# APPENDIX S2: WITOMI RESULTS AND SPECIES' CODE

**Table S1.** Hydraulic requirement parameters of the 57 invertebrate taxa sampled in spring and autumn. Inertia = total variability; OMI = outlying mean index. *P* number of random permutations (out of 1000) that yielded a higher value than the observed marginality (OMI, WitOMI*G* or WitOMI$G_K$) (the value in **bold** characters are significant, $P < 0.05$). Tol = tolerance, Rtol = residual tolerance. I. = inertia; *G* ($G_k$) are the subset marginality WitOMI*G* (WitOMI$G_K$) ; − = NA. The WitOMI cannot be calculated when the OMI is not significant (See Discussion for further details). The species is the one use as example for Figure 3D, 3E, and 3F (Species code in Appendix S2; Table S3).

| Season | All | | | | | Spring | | | | | Autumn | | | | | Spring | | | | | Autumn | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Code | I. | OMI | Tol | Rtol | *P* | I. | *G* | Tol | Rtol | *P* | I. | *G* | Tol | Rtol | *P* | I. | $G_K$ | Tol | Rtol | *P* | I. | $G_K$ | Tol | Rtol | *P* |
| AFLU | 5.54 | 1.63 | 1.16 | 2.75 | **0.05** | 5.59 | 2.46 | 0.54 | 2.59 | 0.00 | 5.05 | 4.99 | 0.04 | 0.02 | 0.00 | 5.89 | 2.76 | 0.70 | 2.43 | 0.00 | 5.05 | 4.99 | 0.04 | 0.02 | 0.00 |
| ANTO | 6.26 | 2.86 | 0.48 | 2.92 | **0.01** | 6.26 | 2.86 | 0.48 | 2.92 | 0.00 | - | - | - | - | - | 7.08 | 3.68 | 0.41 | 3.00 | 0.00 | - | - | - | - | - |
| ATSP | 5.26 | 0.77 | 1.94 | 2.54 | 0.10 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| BASP | 4.95 | 0.15 | 0.92 | 3.88 | **0.00** | 5.22 | 0.37 | 1.28 | 3.57 | 0.01 | 4.02 | 0.95 | 0.86 | 2.21 | 0.00 | 4.89 | 0.04 | 2.11 | 2.74 | 0.01 | 4.02 | 0.95 | 0.86 | 2.21 | 0.00 |
| BIMI | 6.44 | 2.67 | 1.22 | 2.56 | 0.07 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| BFAS | 5.52 | 1.63 | 0.83 | 3.06 | **0.00** | 5.52 | 1.63 | 0.83 | 3.06 | 0.00 | - | - | - | - | - | 4.86 | 0.97 | 1.62 | 2.27 | 0.00 | - | - | - | - | - |
| CASP | 4.75 | 2.09 | 0.70 | 1.96 | **0.00** | 3.82 | 2.28 | 0.45 | 1.09 | 0.00 | 5.17 | 2.46 | 0.75 | 1.96 | 0.00 | 3.98 | 2.44 | 0.46 | 1.08 | 0.00 | 5.17 | 2.46 | 0.75 | 1.96 | 0.00 |
| CESP | 5.99 | 1.36 | 1.74 | 2.89 | 0.14 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| CERA | 5.24 | 0.44 | 1.56 | 3.24 | 0.07 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| CLEP | 5.03 | 0.44 | 1.38 | 3.21 | **0.00** | 5.04 | 0.48 | 0.96 | 3.60 | 0.01 | 4.99 | 1.70 | 1.40 | 1.89 | 0.00 | 4.68 | 0.12 | 2.26 | 2.30 | 0.00 | 4.99 | 1.70 | 1.40 | 1.89 | 0.00 |
