

DIGITAL APPENDIX 4

Multiple regression analysis for the first three relative warps (RW) of the lower pharyngeal jaw (LPJ) and head (HD) against the proportions of the alimentary categories recovered in the genus *Herichthys*

| Independent | Dependent | Slope | P-value | Independent | Dependent | Slope | P-value | Independent | Dependent | Slope | P-value |
|-------------|-----------|---------|---------|------------------------------|--|-----------------|----------------|-------------------|-----------|-------|----------|
| Arthropodes | LPJ-RW1 | 0.090 | 0.087 | Invertebrates non arthropods | LPJ-RW1 | 0.007 | 0.950 | Sanils and shells | LPJ-RW1 | 0.034 | 0.461 |
| | LPJ-RW2 | 0.087 | 0.002 | | LPJ-RW2 | 0.138 | 0.014 | | LPJ-RW2 | 0.031 | 0.218 |
| | LPJ-RW3 | 0.084 | 0.000 | | LPJ-RW3 | 0.042 | 0.298 | | LPJ-RW3 | 0.026 | 0.155 |
| | HD-RW1 | 0.236 | 0.000 | | HD-RW1 | 0.344 | 0.001 | | HD-RW1 | 0.269 | 0.000 |
| | HD-RW2 | 0.558 | 0.000 | | HD-RW2 | 0.363 | 0.000 | | HD-RW2 | 0.164 | 0.000 |
| | HD-RW3 | 0.041 | 0.274 | | HD-RW3 | 0.025 | 0.734 | | HD-RW3 | 0.149 | 0.000 |
| | Algae | LPJ-RW1 | 0.027 | | 0.559 | Plants material | LPJ-RW1 | | 0.030 | 0.497 | Detritus |
| LPJ-RW2 | | 0.054 | 0.032 | LPJ-RW2 | 0.011 | | 0.659 | LPJ-RW2 | 0.028 | 0.207 | |
| LPJ-RW3 | | 0.061 | 0.001 | LPJ-RW3 | 0.069 | | 0.000 | LPJ-RW3 | 0.055 | 0.001 | |
| HD-RW1 | | 0.295 | 0.000 | HD-RW1 | 0.266 | | 0.000 | HD-RW1 | 0.207 | 0.000 | |
| HD-RW2 | | 0.288 | 0.000 | HD-RW2 | 0.376 | | 0.000 | HD-RW2 | 0.287 | 0.000 | |
| HD-RW3 | | 0.140 | 0.000 | HD-RW3 | 0.080 | | 0.013 | HD-RW3 | 0.116 | 0.000 | |
| Fishes | | LPJ-RW1 | 0.061 | 0.165 | R ² and R values for each Relative Warp | | LPJ-RW1 | 0.171 | 0.414 | | |
| | LPJ-RW2 | 0.060 | 0.013 | LPJ-RW2 | | 0.390 | 0.624 | | | | |
| | LPJ-RW3 | 0.065 | 0.000 | LPJ-RW3 | | 0.092 | 0.303 | | | | |
| | HD-RW1 | 0.345 | 0.000 | HD-RW1 | | 0.090 | 0.300 | | | | |
| | HD-RW2 | 0.332 | 0.000 | HD-RW2 | | 0.456 | 0.675 | | | | |
| | HD-RW3 | 0.057 | 0.089 | HD-RW3 | | 0.101 | 0.318 | | | | |
| | | | | | | | R ² | R | | | |

Scatter plot graphs of the relative warps scores (RW) of the lower pharyngeal jaw (LPJ) and head (HD) of the genus *Herichthys*. (A) RW1 vs RW2, (B) R_w1 vs RW3 of the LPJ; (C) RW1 vs RW2, (D) RW1 vs RW3 of the HD.

