Table 3: Select soil and biochar available ion concentration data

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Treatment | Nutrient Concentration (ppm) | | | | | | | |
| Mg | Zn | Fe | Mn | Ca | Cu | Al | K |
| 2012 | 0% | 114.4a | 2.16a | 2.90a | 15.37b | 1316a | 2.42a | 80.19a | 179.5b |
| 2% | 128.2a | 2.11a | 2.45a | 16.16b | 1487a | 2.05ab | 72.30ab | 233.0ab |
| 4% | 140.1a | 2.06a | 1.97a | 19.49ab | 1581a | 2.03ab | 63.65ab | 253.9ab |
| 6% | 148.7a | 1.80a | 2.38a | 20.45ab | 1488a | 1.67b | 46.66b | 243.9ab |
| 8% | 157.9a | 2.55a | 2.37a | 25.70a | 1836a | 1.97ab | 61.14ab | 354.9a |
| 2013 | 0% | 134.8b | 1.97a | 3.29a | 12.56ab | 1523b | 2.19a | 81.89a | 153.5c |
| 2% | 158.3ab | 2.04a | 2.37a | 10.24b | 1803b | 1.93a | 66.29b | 262.9bc |
| 4% | 182.3ab | 1.98a | 2.59a | 11.26ab | 1944ab | 1.84a | 59.42b | 324.1ab |
| 6% | 189.1ab | 2.24a | 2.03a | 13.26ab | 2156ab | 1.85a | 57.68b | 395.7a |
| 8% | 205.0a | 2.54a | 2.29a | 14.79a | 2515a | 1.82a | 58.56b | 424.1a |
| 2014 | 0% | 136.5b | 1.93a | 3.35a | 9.87a | 1541c | 2.09a | 91.31a | 116.3c |
| 2% | 157.8ab | 1.79a | 2.64ab | 9.78a | 1705bc | 1.86a | 79.30ab | 204.0b |
| 4% | 180.2ab | 1.94a | 2.39b | 9.03a | 1964abc | 1.74a | 68.05b | 224.9b |
| 6% | 178.6ab | 1.77a | 2.12b | 9.17a | 2118ab | 1.89a | 69.81b | 307.1a |
| 8% | 194.4a | 1.88a | 2.18b | 11.02a | 2304a | 1.65a | 67.28b | 334.0a |
| Biochar | | 868.7 | 13.25 | 16.75 | 467.8 | 10771 | 0.92 | 16.42 | 3578 |

Values present in figure are treatment means. Samples taken from control fertilizer treatment sub-plots.

Means followed by the same letter are not significantly different at *P<0.05* as determined by Tukey’s HSD.

Biochar analysis completed in triplicate from three separate biochar samples and means presented in table.