

**Supplementary information 2.** Physico-chemical characteristics of soil and irrigation water

A. Physical Analysis of Soil

D <sub>b</sub> (g cm <sup>-3</sup> )	Soil Water Content (%)			Soil Particles (%)			Soil Texture
	SP	FC	PWP	Clay	Silt	Sand	
1.39	38	22	9	33	39	28	Clay Loam

B. Chemical Analysis of Soil: Soluble Chemicals

pH	EC (dS m <sup>-1</sup> )	SAR	Cations (meq 100 g <sup>-1</sup> Soil)				Anions (meq 100 g <sup>-1</sup> Soil)			
			Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	Mg <sup>2+</sup>	Cl <sup>-</sup>	HCO <sub>3</sub> <sup>-</sup>	CO <sub>3</sub> <sup>-</sup>	SO <sub>4</sub> <sup>-</sup>
7.8	1.1	0.42	1.1	4.9	6.6	7.1	2.4	4.2	3.9	7.1

C. Chemical Analysis of Soil: Chemical Ingredients

CEC (meq 100 g <sup>-1</sup> soil)	ESP (%)	CaCO <sub>3</sub> (%)	Organic		Macro-nutrient			
			OM	OC	Ingredients (%)		Total	Available
					N	P		
19.7	5.58	10.4	0.76	0.41	0.06	8.1	96	

D. Chemical Analysis of Irrigation Water: Soluble Chemicals

pH	EC (dS m <sup>-1</sup> )	SAR	Cations (meq L <sup>-1</sup> )				Anions (meq L <sup>-1</sup> )			
			Na <sup>+</sup>	K <sup>+</sup>	Ca <sup>2+</sup>	Mg <sup>2+</sup>	Cl <sup>-</sup>	HCO <sub>3</sub> <sup>-</sup>	CO <sub>3</sub> <sup>-</sup>	SO <sub>4</sub> <sup>-</sup>
7.4	0.7	0.16	0.3	2.9	3.6	3.1	3.9	3.5	3.1	2.8

D<sub>b</sub>: soil bulk density; SP: saturation point; FC: field capacity; PWP: permanent wilting point; pH: power of H<sup>+</sup>; EC: electrical conductivity; SAR: sodium adsorption ratio; CEC: cation exchange capacity; ESP: exchangeable sodium percentage.