| CMAR | 5.30 | 2.09 | 1.10 | 2.10 | **0.00** | 5.36 | 2.17 | 0.96 | 2.24 | 0.00 | 4.97 | 3.47 | 0.60 | 0.90 | 0.00 | 4.80 | 1.60 | 1.55 | 1.65 | 0.00 | 4.97 | 3.47 | 0.60 | 0.90 | 0.00 |
| CHIR | 4.44 | 0.49 | 1.52 | 2.42 | 0.12 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| CPIC | 5.51 | 2.83 | 0.52 | 2.16 | **0.00** | 5.51 | 2.83 | 0.52 | 2.16 | 0.00 | - | - | - | - | - | 5.72 | 3.04 | 0.56 | 2.12 | 0.00 | - | - | - | - | - |
| DRSP | 4.50 | 1.07 | 1.90 | 1.52 | **0.04** | 8.57 | 3.37 | 2.26 | 2.94 | 0.00 | 3.75 | 2.11 | 0.71 | 0.93 | 0.00 | 7.42 | 2.22 | 2.13 | 3.08 | 0.00 | 3.75 | 2.11 | 0.71 | 0.93 | 0.00 |
| DUSP | 5.33 | 0.14 | 1.74 | 3.45 | **0.05** | 5.85 | 0.59 | 1.64 | 3.61 | 0.00 | 4.78 | 1.01 | 1.72 | 2.05 | 0.00 | 5.38 | 0.12 | 3.08 | 2.18 | 0.00 | 4.78 | 1.01 | 1.72 | 2.05 | 0.00 |
| ECSP | 5.35 | 0.33 | 1.47 | 3.55 | **0.00** | 5.33 | 0.53 | 1.48 | 3.32 | 0.01 | 5.49 | 0.57 | 1.22 | 3.70 | 0.00 | 4.86 | 0.06 | 2.57 | 2.24 | 0.01 | 5.49 | 0.57 | 1.22 | 3.70 | 0.00 |
| ECTE | 5.46 | 3.09 | 0.12 | 2.25 | 0.12 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| ELMA | 3.18 | 0.79 | 0.04 | 2.35 | 0.86 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| EPEO | 5.68 | 1.27 | 0.75 | 3.66 | 0.26 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| EVIR | 5.30 | 0.34 | 1.28 | 3.68 | **0.04** | 5.30 | 0.34 | 1.28 | 3.68 | 0.01 | - | - | - | - | - | 5.20 | 0.24 | 2.07 | 2.89 | 0.00 | - | - | - | - | - |
| EPAR | 269 | 3.93 | 0.14 | 0.80 | 3.00 | 0.26 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| EPYG | 4.77 | 0.14 | 1.02 | 3.61 | **0.02** | 4.77 | 0.32 | 0.50 | 3.95 | 0.01 | 4.77 | 0.47 | 0.54 | 3.75 | 0.00 | 4.54 | 0.09 | 1.10 | 3.36 | 0.00 | 4.77 | 0.47 | 0.54 | 3.75 | 0.00 |
| ESSP | 4.86 | 0.14 | 0.86 | 3.86 | **0.00** | 5.04 | 0.65 | 1.45 | 2.94 | 0.00 | 4.74 | 0.49 | 0.47 | 3.78 | 0.00 | 5.00 | 0.61 | 1.58 | 2.81 | 0.00 | 4.74 | 0.49 | 0.47 | 3.78 | 0.00 |
| EGEN | 5.05 | 1.91 | 0.86 | 2.28 | **0.00** | 5.05 | 1.91 | 0.86 | 2.28 | 0.00 | - | - | - | - | - | 5.01 | 1.87 | 0.91 | 2.23 | 0.00 | - | - | - | - | - |
| GASP | 5.69 | 0.36 | 1.17 | 4.16 | **0.05** | 5.87 | 0.43 | 1.09 | 4.35 | 0.01 | 2.58 | 0.62 | 0.35 | 1.62 | 0.00 | 5.51 | 0.07 | 2.19 | 3.25 | 0.01 | 2.58 | 0.62 | 0.35 | 1.62 | 0.00 |
| HEXO | 5.22 | 0.38 | 1.25 | 3.60 | **0.00** | 5.30 | 0.44 | 1.05 | 3.81 | 0.01 | 4.64 | 2.02 | 0.82 | 1.80 | 0.00 | 4.92 | 0.07 | 2.49 | 2.37 | 0.01 | 4.64 | 2.02 | 0.82 | 1.80 | 0.00 |
| HPEL | 5.24 | 0.36 | 1.20 | 3.69 | 0.00 | 5.32 | 0.45 | 0.99 | 3.89 | 0.01 | 4.46 | 2.37 | 0.30 | 1.78 | 0.00 | 4.93 | 0.06 | 2.58 | 2.30 | 0.01 | 4.46 | 2.37 | 0.30 | 1.78 | 0.00 |
