**Supplemental Material**

**Table S1** Summary table containing volumes of compounds used to create modified Hoagland's solutions for each soil nitrogen fertilization treatment. All volumes are expressed as milliliters of compount per liter H2O (mL/L)

|  |  |  |
| --- | --- | --- |
| **Compound** | **70 ppm N** | **630 ppm N** |
| 1 M NH4H2PO4 | 0.33 | 1 |
| 2 M KNO3 | 0.67 | 2 |
| 2 M Ca(NO3)2 | 0.67 | 2 |
| 1 M NH4NO3 | 0.33 | 0 |
| 8 M NH4NO3 | 0 | 2 |
| 1 M KH2PO4 | 0.66 | 0 |
| 1 M KCl | 2 | 0 |
| 1 M CaCO3 | 2.67 | 0 |
| 2 M MgSO4 | 1 | 1 |
| 10% Fe-EDTA | 1 | 1 |
| Trace Elements | 1 | 1 |

**Table S2** Analysis of variance results exploring effect of nitrogen fertilization, inoculation with *B. japonicum*, and interactions between soil nitrogen fertilization and inoculation status on whole plant biomass: pot volume\*

|  |  |  |  |
| --- | --- | --- | --- |
|  | | ***BVR*** | |
|  | df | χ2 | *p* |
| N fertilization (N) | 1 | 52.43 | **<0.001** |
| Inoculation (I) | 1 | 2.042 | 0.153 |
| N\*I | 1 | 1.23 | 0.267 |

\*Significance determined using Type II Wald χ2 tests (α=0.05). *P*-values less than 0.05 are in bold. Key: *BVR* = whole plant biomass: pot volume (g L-1).

**Figure S1**

Chart, box and whisker chart

Description automatically generated

**Figure 1** Effects of soil nitrogen fertilization and inoculation status on whole plant biomass: pot volume. Soil nitrogen fertilization is represented categorically on the x-axis, while inoculation status is represented by colored boxplots. The horizontal dashed line indicates a whole plant biomass: pot volume value of 1 g L-1, which is recommended by Poorter et al. (2012) to minimize the likelihood of pot size induced growth limitation. Yellow shaded boxplots indicate individuals that were not inoculated with *B. japonicum*, while red shaded boxplots indicate individuals that were inoculated with *B. japonicum*. Boxplot indicates the median, first quartile, and third quartile of the data, while whiskers represent the furthest data point that is not more than 1.5 times the inner quartile range. Remaining points outside the whiskers represent outliers that are not statistically different from the rest of the sampling population. Compact lettering above each boxplot indicates treatment combinations that are statistically different from each other, which were determined through Tukey’s tests (Tukey: p<0.050).