

Supplementary Tables

Supplementary Table 1. Weather data of the experimental site- season 1

Std Week	Tmax (°C)	Tmin (°C)	RH (%)	Wind Speed (kmph)	Bright Sunshine (hr)	Rainfall (mm)	Water Evaporation (mm)	Solar Radiation (cal / cm² / day)	Rainy Days
4	30.8	21.4	85	5.4	8.7	0	4.9	399.3	0
5	31.6	22.4	84	4.5	6.9	0	4.1	363	0
6	32.7	20.7	84	6.5	9.3	0	6.3	427.6	0
7	32	22	82	7.4	9.5	0	7.5	393.1	0
8	34.1	22.2	84	5.3	8.8	0	7.5	396.9	0
9	33.3	22.6	76	7.9	8.4	0	7.2	406.5	0
10	35.8	22.9	79	4	9.3	0	7.1	416.5	0
11	35.8	24.2	78	4.7	8.1	0	6.6	395.1	0
12	35.2	24	74	5.5	9	0	7.2	408.7	0
13	36.3	23.9	72	5.1	9.6	0	7.9	439.3	0
14	38.2	25.2	76	3.1	10	0	8	439.2	0
15	37.1	25.9	77	6.1	9.2	0	8.5	426.6	0
16	36.9	25.9	80	5	8	0	7.6	393.2	0
17	38.6	25.8	77	4.1	9.5	0	8.1	420	0
18	38.9	26.8	74	4.6	8.9	0	8.4	414	0

Supplementary Table 2. Weather data of the experimental site- season 2

Std Week	Tmax (°C)	Tmin (°C)	RH (%)	Wind Speed (kmph)	Bright Sunshine (hr)	Rainfall (mm)	Water Evaporation (mm)	Solar Radiation (cal / cm² / day)	Rainy Days
25	33.0	24.2	69	8.7	6.9	0.6	6.9	359.1	0
26	30.0	23.8	74	10.7	2.5	21.2	4.5	266.9	2
27	32.4	23.9	72	8.5	5.1	4.5	6.1	319.9	0
28	31.7	23.3	74	8.0	3.8	12.8	4.8	284.4	2
29	28.2	23.3	80	15.1	1.3	43.8	3.9	210.4	4
30	30.6	24.2	68	15.6	4.7	12.4	6.6	294.0	1
31	30.4	23.1	76	8.4	3.7	19.0	4.9	277.8	1
32	30.9	23.6	77	4.1	3.8	0.0	3.8	264.8	0
33	33.2	24.6	73	4.3	7.8	16.0	5.3	342.9	2
34	32.1	24.1	69	6.9	6.6	12.2	5.8	323.5	1
35	31.4	23.6	67	10.0	4.8	0.4	6.2	301.0	0
36	32.9	23.8	69	8.8	6.4	1.0	7.2	361.5	0
37	32.3	24.1	72	11.2	7.1	0.0	7.4	358.1	0
38	33.8	22.9	70	6.0	8.7	0.0	6.7	385.3	0
39	33.0	23.7	70	6.7	6.3	10.2	6.3	338.4	1

Supplementary Table 3. Physicochemical characteristics of the soil**Properties****Rabi and Kharif (2024)****I. Physical properties****Particle size composition**

Sand (%)	41.93
Silt (%)	11.71
Clay (%)	45.92
Texture	Clay loam

II. Chemical properties**M3****M4**

Soil reaction (pH) (1:2.5 soil-water suspension)	7.90	8.05
Electrical Conductivity (dS m ⁻¹) (1:2.5 soil-water suspension)	0.60	0.38
Organic carbon (%)	0.27	0.20
Available N (kg ha ⁻¹)	168	179
Available P (kg ha ⁻¹)	30.8	29.6
Available K ₂ O (kg ha ⁻¹)	454	375