| HYDR | 3.57 | 1.48 | 0.42 | 1.67 | 0.06 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| HYSP | 5.42 | 0.34 | 1.01 | 4.07 | **0.00** | 5.44 | 0.42 | 0.98 | 4.05 | 0.01 | 5.12 | 0.76 | 1.38 | 2.98 | 0.00 | 5.03 | 0.01 | 1.85 | 3.18 | 0.01 | 5.12 | 0.76 | 1.38 | 2.98 | 0.00 |
| HYDS | 6.18 | 2.75 | 0.83 | 2.59 | **0.03** | 6.18 | 2.75 | 0.83 | 2.59 | 0.00 | - | - | - | - | - | 7.16 | 3.73 | 0.75 | 2.67 | 0.00 | - | - | - | - | - |
| LEPT | 5.34 | 2.74 | 0.47 | 2.13 | 0.16 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| LESP | 4.42 | 0.31 | 0.90 | 3.21 | **0.04** | 4.61 | 0.45 | 1.09 | 3.07 | 0.01 | 2.63 | 1.24 | 0.26 | 1.13 | 0.00 | 4.40 | 0.24 | 1.31 | 2.85 | 0.00 | 2.63 | 1.24 | 0.26 | 1.13 | 0.00 |
| LOPAad | 4.97 | 1.20 | 1.97 | 1.79 | **0.01** | 4.97 | 1.20 | 1.97 | 1.79 | 0.00 | - | - | - | - | - | 4.87 | 1.10 | 2.04 | 1.73 | 0.00 | - | - | - | - | - |
| LOPAla | 4.57 | 0.48 | 1.25 | 2.85 | **0.00** | 5.11 | 0.37 | 0.47 | 4.27 | 0.01 | 3.72 | 1.91 | 0.31 | 1.50 | 0.00 | 4.88 | 0.14 | 1.21 | 3.53 | 0.01 | 3.72 | 1.91 | 0.31 | 1.50 | 0.00 |
| MPOW | 5.77 | 1.21 | 2.07 | 2.49 | 0.27 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| MYSA | 4.20 | 3.34 | 0.28 | 0.58 | 0.24 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| ORHE | 5.58 | 1.77 | 0.89 | 2.92 | **0.00** | 5.58 | 1.77 | 0.89 | 2.92 | 0.00 | - | - | - | - | - | 4.93 | 1.12 | 1.73 | 2.08 | 0.00 | - | - | - | - | - |
| ONSP | 5.18 | 1.10 | 1.74 | 2.34 | 0.06 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| ORTH | 5.12 | 0.23 | 1.26 | 3.63 | **0.00** | 5.39 | 0.39 | 0.91 | 4.09 | 0.01 | 4.35 | 0.90 | 1.57 | 1.88 | 0.00 | 5.01 | 0.01 | 2.50 | 2.50 | 0.01 | 4.35 | 0.90 | 1.57 | 1.88 | 0.00 |
| ORSP | 6.83 | 1.32 | 2.33 | 3.18 | 0.07 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| OTROad | 5.32 | 0.32 | 0.79 | 4.21 | **0.02** | 5.25 | 0.41 | 0.98 | 3.87 | 0.01 | 6.23 | 2.59 | 1.00 | 2.64 | 0.00 | 5.01 | 0.16 | 1.60 | 3.25 | 0.01 | 6.23 | 2.59 | 1.00 | 2.64 | 0.00 |
| OTROla | 5.52 | 0.23 | 1.21 | 4.08 | 0.06 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| PISI | 4.43 | 0.37 | 1.12 | 2.94 | 0.77 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| POLY | 6.09 | 1.16 | 2.02 | 2.91 | 0.07 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| PBIF | 6.95 | 3.46 | 0.59 | 2.90 | **0.01** | 8.24 | 7.16 | 0.33 | 0.76 | 0.00 | 5.87 | 3.73 | 0.79 | 1.36 | 0.00 | 9.48 | 8.39 | 0.35 | 0.74 | 0.00 | 5.87 | 3.73 | 0.79 | 1.36 | 0.00 |
