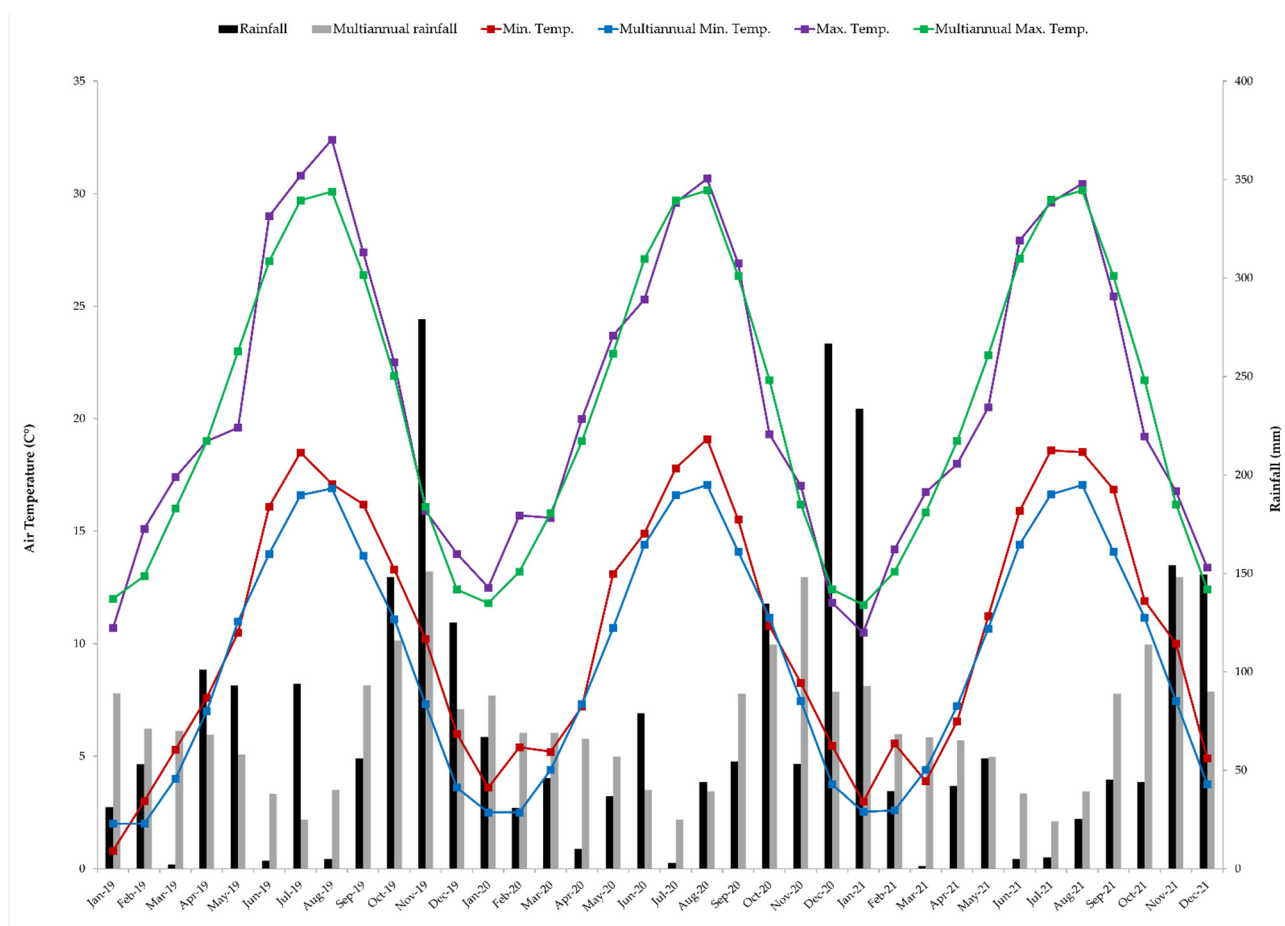




**Figure S1.** Particulars of LM-AM plot with plastic cylinders mounted at the base of each plant to avoid plant damage.



**Figure S2.** Monthly total rainfall (mm) and mean maximum and minimum air temperature (°C) from January 2019 to December 2021 compared to multiannual mean values (1993–2021).

**Table S1.** Results of general linear model analysis (type III) testing the effects of the independent variable block, treatments, years, and their interaction on cauliflower fresh marketable yield.

Source	Sum of Squares (type III)	DF	Mean Squares	F	<i>p</i> -value
Model	288.343	7	41.192	1.433	ns
Intercept	17591.530	1	17591.530	612.025	***
Year	23.536	1	23.536	0.819	ns
Treatment	105.243	2	52.621	1.831	ns
Treatment × Year	101.548	2	50.774	1.766	ns
Block	58.017	2	29.008	1.009	ns
Error	1322.184	46	28.743	-	-
Total	19202.057	54	-	-	-

\*\*\* Significant at 0.001 probability level. ns, not significant at 0.05 probability level. DF: degree of freedom. F: is the calculated Fisher value as the ratio between the variances.

