Separate ANOVAs were performed for Observed and Chao1 species richness α-diversity indices. A Kruskal-Wallis test was performed on the Simpson evenness index.

Table S2 Analysis of variance of α-diversity indices.

|                  | 16S rRNA | p-values |          |          |          |
|------------------|----------|----------|----------|----------|----------|
|                  |          | Observed | Chao1    | Simpson  |          |
| Cropping System  | 0.0627   | 0.0179   | 0.6057   |          |          |
| DNA vs RNA       | <0.001   | <0.001   | 0.0288   |          |          |
| Root proximity   | <0.001   | <0.001   | <0.001   |          |          |

|                  | ITS      | p-values |          |          |          |
|------------------|----------|----------|----------|----------|----------|
| Cropping System  | <0.001   | <0.001   | 0.094    |          |          |
| Root proximity   | <0.001   | <0.001   | <0.001   |          |          |