| PPUS | 5.23 | 0.14 | 0.91 | 4.18 | 0.15 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RASP | 4.76 | 0.13 | 0.81 | 3.82 | 0.97 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| RHIP | 6.91 | 6.12 | 0.52 | 0.27 | **0.00** | 6.91 | 6.12 | 0.52 | 0.27 | 0.00 | - | - | - | - | - | 6.36 | 5.57 | 0.54 | 0.25 | 0.00 | - | - | - | - | - |
| RHYP | 5.93 | 1.93 | 1.14 | 2.86 | **0.00** | 5.93 | 1.93 | 1.14 | 2.86 | 0.00 | - | - | - | - | - | 5.28 | 1.28 | 1.61 | 2.39 | 0.00 | - | - | - | - | - |
| SIGN | 5.51 | 0.53 | 1.71 | 3.26 | **0.00** | 5.51 | 0.53 | 1.71 | 3.26 | 0.01 | - | - | - | - | - | 5.30 | 0.32 | 2.08 | 2.90 | 0.00 | - | - | - | - | - |
| SARG | 5.69 | 0.24 | 1.27 | 4.19 | **0.02** | 6.12 | 2.03 | 1.66 | 2.42 | 0.00 | 5.24 | 0.83 | 2.00 | 2.41 | 0.00 | 5.44 | 1.36 | 1.34 | 2.74 | 0.00 | 5.24 | 0.83 | 2.00 | 2.41 | 0.00 |
| SIMU | 5.34 | 0.51 | 1.24 | 3.59 | **0.00** | 5.63 | 0.58 | 0.94 | 4.12 | 0.00 | 4.38 | 2.45 | 0.87 | 1.06 | 0.00 | 5.11 | 0.06 | 1.82 | 3.24 | 0.01 | 4.38 | 2.45 | 0.87 | 1.06 | 0.00 |
| STEN | 6.27 | 0.57 | 1.59 | 4.11 | 0.38 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| SCAN | 6.36 | 1.40 | 1.40 | 3.56 | **0.02** | 6.30 | 3.00 | 0.45 | 2.84 | 0.00 | 6.47 | 0.98 | 0.62 | 4.87 | 0.00 | 6.54 | 3.25 | 0.56 | 2.74 | 0.00 | 6.47 | 0.98 | 0.62 | 4.87 | 0.00 |
| TANYP | 4.88 | 0.73 | 1.69 | 2.46 | **0.02** | 4.88 | 0.73 | 1.69 | 2.46 | 0.01 | - | - | - | - | - | 4.95 | 0.80 | 1.92 | 2.23 | 0.00 | - | - | - | - | - |
| TANYT | 5.34 | 0.17 | 1.32 | 3.85 | **0.03** | 5.48 | 0.32 | 0.91 | 4.25 | 0.01 | 4.46 | 1.41 | 0.79 | 2.26 | 0.00 | 5.22 | 0.06 | 1.52 | 3.64 | 0.01 | 4.46 | 1.41 | 0.79 | 2.26 | 0.00 |
| TFLU | 6.94 | 2.03 | 1.56 | 3.36 | 0.11 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

**Table S2.** Physical habitat preference parameters of the 12 fish taxa sampled in ten Mediterranean tributaries of the Rhône River. Inertia = total variability; OMI = outlying mean index. *P* number of random permutations (out of 1000) that yielded a higher value than the observed marginality (OMI, WitOMI*G* or WitOMI$G_K$) (the value in **bold** characters are significant, $P < 0.05$). Tol = tolerance, Rtol = residual tolerance. I. = inertia; *G* ($G_k$) are the subset marginality WitOMI*G* (WitOMI$G_K$). − = NA. The WitOMI cannot be calculated when the OMI is not significant(See Discussion for further details). The species is the one use as example for Figure 4D, 4E, and 4F (Species code in Table S4 in appendix S2).

