| *Table X. Results of Linear Model testing alpha diversity metrics for ITS communities* | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Index | covariates | p\_Sum Sq | p\_Df | p\_F value | p\_P.value | h\_Sum Sq | h\_Df | h\_F value | h\_P.value |
| Richness | (Intercept) | 1,756.53 | 1.00 | 5.93 | 0.022 | 10,585.23 | 1.00 | 64.89 | <0.001 |
| Richness | plant\_pathway\_induced | 7,188.41 | 2.00 | 12.14 | <0.001 | 2,463.21 | 2.00 | 7.55 | 0.002 |
| Richness | libsize\_after\_filtering | 3,170.92 | 1.00 | 10.71 | 0.003 | 659.26 | 1.00 | 4.04 | 0.051 |
| Richness | Residuals | 7,696.50 | 26.00 |  |  | 6,525.02 | 40.00 |  |  |
| Chao1 | (Intercept) | 1,715.55 | 1.00 | 5.80 | 0.023 | 10,131.28 | 1.00 | 60.99 | <0.001 |
| Chao1 | plant\_pathway\_induced | 7,115.25 | 2.00 | 12.03 | <0.001 | 2,534.37 | 2.00 | 7.63 | 0.002 |
| Chao1 | libsize\_after\_filtering | 3,310.01 | 1.00 | 11.19 | 0.003 | 525.87 | 1.00 | 3.17 | 0.083 |
| Chao1 | Residuals | 7,688.21 | 26.00 |  |  | 6,644.70 | 40.00 |  |  |
| Shannon | (Intercept) | 1,715.55 | 1.00 | 5.80 | 0.023 | 10,131.28 | 1.00 | 60.99 | <0.001 |
| Shannon | plant\_pathway\_induced | 7,115.25 | 2.00 | 12.03 | <0.001 | 2,534.37 | 2.00 | 7.63 | 0.002 |
| Shannon | libsize\_after\_filtering | 3,310.01 | 1.00 | 11.19 | 0.003 | 525.87 | 1.00 | 3.17 | 0.083 |
| Shannon | Residuals | 7,688.21 | 26.00 |  |  | 6,644.70 | 40.00 |  |  |
| Simpson | (Intercept) | 1,715.55 | 1.00 | 5.80 | 0.023 | 10,131.28 | 1.00 | 60.99 | <0.001 |
| Simpson | plant\_pathway\_induced | 7,115.25 | 2.00 | 12.03 | <0.001 | 2,534.37 | 2.00 | 7.63 | 0.002 |
| Simpson | libsize\_after\_filtering | 3,310.01 | 1.00 | 11.19 | 0.003 | 525.87 | 1.00 | 3.17 | 0.083 |
| Simpson | Residuals | 7,688.21 | 26.00 |  |  | 6,644.70 | 40.00 |  |  |