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| --- | --- | --- | --- | --- | --- | --- |
| Plant identity | Treatment | Shoot Biomass dry (gr) | Root Biomass dry (gr) | Total Biomass dry (gr) | Root: shoot Ratio | Leaf P % |
| *Zea mays* (Corn) | **Control** | 13.06±2.82a {NA} | 1.27±0.70a {NA} | 14.33±3.05b {NA} | 0.10±0.05a {NA} | 0.04±0.02a {NA} |
| **Com** | 15.48±3.91a {18.5%} | 1.62±0.56a {27.6%} | 17.10±4.40a {19.3%} | 0.10±0.01a {0%} | 0.03±0.01a {-25%} |
| **Local** | 13.47±2.78a {3.14%} | 2.12±1.32a {66.9%} | 15.59±2.94ab {8.8%} | 0.17±0.14a {70%} | 0.06±0.05a {50%} |
| ANOVA |  | F=3.30, **p=0.07** | F=2.47, p= 0.12 | F=4.57, **p=0.03\*** | F=1.50, p=0.25 | F=1.30, p=0.30 |
| *Linum usitatissimum* (Flax) | **Control** | 3.26±0.78a {NA} | 0.43±0.29a {NA} | 3.69±0.97a {NA} | 0.13±0.06b {NA} | 0.18±0.04ab {NA} |
| **Com** | 2.85±0.97a {-12.6%} | 0.31±0.16a {-27.9%} | 3.16±1.11a {-17.5%} | 0.10±0.04ab {-23.1%} | 0.15±0.02b {-16.7%} |
| **Local** | 2.60±0.74a {-20.3%} | 0.71±0.70a {65.1%} | 3.31±1.25a {-10.3%} | 0.25±0.16a {92.3%} | 0.20±0.03a {11.1%} |
| ANOVA |  | F=3.19, **p=0.07** | F=3.46, **p=0.06** | F=1.04, p=0.38 | F=6.24, **p=0.01\*** | F=6.19, **p=0.01\*** |
| Triticum aestivum (Lillian wheat) | **Control** | 8.22±2.26a {NA} | 0.79±0.51a {NA} | 9.02±2.59a {NA} | 0.09±0.05a {NA} | 0.07±0.03a {NA} |
| **Com** | 7.87±1.63a {-4.3%} | 0.52±0.22a {-34.2%} | 8.39±1.82a {-7%} | 0.06±0.02a {-33.3%} | 0.05±0.03a {-28.6%} |
| **Local** | 7.32±1.37a {-11%} | 0.72±0.38a {-8.86%} | 8.04±1.63a {-10.9%} | 0.09±0.04a {0%} | 0.07±0.03a {0%} |
| ANOVA |  | F=1.09, p=0.36 | F=0.9, p=0.42 | F0.87, p=0.43 | F=1.32, p=0.29 | F=1.53, p=0.25 |
| *Glycine max* (Soya beans) | **Control** | 3.57±1.49a {NA} | 0.22±0.15a {NA} | 3.49±1.60a {NA} | 0.06±0.02a {NA} | 0.09±0.02ab {NA} |
| **Com** | 4.90±2.30a {37.3%} | 0.27±0.15a {22.7%} | 5.17±2.42a {48.1%} | 0.06±0.02a {0%} | 0.07±0.02b {-22.2%} |
| **Local** | 4.00±1.00a {12.1%} | 0.32±0.10a {45.5%} | 4.32±1.03a {23.8%} | 0.08±0.03a {33.3%} | 0.11±0.03a {22.2%} |
| ANOVA |  | F=2.27, p=0.14 | F=1.42, p=0.28 | F=2.20, p=0.15 | F=2.04, p=0.17 | F=8.19, **p=0.004\*\*** |
| *Lens culinaris* (Lentils) | **Control** | 4.78±1.34a {NA} | 0.64±0.45a {NA} | 5.42±1.71a {NA} | 0.12±0.07a {NA} | 0.09±0.03ab {NA} |
| **Com** | 4.32±1.26a {-9.6%} | 0.40±0.16a {-37.5%} | 4.73±1.35a {-11.8%} | 0.09±0.04a {-25%} | 0.06±0.01b {-33.3%} |
| **Local** | 4.43±1.81a {-7.3%} | 0.59±0.34a {-7.8%} | 5.01±2.06a {-7.6%} | 0.13±0.06a {8.3%} | 0.11±0.02a {22.2%} |