| Altitude | All | | | | | Upstream | | | | | Downstream | | | | | Upstream | | | | | Downstream | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Code | I. | OMI | Tol | Rtol | *P* | I. | *G* | Tol | Rtol | *P* | I. | *G* | Tol | Rtol | *P* | I. | $G_K$ | Tol | Rtol | *P* | S.I. | $G_K$ | Tol | Rtol | *P* |
| SCU | 5.50 | 2.15 | 1.50 | 1.85 | 0.08 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| OTR | 5.71 | 0.08 | 2.43 | 3.21 | **0.00** | 4.74 | 1.12 | 1.62 | 2.01 | **0.00** | 8.44 | 4.14 | 1.09 | 3.21 | **0.00** | 3.62 | 0.00 | 0.96 | 2.66 | **0.00** | 4.47 | 0.18 | 1.69 | 2.60 | **0.00** |
| YTR | 5.77 | 0.26 | 1.69 | 3.81 | **0.00** | 4.92 | 1.15 | 1.67 | 2.10 | **0.00** | 9.17 | 5.58 | 1.59 | 1.99 | **0.00** | 3.77 | 0.00 | 0.75 | 3.02 | **0.00** | 4.98 | 1.40 | 1.22 | 2.37 | **0.00** |
| MIN | 5.32 | 0.45 | 2.52 | 2.35 | **0.00** | 2.82 | 0.33 | 0.96 | 1.54 | **0.00** | 8.51 | 4.61 | 0.81 | 3.08 | **0.00** | 2.79 | 0.30 | 1.01 | 1.48 | **0.00** | 3.93 | 0.04 | 0.88 | 3.01 | **0.00** |
| STO | 5.91 | 0.77 | 2.41 | 2.73 | **0.00** | 2.86 | 0.20 | 0.67 | 1.98 | **0.00** | 9.28 | 4.93 | 0.88 | 3.48 | **0.00** | 3.17 | 0.51 | 0.78 | 1.87 | **0.00** | 4.38 | 0.03 | 1.24 | 3.11 | **0.00** |
| BLA | 4.99 | 0.46 | 2.27 | 2.26 | **0.00** | 2.31 | 0.20 | 0.71 | 1.40 | **0.00** | 8.61 | 4.53 | 0.88 | 3.19 | **0.00** | 2.51 | 0.40 | 0.73 | 1.38 | **0.00** | 4.09 | 0.02 | 0.68 | 3.40 | **0.00** |
| SBA | 3.71 | 0.07 | 0.51 | 3.13 | 0.77 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| SON | 6.38 | 4.89 | 0.75 | 0.75 | **0.03** | - | - | - | - | - | 6.38 | 4.89 | 0.75 | 0.75 | **0.00** | - | - | - | - | - | 2.80 | 1.31 | 0.13 | 1.37 | **0.00** |
| NAS | 12.60 | 10.20 | 1.62 | 0.78 | **0.00** | - | - | - | - | - | 12.60 | 10.20 | 1.62 | 0.78 | **0.00** | - | - | - | - | - | 4.40 | 2.00 | 1.33 | 1.07 | **0.00** |
| GUD | 8.43 | 4.31 | 0.95 | 3.17 | **0.00** | 1.16 | 0.25 | 0.47 | 0.44 | **0.00** | 9.47 | 5.52 | 0.51 | 3.44 | **0.00** | 2.53 | 1.62 | 0.02 | 0.89 | **0.00** | 4.04 | 0.09 | 0.98 | 2.97 | **0.00** |
| CHU | 5.58 | 1.58 | 1.69 | 2.31 | **0.00** | 1.27 | 0.03 | 0.13 | 1.11 | **0.00** | 8.61 | 4.53 | 0.88 | 3.19 | **0.00** | 2.34 | 1.10 | 0.28 | 0.96 | **0.00** | 4.09 | 0.02 | 0.68 | 3.40 | **0.00** |
| STR | 9.92 | 5.28 | 1.19 | 3.46 | **0.00** | - | - | - | - | - | 11.07 | 6.86 | 0.58 | 3.62 | **0.00** | - | - | - | - | - | 4.63 | 0.43 | 0.84 | 3.37 | **0.00** |
| BAR | 8.34 | 3.83 | 1.30 | 3.21 | **0.00** | 1.66 | 0.52 | 0.07 | 1.07 | **0.00** | 9.46 | 5.26 | 0.58 | 3.62 | **0.00** | 2.60 | 1.45 | 0.88 | 0.27 | **0.00** | 4.28 | 0.07 | 0.60 | 3.60 | **0.00** |

