

SUPPLEMENTARY MATERIALS

Table S1. Kruskal-Wallis test on pH, amounts of total organic C (TOC), carbonates (CaCO₃), sand, silt and clay, water content at field capacity (FC), bulk density (BD), soil electrical conductivity in non-irrigation winter period (EC_{ew}) and in irrigation summer period (EC_s) of superficial and deep layers according to soil classification. Different letters mean significant differences ($p < 0.05$)

Superficial layers (0 – 30 cm soil depth)										
Soil classification	pH	CaCO ₃	Sand	Silt	Clay	TOC	FC	BD	EC _{ew}	EC _s
euAR	b	c	a	c	c	b	c	b	a	c
fvCM	a	b	b	ab	b	a	b	b	a	bc
glCM	ab	ab	bc	a	b	a	ab	a	a	c
gl(s)CM	ab	ab	cd	ab	a	a	ab	b	a	a
stCM	a	a	d	ab	a	a	a	ab	a	ab
vr/glCM	a	b	c	b	a	a	b	ab	a	bc
Deep layers (30 – 90 cm soil depth)										
Soil	pH	CaCO ₃	Sand	Silt	Clay	TOC	FC	BD	EC _{ew}	EC _s
euAR	b	c	a	c	c	b	c	b	b	c
fvCM	ab	b	b	ab	b	a	b	b	b	bc
glCM	ab	ab	bc	a	b	a	ab	a	b	c
gl(s)CM	ab	ab	cd	ab	a	a	ab	b	a	a
stCM	ab	a	d	ab	a	a	a	ab	b	ab
vr/glCM	a	b	bc	b	a	a	b	ab	b	bc

euAR = Eutric Arenosols; fvCM = Fluvic Cambisols; glCM = Gleyic Cambisols; gl(s)CM = Endogleyic Cambisols; stCM = Stagnic Cambisols; vr/glCM = Vertic and Gleyic Cambisols.

Table S2. Statistical summary of pH, electrical conductivity (EC), total N (TN), biological demand of oxygen (BOD), chemical demand of oxygen (COD), total P (TP), sulphates, chlorides, sodium adsorption ratio (SAR) of water samples collected during non-irrigation winter period and irrigation summer period.

Non-irrigation winter period									
	pH	EC	TN	BOD	COD	TP	SO ₄ ²⁻	Cl ⁻	SAR
		dS/m	-----mg/L-----						
min	7.4	0.6	0.5	3.1	31	0.01	5.3	21.8	3.4
1 st Qu	7.9	1.1	0.9	6.3	41	0.01	63.5	23.4	4.4
Median	8.1	2.2	1.5	7.4	56	0.1	77.9	46.1	10.4
Mean	8.1	7.1	2.7	11.6	152	0.2	158.1	364.3	42.5
3 st Qu	8.4	7.5	2.2	9.9	121	0.2	163.6	501.6	72.4
Max	8.6	45.8	24.5	107.8	1489	2.9	991.1	4383.6	237.5
Irrigation summer period									
	pH	EC	TN	DOD	BOD	TP	SO ₄ ²⁻	Cl ⁻	SAR
		dS/m	-----mg/L-----						
min	6.7	0.5	0.5	5.8	36	0.01	1.9	0.6	0.01
1 st Qu	7.4	0.8	0.8	8.6	48	0.1	37.9	31.9	6.9
Median	7.7	1.4	1.4	15.1	58	0.1	54.3	53.6	10.8
Mean	7.7	6.5	11.8	80.2	128	0.2	306.1	363.5	36.4
3 st Qu	7.9	8.1	11.7	131.9	88	0.2	112.6	281.3	50.4
Max	9.9	52.8	190.8	881.6	1954	4.3	6551.8	3475.7	174.3