

Supplementary file

Table S1. Weekly meteorological information during the entire crop season of the year 2020-2021 at Jabalpur

Month	Standard week	Temp (°C)		RH		Total rainfall (mm)	No. of rainy days	Pan evaporation (mm)	Sun- shine hours
		Maximum	Minimum	Morning	Evening				
October	41	32.3	22.8	91	58	0	0	3.0	5.7
	42	33.0	21.2	89	49	0	0	3.6	8.2
	43	32.7	16.7	85	33	0	0	3.3	8.7
	44	30.8	12.7	80	25	0	0	3.1	8.3
	45	29.6	8.3	81	22	0	0	2.7	7.9
November	46	31.2	15.5	86	41	5.2	1	2.4	8.2
	47	28.0	10.7	82	37	1.4	0	2.6	6.9
	48	27.6	9.1	83	33	0.0	0	2.4	8.1
	49	29.3	9.1	81	29	0.0	0	2.4	9.4
December	50	26.4	14.7	88	57	2.3	0	1.7	3.2
	51	23.2	5.5	74	31	0.0	0	2.1	7.4
	52	23.8	7.2	83	43	0.0	0	1.8	6.2
	1	26.5	12.4	87	50	0.5	0.5	1.6	4.5
January	2	25.0	11.8	86	49	0.4	0.4	2.1	5.7
	3	25.4	8.0	75	31	0.0	0.0	2.5	8.2
	4	24.6	8.6	86	49	0.0	0.0	2.1	7.4
	5	21.4	4.8	73	31	0.0	0.0	2.6	6.0
February	6	26.4	8.9	72	34	0.0	0.0	3.0	9.1
	7	27.7	11.8	83	42	12.6	12.6	2.7	7.7

	8	28.6	10.6	79	28	0.0	0.0	3.1	9.3
	9	32.7	12.4	74	25	0.0	0.0	4.4	9.8
March	10	34.8	13.0	74	20	0.0	0.0	4.6	8.9
	11	32.3	15.3	78	29	6.2	6.2	4.4	7.0
	12	33.9	16.7	67	27	0.0	0.0	4.6	5.0
	13	36.8	16.7	57	13	0.0	0.0	6.7	8.5
April	14	38.3	14.8	64	11	0.0	0.0	6.7	8.6
	15	37.7	18.6	61	22	0.6	0.6	6.4	8.0
	16	37.0	18.0	53	19	0.0	0.0	6.0	7.2
	17	38.2	17.5	52	13	0.0	0.0	7.6	9.9
	18	38.8	23.2	47	24	2.6	2.6	5.8	7.8
May	19	38.0	23.3	71	35	39.0	39.0	7.9	9.6

Table S2. Soil characteristics of the experimental site

Sr. No.	Soil component	Analytical value
1	Soil pH	7.50
2	Electrical conductivity (ds/m)	0.18
3	Available potash (kg/ha)	321
4	Available phosphorus (kg/ha)	25.9
5	Organic carbon (%)	0.89
6	Available nitrogen (kg/ha)	261

Table S3. Interaction effect of planting dates and mulching on plant height

Planting date	Mulching											
	30 DAP			Mean dates	60 DAP			Mean dates	90 days			Mean dates
	(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch		(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch		(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch	
D ₁ (15 th November)	34.82	30.87	28.65	31.45	48.05	44.71	37.32	43.36	68.09	64.70	57.34	63.38
D ₂ (1 st December)	27.38	37.32	57.34	26.54	45.87	42.91	40.60	43.13	65.65	62.92	60.49	63.02
D ₃ (16 th December)	28.65	37.32	57.34	21.21	40.60	41.47	37.65	40.02	61.03	61.47	56.47	59.66
Mean Mulch	28.28	44.96	64.92		44.96	43.03	38.52		64.92	63.03	58.10	
Factor	SE(m)±		C.D. at 5 % level		SE(m)±		C.D. at 5 % level		SE(m) ±		C.D. at 5 % level	
Planting dates	0.06		0.19		0.11		0.33		0.09		0.27	
Mulch	0.06		0.19		0.11		0.33		0.09		0.27	
Planting date × mulch	0.10		0.32		0.19		0.60		0.15		0.46	

Table S4. Interaction effect of planting dates and mulching on the number of leaves

Planting date	Mulching											
	30 DAP			Mean dates	60 DAP			Mean dates	90 DAYS			Mean dates
	(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch		(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch		(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch	
D ₁ (15 th November)	5.53	3.13	4.58	4.41	8.54	6.28	7.81	7.54	9.75	8.48	9.30	9.17
D ₂ (1 st December)	4.90	4.19	3.78	4.29	7.63	7.43	6.89	7.32	9.68	8.22	8.20	8.71
D ₃ (16 th December)	4.39	4.25	2.74	3.79	7.57	7.77	5.66	7.00	9.35	8.90	7.55	8.60
Mean mulch	4.94	3.85	3.70		7.91	7.16	5.66		9.59	8.53	8.37	
Factor	SE(m)±		C.D. at 5 % level		SE(m)±	C.D. at 5 % level			SE(m)±		C.D. at 5 % level	
Planting dates	0.06		0.19		0.08	0.26			0.05		0.16	
Mulch	0.06		0.19		0.08	0.26			0.05		0.16	
Planting date × mulch	0.11		0.34		0.15	0.45			0.10		0.30	