**Table S2.** Results of general linear model analysis (type III) testing the effects of the independent variable block, treatments, years, and their interaction on cauliflower plant dry weight.

Source	Sum of Squares (type III)	DF	Mean Squares	F	<i>p</i> -value
Model	12.622	7	1.803	4.418	***
Intercept	458.378	1	458.378	1122.991	***
Year	1.023	1	1.023	2.505	ns
Treatment	7.402	2	3.701	9.067	***
Treatment × Year	3.811	2	1.906	4.669	*
Block	0.387	2	0.193	0.474	ns
Error	18.776	46	0.408	-	-
Total	489.776	54	-	-	-

\*\*\*, \* Significant at 0.001 and 0.05 probability level, respectively. ns, not significant at 0.05 probability level.

**Table S3.** Results of generalized linear model analysis testing the effects of the independent variable block, treatments, years, and their interaction on weed dry biomass in cauliflower fields.

Source	Wald $\chi^2$	DF	<i>p</i> -value
Intercept	6153.796	1	***
Year	9.371	1	**
Treatment	17.180	2	***
Treatment × Year	8.883	2	*
Block	1.335	2	ns

\*\*\*, \*\*, \*, Significant at 0.001, 0.0, and 0.05 probability level, respectively. ns, not significant at 0.05 probability level.

**Table S4.** Results of general linear model analysis (type III) testing the effects of the independent variable block, treatments, years, and their interaction on the aboveground dry biomass of the LM growing in cauliflower fields.

Source	Sum of Squares (type III)	DF	Mean Squares	F	<i>p</i> -value
Model	276562.721	5	55312.544	7.100	***
Intercept	630171.361	1	630171.361	80.890	***
Year	246.490	1	246.490	0.032	ns
Treatment	142606.934	1	142606.934	18.305	***
Treatment × Year	36087.334	1	36087.334	4.632	*
Block	97621.962	2	48810.981	6.266	**

Error	233712.758	30	7790.425	-	-
Total	1140446.840	36	-	-	-

\*\*\*, \*\*, \*, Significant at 0.001, 0.0, and 0.05 probability level, respectively. ns, not significant at 0.05 probability level.

**Table S5.** Results of general linear model analysis (type III) testing the effects of the independent variable block, treatments, years, and their interaction on eggplant fresh marketable production.

Source	Sum of Squares (type III)	DF	Mean Squares	F	p-value
Model	9034.832	7	1290.690	13.751	***
Intercept	71889.889	1	71889.889	765.915	***
Year	37.376	1	37.376	0.398	ns
Treatment	7882.376	2	3941.188	41.989	***
Treatment × Year	743.916	2	371.958	3.963	*
Block	371.165	2	185.582	1.977	ns
Error	4317.629	46	93.862	-	-
Total	85242.350	54	-	-	-

\*\*\*, \* Significant at 0.001 and 0.05 probability level, respectively. ns, not significant at 0.05 probability level.

**Table S6.** Results of general linear model analysis (type III) testing the effects of the independent variable block, treatments, years, and their interaction on eggplant dry weights.

Source	Sum of Squares (type III)	DF	Mean Squares	F	p-value
Model	23.103	7	3.300	5.811	***
Intercept	212.260	1	212.260	373.711	***
Year	3.755	1	3.755	6.611	*
Treatment	12.145	2	6.072	10.691	***
Treatment × Year	6.954	2	3.477	6.122	**
Block	0.250	2	0.125	0.220	ns
Error	26.127	46	0.568	-	-
Total	261.490	54	-	-	-

\*\*\*, \*\*, \* Significant at 0.001, 0.01, and 0.05 probability level, respectively. ns, not significant at 0.05 probability level.

**Table S7.** Results of general linear model analysis (type III) testing the effects of the independent variable block, treatments, years, and their interaction on eggplant weed dry biomass.

Source	Sum of Squares (type III)	DF	Mean Squares	F	p-value
Model	231030.731	7	3705366.632	16.886	***
Intercept	2122603.282	1	57041666.667	259.955	***
Year	37547.452	1	3616160.667	16.480	***
Treatment	121446.347	2	8640935.647	39.379	***
Treatment × Year	69539.867	2	2481545.282	11.309	***
Block	2497.065	2	38221.949	0.174	ns
Error	261270.471	46	219428.792	-	-
Total	2614904.484	54	-	-	-

\*\*\*, \*\* Significant at 0.001 and 0.01 probability level, respectively. ns, not significant at 0.05 probability level.

**Table S8.** Results of generalized linear model analysis testing the effects of the independent variable block, treatments, years, and their interaction on the aboveground dry biomass of the LM growing in eggplant fields.

Source	Wald $\chi^2$	DF	<i>p</i> -value
Intercept	88.469	1	***
Year	0.101	1	ns
Treatment	54.227	1	***
Treatment $\times$ Year	0.574	1	ns
Block	0.027	2	ns

\*\*\* Significant at 0.001 probability level. ns, not significant at 0.05 probability level.