**Table S1.** Average relative abundance (%) of abundant phyla in soil from conventionally tilled (CT) winter wheat, no-till (NT) canola, Old World Bluestem (OWB) pasture, and native tallgrass prairie (TGP) systems from August 2016 to July 2017.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | **CT** | **NT** | **OWB** | **TGP** |
| Acidobacteria | 11.75% | 11.32% | 13.53% | 9.20% |
| Actinobacteria | 24.67% | 23.55% | 21.45% | 20.16% |
| Bacteroidetes | 2.92% | 2.81% | 2.74% | 2.54% |
| Chloroflexi | 9.90% | 4.23% | 4.78% | 4.73% |
| Cyanobacteria | 2.35% | 0.76% | 1.29% | 0.32% |
| Firmicutes | 9.68% | 15.95% | 18.03% | 17.51% |
| Gemmatimonadetes | 1.00% | 1.57% | 1.04% | 1.40% |
| Nitrospirae | 0.51% | 0.76% | 0.26% | 0.73% |
| Planctomycetes | 2.57% | 2.79% | 2.99% | 3.47% |
| Proteobacteria | 21.20% | 22.56% | 20.84% | 24.36% |
| Verrucomicrobia | 1.78% | 3.77% | 3.67% | 6.35% |
| Archaea Phyla | 0.09% | 0.17% | 0.06% | 0.14% |
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