

## Supporting information

### TABLES

**Table S1.** Soil physicochemical properties at the BEG and JBS sites.

### FIGURES

**Figure S1:** Average monthly precipitation and temperature distribution at BEG and JBS sites during the two experimental seasons (2016-2018).

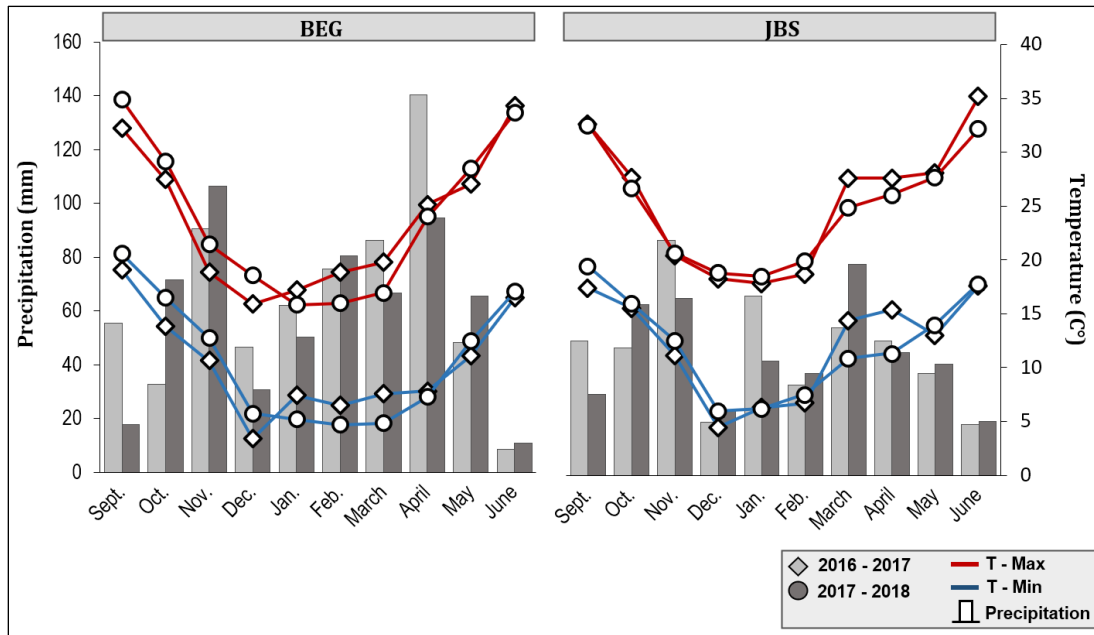
**Figure S1:** Clover root colonization by *P. thivervalensis* T124 according to the different treatments within the experiment 1 (A) and the experiment 2 (B).

**Table S1. Soil physicochemical properties at the BEG and JBS sites.**

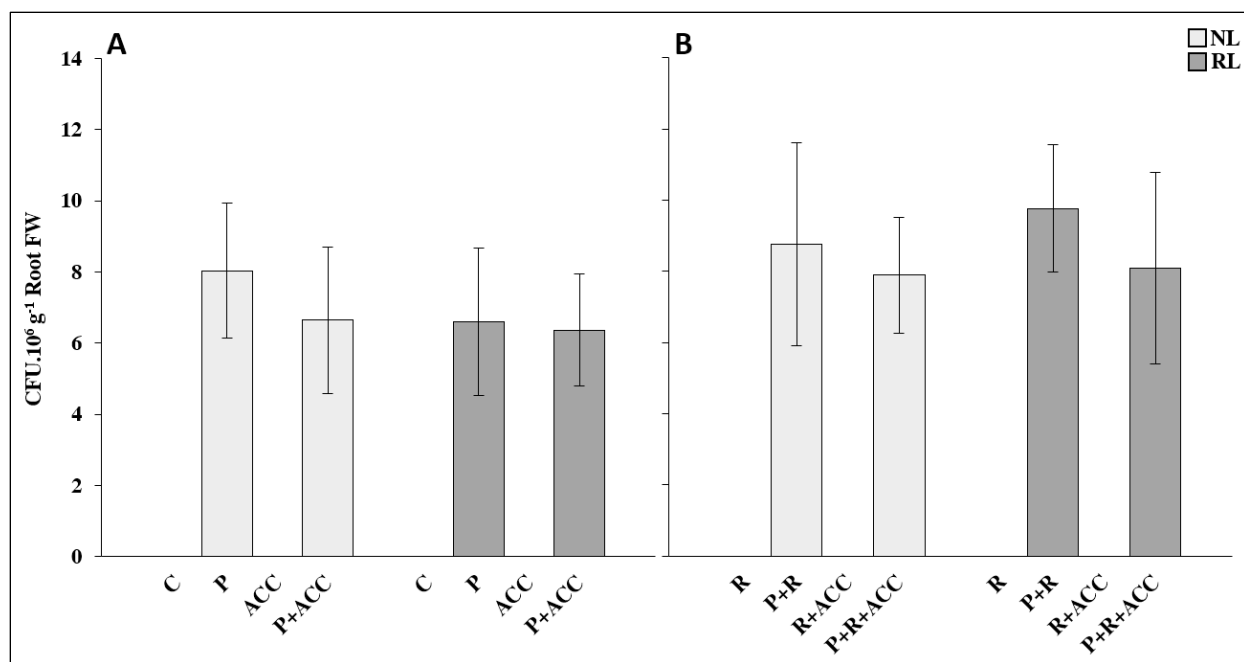
	<b>Beja El Gnadil (BEG)</b>	<b>Jendouba Bou-Salem (JBS)</b>
pH	6.52	6.71
EC (us cm <sup>-1</sup> )	175.21	184.21
Sand (%)	11	46
Clay (%)	36	28
Silt (%)	50	24
Organic matter (%)	1.6 – 1.8	1.7– 1.8
C (%)	1.94	1.68
P <sub>2</sub> O <sub>5</sub> (mg kg <sup>-1</sup> )	45	42
K <sub>exchangeable</sub> (mg kg <sup>-1</sup> )	427.6	402.4
K <sub>2</sub> O (mg kg <sup>-1</sup> )	481.27	438.15

Soil samples were taken at a depth of 0 to 40 cm; EC, electrical conductivity.

## FIGURES



**Figure S1:** Average monthly precipitation and temperature distribution at BEG and JBS sites during the two experimental seasons (2017-2018).



**Figure S1:** Clover root colonization by *P. thivervalensis* T124 according to the different treatment within the experiment 1 (A) and the experiment 2 (B).

C, Control treatment; P, plant inoculated with *P. thivervalensis*; R: inoculated with *R. leguminosarum*; ACC, exogenous ACC; NL, Normal light condition; RL, Reduced light condition.