| ANOVA |  | F=0.28, p=0.76 | F=1.55 p=0.25 | F=0.47, p=0.63 | F=1.14, p=0.35 | F=9.48, p**=0.003\*\*** |
| *Schizachyrium scoparium* (Little blue stem) | **Control** | 0.61±0.34a {NA} | 0.18±0.11a {NA} | 0.80±0.45a {NA} | 0.30±0.12a {NA} | 0.12±0.02a {NA} |
| **Com** | 0.77±0.52a {26.2%} | 0.18±0.12a {0%} | 0.95±0.54a {18.8%} | 0.38±0.56a {26.7%} | 0.06±0.02b {-50%} |
| **Local** | 0.37±0.28a {-39.3%} | 0.15±0.07a {-16.7%} | 0.51±0.27a {-36.3%} | 0.70±0.61a {133.4%} | 0.10±0.08a {-16.7%} |
| ANOVA |  | F=2.06, p=0.16 | F=0.37, p=0.70 | F=2.05, p=0.16 | F=1.84, p=0.19 | F=27.98, p**<0.001\*\*\*** |
| *Dalea candida* (White prairie clover) | **Control** | 0.16±0.13a {NA} | 0.07±0.04a {NA} | 0.22±0.17a {NA} | 0.51±0.39a {NA} | 0.30±0.20a {NA} |
| **Com** | 0.13±0.10a {-18.8%} | 0.09±0.07a {22.2%} | 0.22±0.16a {0%} | 0.65±0.40a {27.5%} | 0.14±0.02a {-53.3%} |
| **Local** | 0.20±0.20a {25%} | 0.12±0.11a {71.4%} | 0.32±0.32a {45.5%} | 0.60±0.26a {17.6%} | 0.33±0.17a {10%} |
| ANOVA |  | F=0.73, p=0.49 | F=0.79, p=0.47 | F=0.70, p=0.51 | F=0.63, p=0.70 | F=3.05, **p=0.07** |
| *Hedysarum alpinum* (Alpine Sweetvetch) | **Control** | 0.27±0.32a {NA} | 0.15±0.16a {NA} | 0.42±0.48a {NA} | 0.83±0.45a {NA} | 0.18±0.05a {NA} |
| **Com** | 0.31±0.31a {14.8%} | 0.29±0.19a {93.3%} | 0.60±0.60a {42.9%} | 1.70±1.20a {104.8%} | 0.10±0.05b {-44.4%} |
| **Local** | 0.33±0.19a {22.2%} | 0.28±0.08a {86.7%} | 0.61±0.19a {48.8%} | 1.51±1.65a {81.9%} | 0.17±0.03a {-5.6%} |
| ANOVA |  | F=0.75, p=0.49 | F=1.48, p=0.26 | F=1.62, p=0.23 | F=1.62, p=0.23 | F=5.62, **p=0.01\*** |
| *Calamovilfa longifolia* (Prairie sandreed) | **Control** | 0.25±0.14a {NA} | 0.15±0.09a {NA} | 0.41±0.21a {NA} | 0.75±0.41a {NA} | 0.15±0.02a {NA} |
| **Com** | 0.30±0.18a {20%} | 0.17±0.17a {13.3%} | 0.46±0.34a {12.2%} | 0.51±0.26a {-32%} | 0.09±0.02b {-40%} |
| **Local** | 0.27±0.21a {8%} | 0.15±0.15a {0%} | 0.41±0.33a {0%} | 0.55±0.42a {-26.6%} | 0.18±0.06b {20%} |
| ANOVA |  | F=0.09, p=0.91 | F=0.04, p=0.95 | F=0.30, p=0.74 | F=0.96, p=0.40 | F=14.65, **p<0.001\*\*\*** |
| *Agropyron dasystachyum* (Northern wheatgrass) | **Control** | 2.14±0.90a {NA} | 1.33±0.88a {NA} | 3.47±1.70a {NA} | 0.57±0.24a {NA} | 0.14±0.02a {NA} |
| **Com** | 2.41±0.75a {12.6%} | 1.15±0.56a {-13.5%} | 3.56±1.27a {2.6%} | 0.45±0.11a {-21.1%} | 0.09±0.03a {-35.7%} |
| **Local** | 1.99±0.80a {-7%} | 0.90±0.54a {-32.3%} | 2.88±1.28a {-17%} | 0.45±0.18a {-21.1%} | 0.15±0.03a {7.1%} |
| ANOVA |  | F=0.72, p=0.50 | F=0.94, p=0.41 | F=0.68, p=0.52 | F= 1.08, p=0.36 | F=5.36, **p=0.01\*** |