

Supplementary Table S1. Prevailing climatic data at the experimental site during the two growing seasons of marigold (*C. officinalis* L.) 2019/2020 and 2020/2021.

Climatic Data	October		November		December		January		February		March	
	I	II	I	II	I	II	I	II	I	II	I	II
Precipitation (mm)	1.0	3.1	0.0	6.7	2.8	0.6	0.0	2.0	3.2	5.4	0.3	5.2
Temperature (°C)	28.9	29.7	23.9	21.1	16.9	18.8	15.8	14.2	17.9	16.9	20.2	25.1
Evaporation (mm)	218.5	224.7	158.0	133.2	104.5	115.3	97.0	102.8	126.2	139.7	110.9	210.2
Relative Humidity (%)	54.0	53.0	56.0	58.0	61.0	62.0	58.0	60.0	54.0	51.0	49.0	47.0

I = the 2019/2020 season and II = the 2020/2021 season. The above-mentioned climatic data were reported according to the Meteorological Station of Beni-Suef, Egyptian Meteorological Authority, Egypt.

Supplementary Table S2. Physical and chemical properties of soil and chemical analysis of irrigation water used in the current study (average of two years).

Soil Physical Analysis														
Silt %			Clay %			Coarse Sand %			Fine Sand %		Soil Texture			
28.64			56.35			4.39			10.62		Clay			
Soil Chemical Analysis														
pH	EC (dS/m)	O.M %	Soluble Cations (meq/L)				Soluble Anions (meq/L)				Available NPK (mg/kg soil)			
			Na ⁺	K ⁺	Mg ⁺⁺	Ca ⁺⁺	CO ₃ ⁻⁻	HCO ₃ ⁻	Cl ⁻	SO ₄ ⁻⁻	N	P	K	
7.90	1.51	1.17	6.87	0.39	2.43	5.25	5.40	2.14	7.58	4.51	38.52	7.69	194	
Irrigation Water Chemical Analysis														
EC (dS/m)	pH	Soluble Cations (meq/L)					Soluble Anions (meq/L)							
		Na ⁺	K ⁺	Mg ⁺⁺	Ca ⁺⁺	CO ₃ ⁻⁻	HCO ₃ ⁻	Cl ⁻	SO ₄ ⁻⁻					
7.12	4.29	20.55	0.91	8.03	8.74	0.00	2.14	23.50						17.42