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

#### A. Physical Analysis of Soil $D_b$ Soil Water Content (%) Soil Particles (%) Soil (g cm<sup>-3</sup>) SP FC PWP Silt Sand Texture Clay 1.39 38 22 9 33 39 28 Clay Loam

### B. Chemical Analysis of Soil: Soluble Chemicals

- LU	EC	SAR	Cations (meq 100 g <sup>-1</sup> Soil)				Anions (meq 100 g <sup>-1</sup> Soil)				
pН	$(dS m^{-1})$	SAK	Na <sup>+</sup>	$K^+$	$Ca^{2+}$	$Mg^{2+}$	Cl-	HCO <sub>3</sub> -	$CO_3^-$	SO <sub>4</sub> -	
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

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

## D. Chemical Analysis of Irrigation Water: Soluble Chemicals

pН	EC	CAD	Cations (meq L <sup>-1</sup> )				Anions (meq L <sup>-1</sup> )			
	$(dS m^{-1})$	SAR	Na <sup>+</sup>	$K^+$	$Ca^{2+}$	$Mg^{2+}$	Cl-	HCO <sub>3</sub> -	$CO_3$	SO <sub>4</sub> -
7.4	0.7	0.16	0.3	2.9	3.6	3.1	3.9	3.5	3.1	2.8

 $D_b$ : soil bulk density; SP: saturation point; FC: field capacity; PWP: permanent wilting point; pH: power of  $H^+$ ; EC: electrical conductivity; SAR: sodium adsorption ratio; CEC: cation exchange capacity; ESP: exchangeable sodium percentage.