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| Supplementary Table 4. Results from a mixed model analysis of Starts 1 and 2 for activity-density (Log10 (AD+1)) and species diversity indices of carabid beetles. Numerator and denominator degrees of freedom are indicated by the abbreviations Num DF and Den DF. Bolded P-values are significant at P< 0.05. Block[Tillage] was identified as a random effect in the model. |
| Fixed Effects | Activity-Density  |   | S |   | E*var* |   | H'  |
|  | Num DF, Den DF | F value | P value |  | Num DF, Den DF | F value | P value |  | Num DF, Den DF | F value | P value |  | Num DF, Den DF | F value | P value |
| **Start 1**  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  Tillage | 1, 3.04 | 0.20 | 0.687 |  | 1, 3.29 | 0.00 | 1.000 |  | 1, 1.39 | 4.17 | 0.157 |  | 1, 3 | 1.460 | 0.314 |
|  Cover | 1, 14.1 | 17.69 | **0.001** |  | 1, 23.5 | 2.81 | 0.107 |  | 1, 5.87 | 12.05 | **0.014** |  | 1, 11 | 0.570 | 0.465 |
|  Tillage\*Cover | 1, 14.1 | 3.78 | 0.072 |  | 1, 23.5 | 1.58 | 0.221 |  | 1, 5.87 | 0.01 | 0.932 |  | 1, 11 | 2.190 | 0.167 |
|  Year | 2, 23 | 17.90 | **<0.0001** |  | 2, 21.1 | 28.23 | **<0.0001** |  | 2, 22.4 | 6.90 | **0.005** |  | 2, 23.1 | 17.760 | **<0.0001** |
|  Year\*Tillage | 2, 23 | 0.63 | 0.541 |  | 2, 21.1 | 1.61 | 0.223 |  | 2, 22.4 | 0.36 | 0.702 |  | 2, 23.1 | 0.150 | 0.859 |
|  Year\*Cover | 2, 23 | 7.28 | **0.004** |  | 2, 21.1 | 0.19 | 0.827 |  | 2, 22.4 | 3.03 | 0.069 |  | 2, 23.1 | 0.100 | 0.909 |
|  Year\*Tillage\*Cover | 2, 23 | 4.50 | **0.022** |  | 2, 21.1 | 3.13 | 0.064 |  | 2, 22.4 | 2.02 | 0.156 |  | 2, 23.1 | 2.400 | 0.113 |
| **Start 2** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  Tillage | 1, 3 | 3.89 | 0.143 |  | 1, 3.01 | 1.44 | 0.317 |  | 1, 2.98 | 11.63 | **0.043** |  | 1, 3.18 | 0.500 | 0.528 |
|  Cover | 1, 11.1 | 9.72 | **0.010** |  | 1, 8.57 | 4.66 | 0.061 |  | 1, 8.78 | 1.24 | 0.294 |  | 1, 7.17 | 3.020 | 0.125 |
|  Tillage\*Cover | 1, 11.1 | 0.09 | 0.766 |  | 1, 8.57 | 0.23 | 0.643 |  | 1, 8.78 | 4.51 | 0.063 |  | 1, 7.17 | 0.720 | 0.422 |
|  Year | 2, 21.3 | 26.23 | **<0.0001** |  | 2, 23.9 | 13.72 | **0.000** |  | 2, 23.2 | 15.13 | **<0.0001** |  | 2, 24.1 | 6.980 | **0.004** |
|  Year\*Tillage | 2, 21.3 | 5.33 | **0.013** |  | 2, 23.9 | 2.97 | 0.070 |  | 2, 23.2 | 0.33 | 0.723 |  | 2, 24.1 | 3.210 | 0.058 |
|  Year\*Cover | 2, 21.3 | 0.76 | 0.480 |  | 2, 23.9 | 0.95 | 0.399 |  | 2, 23.2 | 0.94 | 0.403 |  | 2, 24.1 | 2.500 | 0.103 |
|  Year\*Tillage\*Cover | 2, 21.3 | 4.39 | **0.025** |  | 2, 23.9 | 0.62 | 0.546 |   | 2, 23.2 | 4.49 | **0.022** |  | 2, 24.1 | 0.890 | 0.423 |