

## Article

# Co-Inoculation of Soybean Seeds with *Azospirillum* and/or *Rhizophagus* Mitigates the Deleterious Effects of Waterlogging in Plants under Enhanced CO<sub>2</sub> Concentrations

Eduardo Pereira Shimoia <sup>1,\*</sup>, Douglas Antônio Posso <sup>1,\*</sup>, Cristiane Jovelina da-Silva <sup>2</sup>, Adriano Udich Bester <sup>1</sup>, Nathalia Dalla Corte Bernardi <sup>1</sup>, Ivan Ricardo Carvalho <sup>3</sup>, Ana Cláudia Barneche de Oliveira <sup>4</sup>, Luis Antonio de Avila <sup>5</sup> and Luciano do Amarante <sup>1</sup>

<sup>1</sup> Botanic Department, Federal University of Pelotas, Capão do Leão 96010-610, RS, Brazil; adriano.udich.bester@gmail.com (A.U.B.); nathaliadcbernardi@gmail.com (N.D.C.B.); lucianoamarante@yahoo.com.br (L.do.A.)

<sup>2</sup> Department of Horticultural Science, North Carolina State University, Raleigh, NC 27695, USA; cjdasilv@ncsu.edu

<sup>3</sup> Department of Agricultural Studies, Regional University of Northwestern Rio Grande do Sul, Ijuí 98700-000, RS, Brazil; carvalho.irc@gmail.com

<sup>4</sup> Embrapa Temperate Agriculture, Brazilian Agricultural Research Corporation, Pelotas 96010-971, RS, Brazil; ana.barneche@embrapa.br

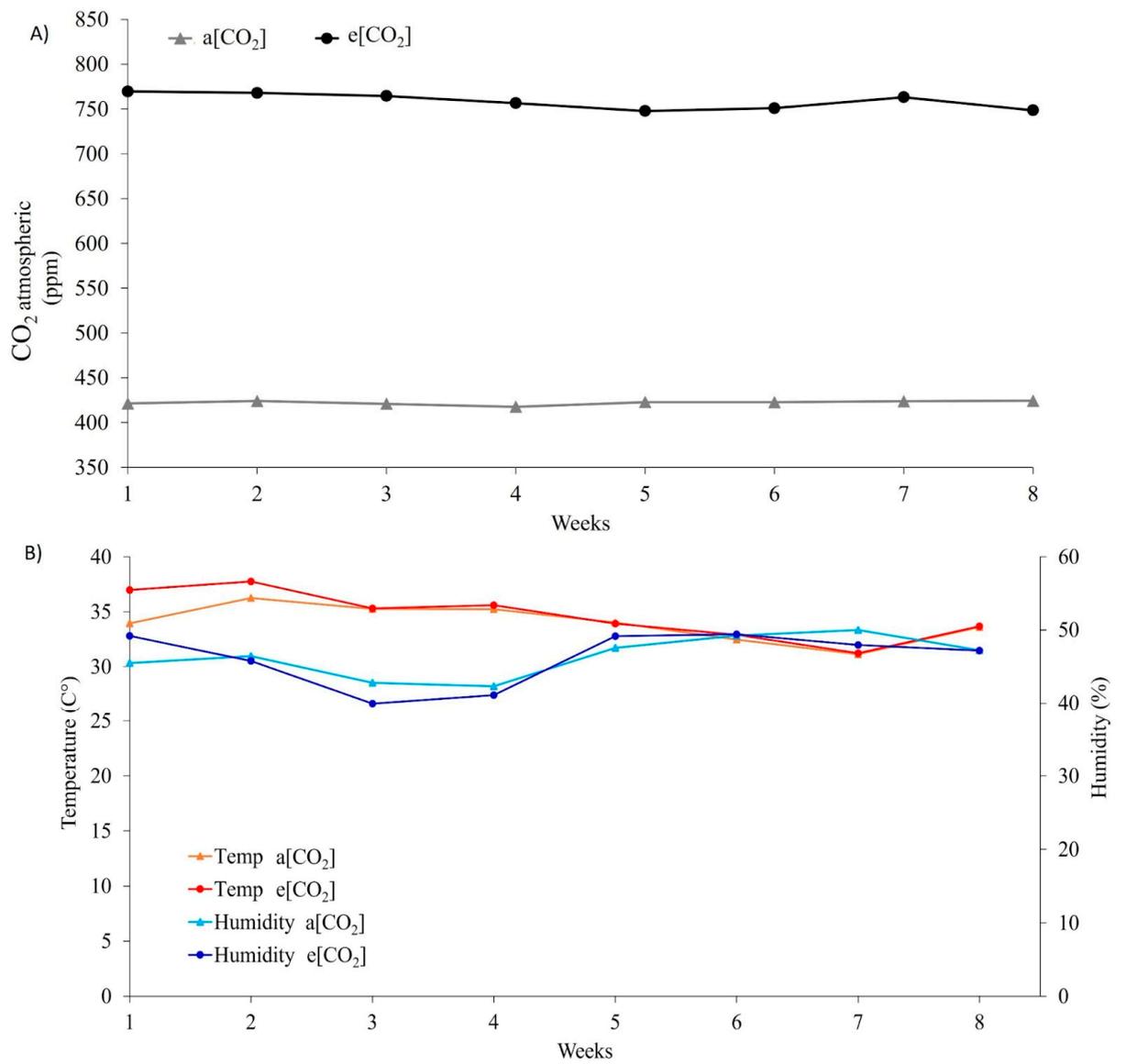
<sup>5</sup> Department of Plant Soil Sciences, Mississippi State University, Mississippi State, MS 39762, USA; luis.avila@pss.msstate.edu

\* Correspondence: eduardopshimoia@gmail.com (E.P.S.); douglasposso@hotmail.com (D.A.P.); Tel.: +55-53981034124 (D.A.P.)

## Supplementary Material

**Table S1.** Soil characteristics.

Water pH	Texture	Effective CEC	Base Saturation (%)	SMP Index	CEC pH 7
6.79	3	8.3	88.7	7.26	9.3
P-Mehlich	K	Cu	Zn	Mn	S
mg dm <sup>-3</sup>					
7.9	98.8	1.1	1.1	3.5	12.1
K	Ca	Mg	H + Al	Al	Ca/Mg Relation
cmolc dm <sup>-3</sup>					1.4
0.253	4.7	3.3	1	0	
Molar Relation				%OM	%Clay
K/CTC	Ca/CTC	Mg/CTC	(Ca + Mg)/ K		m/v
2.72	50.5	35.5	31.6	1.5	22



**Figure S1.** Atmospheric conditions of CO<sub>2</sub> concentrations (ambient a[CO<sub>2</sub>] or elevated e[CO<sub>2</sub>]) (A), temperature (°C), and humidity during the experiment on each open top chamber (B).