

Table S1 Salinity of irrigation water in different years (gL⁻¹)

Treatment	K1	K2	K3	K4	K5	K6
2008	0.45	1.95	2.40	2.82	2.91	3.27
2009	0.46	2.24	3.81	6.58	10.05	
2010	0.35	2.38	4.42	6.00	9.16	

[illegible]

Table S3 Dates of cotton growth stages of Experiment One

Year	Seedling stage	Bud stage	Flowering–boll	Boll-opening stage
			stage	
2008	5/2-6/13	6/14-7/8	7/9-9/1	9/2-10/31
2009	5/1-6/12	6/13-7/7	7/8-8/31	9/1-10/31
2010	5/10-6/20	6/21-7/7	7/8-8/26	8/27-10/31

Table S4 Dates of cotton growth stages of Experiment Two

Year	Seedling stage	Bud stage	Flowering–boll stage	Boll-opening stage
2008	4/15-6/13	6/10-7/8	7/8-9/2	9/2-10/2

Table S5 Irrigation schedule of Experiment Two

Experiments	Treatments and Irrigation dates	Irrigation schedule											
	Irrigation dates	6/15	6/23	7/1	7/7	7/13	7/19	7/25	7/31	8/6	8/12	8/18	8/24
	0.6ET	36	27.7	31.6	18	15.6	15.6	21.7	16.8	19.2	28.2	17.6	22.7
	0.8ET	48	36.9	42.1	24	20.8	20.8	28.9	22.4	25.6	37.6	23.5	30.2
	1.0ET	60	46.1	52.6	30	26	26	36.1	28	32	47	29.4	37.8
	1.2ET	72	55.3	63.1	36	31.2	31.2	43.3	33.6	38.4	56.4	35.3	45.4
Experiments	Treatments and Irrigation dates	6/15	6/23	7/4	7/14	7/21	7/28	8/5	8/12	8/19	8/23	6/15	
	Irrigation dates	6/15	6/23	7/4	7/14	7/21	7/28	8/5	8/12	8/19	8/23	6/15	
	A1B3	45	45	45	45	30	30	30	30	30	30		
	A1B4	45	45	45	45	22.5	22.5	22.5	22.5	22.5	22.5		
	A1B2	45	45	45	45	37.5	37.5	37.5	37.5	37.5	37.5		
	A1B1	45	45	45	45	45	45	45	45	45	45		
	A2B3	37.5	37.5	37.5	37.5	30	30	30	30	30	30		
	A2B4	37.5	37.5	37.5	37.5	22.5	22.5	22.5	22.5	22.5	22.5		
	A2B1	37.5	37.5	37.5	37.5	45	45	45	45	45	45		
	A3B2	30	30	30	30	37.5	37.5	37.5	37.5	37.5	37.5		
	A3B4	30	30	30	30	22.5	22.5	22.5	22.5	22.5	22.5		
	A3B1	30	30	30	30	45	45	45	45	45	45		
	A4B2	22.5	22.5	22.5	22.5	37.5	37.5	37.5	37.5	37.5	37.5		
	A4B3	22.5	22.5	22.5	22.5	30	30	30	30	30	30		
	A4B1	22.5	22.5	22.5	22.5	45	45	45	45	45	45		

Table S6. Data recorded of the two experiment in 2008-2010 and 2018

Years	Data
2008-2010	Meteorological data
	Soil physical and chemical properties
	Division of growth stages
	Soil moisture content and soil salt content during the entire growth period
	Cotton yield
2018	Treatments and setups of two experiments
	Meteorological data
	Division of growth stages
	Soil moisture content and soil salt content during the entire growth period
	Cotton yield