**Table S3.** Invertebrate code from Mérigoux and Dolédec (2004).

| Species | Code |
|---|---|
| *Ancylus fluviatilis* Müller | AFLU |
| *Antocha* sp. | ANTO |
| *Athripsodes* sp. | ATSP |
| *Baetis* sp. | BASP |
| *Bidessus minutissimus* | BIMI |
| *Blepharicera fasciata* (Westwood) | BFAS |
| *Caenis* sp. | CASP |
| *Ceraclea* sp. | CESP |
| *Ceratopogoninae* | CERA |
| *Cheumatopsyche lepida* (Pictet) | CLEP |
| *Chimarra marginata* (Linnaeus) | CMAR |
| Chironomini | CHIR |
| *Choroterpes picteti* Eaton | CPIC |
| *Dryops* sp. | DRSP |
| *Dugesia* sp. | DUSP |
| *Ecdyonurus* sp. | ECSP |
| *Ecnomus tenellus* | ECTE |
| *Elmis maugetii* (l) | ELMA |
| *Epeorus* sp. | EPEO |
| *Ephoron virgo* (Olivier) | EVIR |
| *E. parallelepipedus* (a) | EPAR |
| *Esolus* spp. (l) | ESSP |
| *E. pygmaeus* (a) (Ph. Müller) | EPYG |
| *Euleuctra geniculata* Stephens | EGEN |
| *Gammarus* spp. | GASP |
| *Hydropsyche* spp. | HYSP |
| *H. exocellata* Dufour | HEXO |
| *H. pellucidula* (Curtis) | HPEL |
| *Hydra* sp. | HYDR |
| *Hydroptila* sp. | HYDS |
| *Leptocerus tineiformis* | LEPT |
| *Leuctra* sp. | LESP |
| *Limnius opacus* (a) Ph. Müller | LOPAad |
| *L. opacus* (l) Ph. Müller | LOPAla |
| *Micronecta poweri* | MPOW |
| *Mystacides azurea* | MYSA |
| *Oligoneuriella rhenana* (Imhoff) | ORHE |
| *Onychogomphus* sp. | ONSP |
| Orthocladiinae | ORTH |
| *Orthotrichia* sp. | ORSP |
| *Oulimnius troglodytes* (a) (Gyllenhal) | OTROad |
| *O. troglotydes* (l) | OTROla |
| *Pisidium* sp. | PISI |
| *Polycentrus flavomaculatus* | POLY |
| *Procloeon bifidum* (Bengtsson) | PBIF |
| *Psychomyiia pusilla* | PPUS |
| *Radix* sp. | RASP |
| *Rhyacophila* sp. | RHYP |
| *Rhithrogena* sp. | RHIP |
| *Serratella ignita* (Poda) | SIGN |
| *Setodes argentipunctellus* McLachlan | SARG |
| Simuliidae | SIMU |
| *Stenelmis canaliculata* (a) | STEN |
| *S. canaliculata* (l) | SCAN |
| Tanypodinae | TANYP |
| Tanytarsini | TANYT |
| *Theodoxus fluviatilis* | TFLU |

**Table S4.** Fish code from Dolédec et al. (2000);† Young of the year.

| Species | Code |
|---|---|
| Sculpin (*Cottus gobio*) | SCU |
| Older trout (*Salmo trutta*) | OTR |
| Y-O-Y† trout (*Salmo trutta*) | YTR |
| Minnow (*Phoxinus phoxinus*) | MIN |
| Stone loach (*Nemacheilus barbatulus*) | STO |
| Blageon (*Telestes soufia*) | BLA |
| Southwestern barbel (*Barbus meridionalis* | SBA |
| Southwestern nase (*Chondrostoma toxostoma*) | SON |
| Nase (*Chondrostoma nasus*) | NAS |
| Gudgjeon (*Gobio gobio*) | GUD |
| Chub (*Leuciscus cephalus*) | CHU |
| Streambleak (*Alburnoides bipunctatus*) | STR |
| Barbel (*Barbus barbus*) | BAR |

## REFERENCES


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