Table S5: Interaction effect of planting dates and mulching on the length of leaves

Planting date	Mulching											
	30 DAP			Mean dates	60 DAP			Mean dates	90 Days			Mean dates
	(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch		(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch		(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch	
D ₁ (15 th November)	26.79	23.00	22.76	24.18	37.55	35.98	33.76	35.76	49.11	47.90	46.39	47.80
D ₂ (1 st December)	23.76	23.76	23.19	22.94	36.32	34.78	3.76	34.81	45.70	44.61	41.78	44.03
D ₃ (16 th December)	21.88	22.10	22.46	22.06	32.08	32.17	29.47	31.24	45.91	41.63	40.87	42.80
Mean Mulch	24.21	22.09	22.09		35.32	34.31	32.19		46.90	44.71	43.01	
Factor	SE(m)±		C.D. at 5 % level		SE(m)±		C.D. at 5 % level		SE(m)±		C.D. at 5 % level	
Planting dates	0.05		0.15		0.07		0.24		0.10		0.30	
Mulch	0.05		0.15		0.07		0.24		0.10		0.30	
Planting date × mulch	0.08		0.27		0.13		0.40		0.17		0.52	

Table S6. Interaction effect of planting dates and mulching on the width of the leaf

Planting date	Mulching											
	30 DAP			Mean dates	60 DAP			Mean dates	90 DAYS			Mean dates
	(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch		(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch		(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch	
D ₁ (15 th November)	0.85	0.81	0.82	0.82	1.65	1.54	1.64	1.61	2.37	1.95	1.72	2.01
D ₂ (1 st December)	0.77	0.74	0.74	0.75	1.49	1.45	1.38	1.44	2.15	1.88	1.77	1.93
D ₃ (16 th December)	0.72	0.69	0.67	0.69	1.40	1.36	1.31	1.36	1.92	1.83	1.66	1.75
Mean mulch	0.78	0.75	0.74		1.51	1.45	1.45		2.15	1.88	1.66	
Factor	SE(m)±		C.D. at 5 % level		SE(m)±		C.D. at 5 % level		SE(m)±		C.D. at 5 % level	
Planting dates	0.005		0.01		0.02		0.07		0.04		NA	
Mulch	0.005		0.01		0.02		0.07		0.04		NA	
Planting date × mulch	0.08		NA		0.04		NA		0.07		NA	

Table S7. Interaction effect of planting dates and mulching on the length of the pseudostem

Planting date	Mulching											
	30 DAP			Mean dates	60 DAP			Mean dates	90 DAYS			Mean dates
	(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch		(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch		(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch	
D ₁ (15 th November)	2.34	2.18	2.03	2.18	3.56	3.47	3.45	3.49	4.89	4.73	4.80	4.81
D ₂ (1 st December)	2.21	2.12	2.06	2.13	2.33	2.29	2.05	2.22	4.53	4.53	4.21	4.42
D ₃ (16 th December)	2.05	2.03	1.97	2.01	2.48	2.00	1.99	2.16	4.44	4.31	3.58	4.11
Mean mulch	2.20	2.11	2.02		2.79	2.59	2.50		4.62	4.52	4.19	
Factor	SE(m)±		C.D. at 5 % level		SE(m)±		C.D. at 5 % level		SE(m)±		C.D. at 5 % level	
Planting dates	0.03		0.10		0.05		0.17		0.08		0.24	
Mulch	0.03		0.10		0.05		0.17		0.08		0.24	
Planting date × mulch	0.052		NA		0.10		NA		0.15		NA	

Table S8. Interaction effect of planting dates and mulching on the diameter of the pseudostem

Planting date	Mulching											
	30 DAP			Mean dates	60 DAP			Mean dates	90 DAYS			Mean dates
	(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch		(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch		(M ₁) Plastic mulch	(M ₂) Paddy straw	(M ₀) No mulch	
D ₁ (15 th November)	0.57	0.46	0.46	0.50	0.67	0.56	0.61	0.61	0.84	0.80	0.79	0.81
D ₂ (1 st December)	0.54	0.37	0.50	0.47	0.62	0.58	0.60	0.60	0.80	0.79	0.77	0.79
D ₃ (16 th December)	0.44	0.52	0.41	0.45	0.59	0.60	0.53	0.57	0.76	0.78	0.74	0.75
Mean mulch	0.51	0.45	0.46		0.63	0.58	0.57		0.80	0.78	0.77	
Factor	SE(m)±		C.D. at 5 % level		SE(m)±		C.D. at 5 % level		SE(m)±		C.D. at 5 % level	
Planting dates	0.03		0.10		0.06		0.22		0.08		0.25	
Mulch	0.03		0.10		0.06		0.22		0.08		0.25	
Planting date × mulch	0.07		0.24		0.09		0.30		0.11		0.35	

