|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Test** | **Response** | **Explanatory** | **Random effect** | **Estimate** | **Std. error** | **Z** | **Chi2** | **DF** | **P-value** |
| Fig. 2a | GLMER | Veg alpha | Intercept | Site | 1.953 | 0.056 | 35.19 |  |  | < 0.001 |
|  |  |  | Wetland (other) | Site | -0.148 | 0.079 | -1.87 |  |  | 0.061 |
| Fig. 2b | Kruskal-Wallis | Veg BCI | Wetland |  |  |  |  | 6.222 | 1 | 0.013 |
| Fig. 2c | GLM with poisson | Veg gamma | Intercept |  | 3.735 | 0.049  | 76.46  |  |  | < 0.001 |
|  |  |  | Wetland (other) |  | -0.276  | 0.074  | -3.71 |  |  | < 0.001 |
| Fig. 2d | GLMER | Beetle alpha | Intercept | Site | 1.266  | 0.079  | 16.02  |  |  | < 0.001 |
|  |  |  | Wetland (other) | Site | -0.149  | 0.115 | -1.30  |  |  | 0.193  |
| Fig. 2e | Kruskal-Wallis | Beetle BCI | Wetland |  |  |  |  | 0.463 | 1 | 0.496 |
| Fig. 2f | GLM with poisson | Beetle gamma | Intercept |  | 2.549  | 0.088  | 28.84  |  |  | < 0.001 |
|  |  |  | Wetland (other) |  | -0.170  | 0.131  | -1.30  |  |  | 0.193 |

Table 1. Model choice, effect sizes and their significance for response variables illustrated in Figure 2.