPT-Taxa	1.550191	0.121096
EPT/Diptera	0.483935	0.628432
OD-Taxa [%] (Austria)	-3.0095	0.002617
EPT-Taxa [%] (Austria)	0.441546	0.658818

OD/Total-Taxa	-3.0095	0.002617
EP-Taxa	-1.02523	0.305254
ETCO (Eph., Tri., Col., Odo.)	3.134943	0.001719
Turbellaria	-0.01072	0.991445
Nematoda	1.346312	0.178202
Oligochaeta	-0.24456	0.806797
Hirudinea	0.010722	0.991445
Crustacea	1.169243	0.242306
Araneae	1.052331	0.292648
Ephemeroptera	0.079969	0.936262
Odonata	2.740215	0.00614
Heteroptera	2.532835	0.011314
Trichoptera	1.534736	0.124849
Coleoptera	2.727836	0.006375
Diptera	1.516859	0.129302
Hydrachnidia	1.347248	0.1779
Number of Families	2.777762	0.005473
Number of Genera	3.265076	0.001094
Trichoptera_taxa	2.210379	0.027079
Leptophlebiidae	0.072161	0.942474
DIPTERA_Bad_SIPH_G	-1.33431	0.182103
HABITAT_Argillal	1.029502	0.303244
TROPHIC_Filterer	0.395225	0.692677
BEHAV_Borrowing	0.517424	0.60486
Sel_nonEPTaxa_M	-0.8111	0.417308
ALL/Diptera	-0.06047	0.951779
Sel_Trichoptera	1.118903	0.263182
PleTri_taxa	2.210379	0.027079
Life Index	-2.93604	0.003324
Portuges GoldIndex	2.899345	0.003739
sel EPTD	0.328716	0.74237
AWIC Index	-1.09699	0.272645
Sum of abundance classes	0.255947	0.797991
Number of indicator taxa	0.088573	0.929421
SPEAR pesticides	-1.75495	0.079267
SPEAR organic	-2.39511	0.016615
SPEAR [%]	-0.62221	0.533801
Anzahl Indikatorarten	3.160496	0.001575