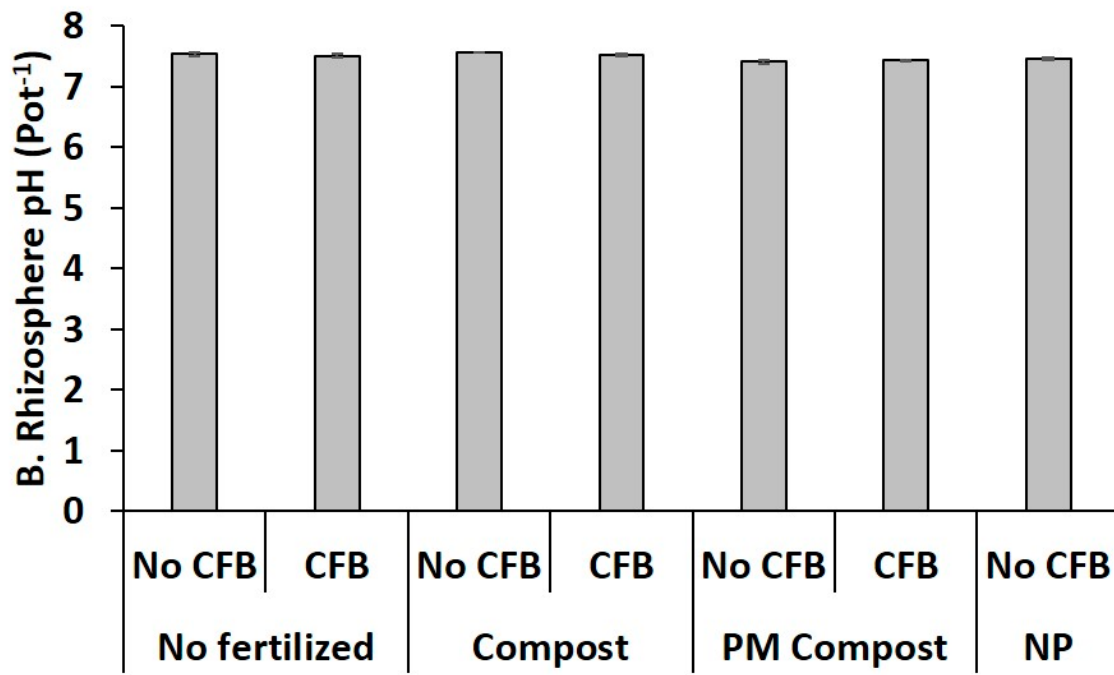


**Table S1: Type III error tables for alkaline soil\_ Experiment 1**

| Type III Tests of Fixed Effects              |              |        |        |         |        |
|----------------------------------------------|--------------|--------|--------|---------|--------|
| Random variable                              | Fixed Effect | Num DF | Den DF | F Value | Pr > F |
| Dry shoot biomass (g plant <sup>-1</sup> )   | Treatment    | 6      | 28     | 16.97   | <.0001 |
| Dry root biomass (g plant <sup>-1</sup> )    | Treatment    | 6      | 28     | 10.06   | <.0001 |
| Total root length (cm plant <sup>-1</sup> )  | Treatment    | 6      | 28     | 8.00    | <.0001 |
| Shoot N concentration (mg g <sup>-1</sup> )  | Treatment    | 6      | 28     | 86.57   | <.0001 |
| Shoot N content (mg plant <sup>-1</sup> )    | Treatment    | 6      | 28     | 171.19  | <.0001 |
| Shoot P concentration (mg g <sup>-1</sup> )  | Treatment    | 6      | 28     | 12.23   | <.0001 |
| Shoot P content (mg plant <sup>-1</sup> )    | Treatment    | 6      | 28     | 62.20   | <.0001 |
| Shoot K concentration (mg g <sup>-1</sup> )  | Treatment    | 6      | 28     | 80.24   | <.0001 |
| Shoot K content (mg plant <sup>-1</sup> )    | Treatment    | 6      | 28     | 60.14   | <.0001 |
| Shoot Mg concentration (mg g <sup>-1</sup> ) | Treatment    | 6      | 28     | 9.88    | <.0001 |
| Shoot Mg content (mg plant <sup>-1</sup> )   | Treatment    | 6      | 28     | 51.87   | <.0001 |
| Shoot Ca concentration (mg g <sup>-1</sup> ) | Treatment    | 6      | 28     | 64.48   | <.0001 |
| Shoot Ca content (mg plant <sup>-1</sup> )   | Treatment    | 6      | 28     | 70.18   | <.0001 |

**Table S1: Type III error tables for acidic soil\_ Experiment 2**

| Type III Tests of Fixed Effects              |              |        |        |         |        |
|----------------------------------------------|--------------|--------|--------|---------|--------|
| Random variable                              | Fixed Effect | Num DF | Den DF | F Value | Pr > F |
| Dry shoot biomass (g plant <sup>-1</sup> )   | Treatment    | 7      | 24     | 15.34   | <.0001 |
| Dry root biomass (g plant <sup>-1</sup> )    | Treatment    | 7      | 24     | 3.98    | 0.0051 |
| Shoot N concentration (mg g <sup>-1</sup> )  | Treatment    | 7      | 24     | 12.78   | <.0001 |
| Shoot N content (mg plant <sup>-1</sup> )    | Treatment    | 7      | 24     | 41.39   | <.0001 |
| Shoot P concentration (mg g <sup>-1</sup> )  | Treatment    | 7      | 24     | 124.52  | <.0001 |
| Shoot P content (mg plant <sup>-1</sup> )    | Treatment    | 7      | 24     | 162.03  | <.0001 |
| Shoot K concentration (mg g <sup>-1</sup> )  | Treatment    | 7      | 24     | 5.66    | 0.0006 |
| Shoot K content (mg plant <sup>-1</sup> )    | Treatment    | 7      | 24     | 15.37   | <.0001 |
| Shoot Mg concentration (mg g <sup>-1</sup> ) | Treatment    | 7      | 24     | 16.09   | <.0001 |
| Shoot Mg content (mg plant <sup>-1</sup> )   | Treatment    | 7      | 24     | 13.08   | <.0001 |
| Shoot Ca concentration (mg g <sup>-1</sup> ) | Treatment    | 7      | 24     | 23.90   | <.0001 |
| Shoot Ca content (mg plant <sup>-1</sup> )   | Treatment    | 7      | 24     | 12.21   | <.0001 |



**Figure S1.** Tomato rhizosphere pH for alkaline soil-Experiment 1.