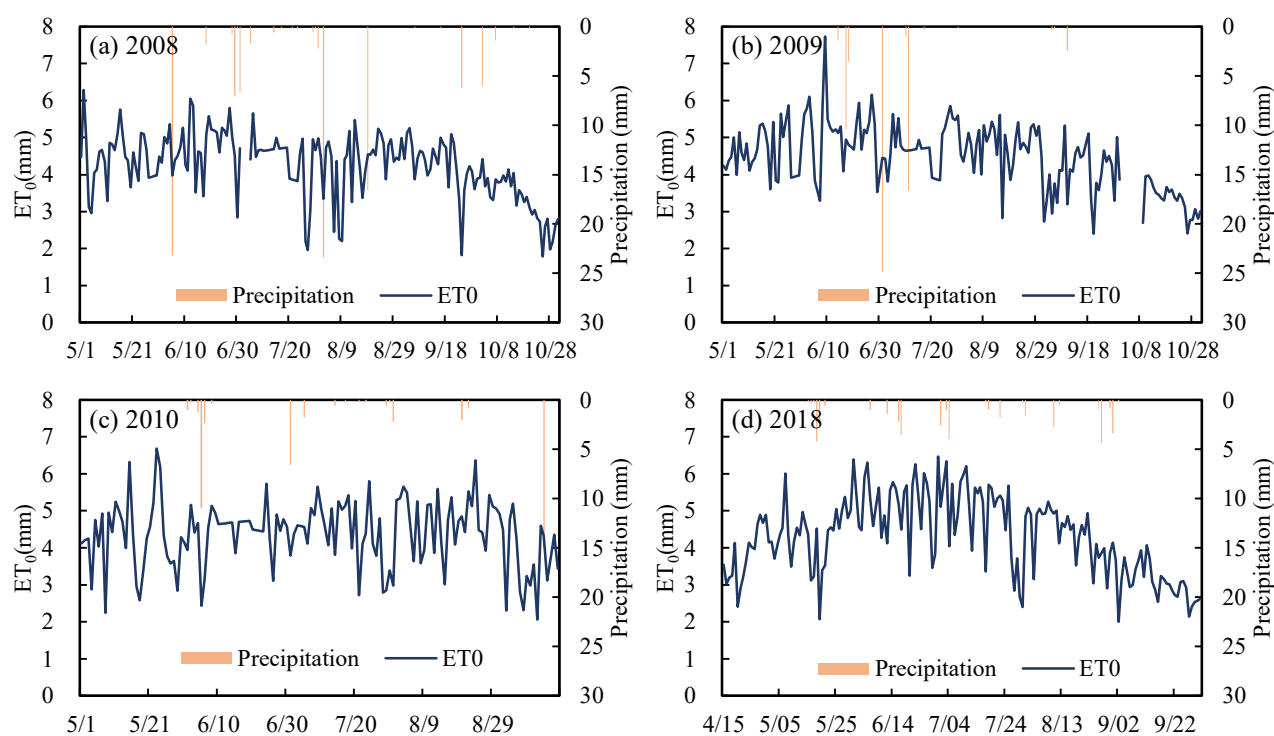


Figure S1 Daily reference evapotranspiration (ET_0) and precipitation during the whole growth period of cotton in Experiment One (a-c) and Experiment Two (d). Note: Data discontinuity indicates that the data is missing.

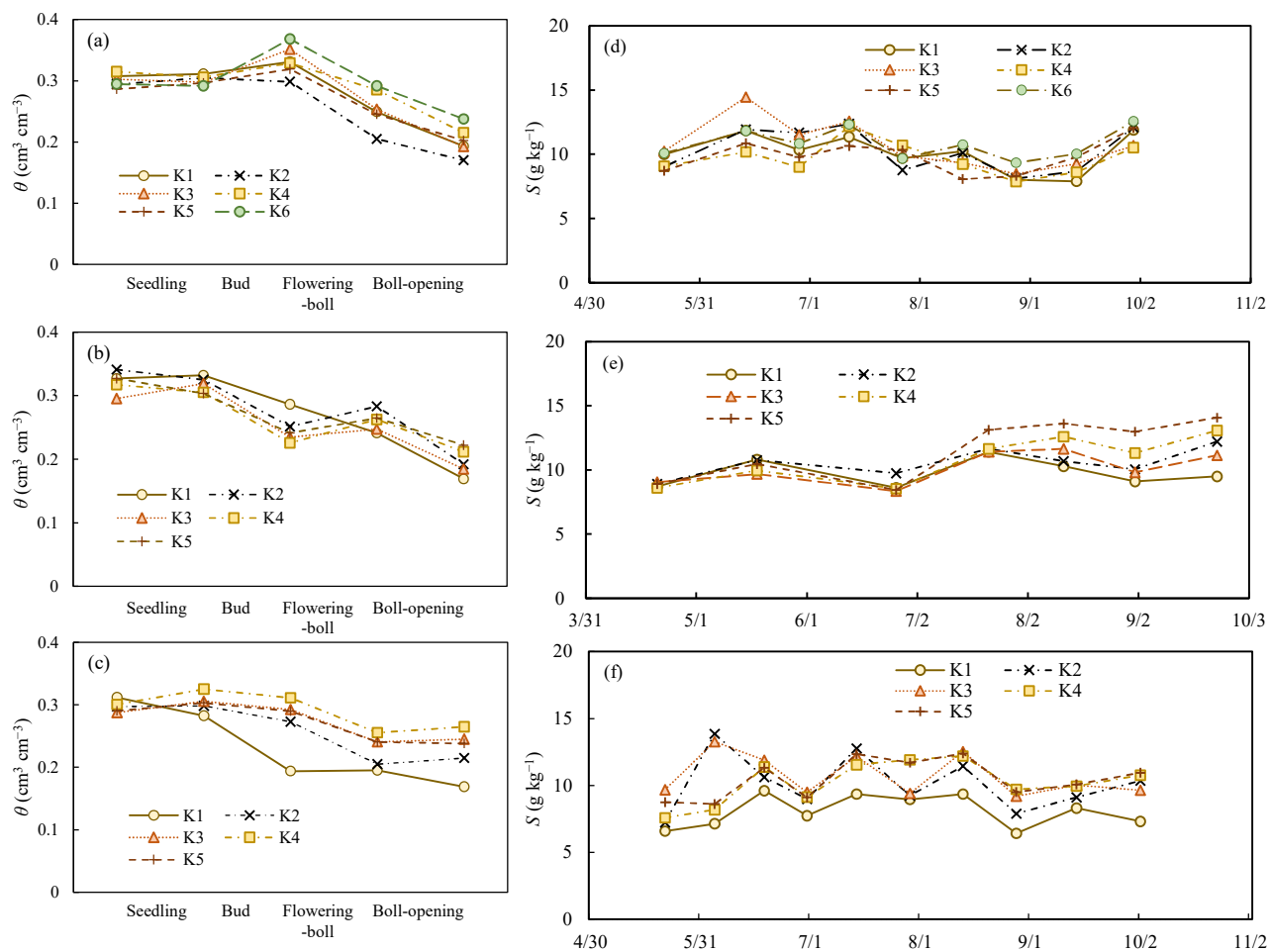


Figure S2. Soil moisture content of (a) 2008, (b) 2009, (c) 2010 and soil salt content of (d) 2008, (e) 2009 and (f) 2010.