Supplementary table 1: Average weather data from for the period 1951-2020 obtained from the closest weather station of the Servicio Meteorológico Nacional to the Santa Maria Teopoxco site, located in the Santa Maria Teopoxco municipality, Oaxaca at 1,974 m asl (18.166667^{o}, -96.950000^{o}). NA indicates data are not available. Note that the trial was located in a mountainous regions, so the data from the closest weather station may not completely coincide with the weather at the site.

	Maximum Temperature (^{o}C)	Mean Temperature (^{o}C)	Minimum Temperature (^{o}C)	Precipitation (mm)	Evaporation (mm)	Days with rainfall
January	19.5	13.5	7.4	37.2	NA	9.2
February	21.4	14.5	7.7	25.9	NA	6.6
March	24	16.8	9.6	19.3	NA	6.3
April	25.4	18.5	11.6	25.9	NA	5.9
May	25	18.5	11.9	55.6	NA	8.9
June	23.2	17.7	12.2	241.1	NA	19.6
July	21.4	16.4	11.4	316.1	NA	23.4
August	21.9	16.9	11.8	259.2	NA	20.4
September	21.5	16.5	11.4	239	NA	20.6
October	20.7	15.4	10.2	148.6	NA	17.4
November	20.4	14.7	9	78.7	NA	13.4
December	19.6	13.9	8.3	51.3	NA	10.5
Yearly Mean	22	16.1	10.2	1,497.9	NA	162.2

Supplementary table 2: Average weather data from for the period 1951-2020 obtained from the closest weather station of the Servicio Meteorológico Nacional to the Tamazulapam del Espiritu Santo site at San Pedro y San Pablo Ayutla, Oaxaca at 2056 m asl (17.01667º, -96.099722º). Note that the trial was located in a mountainous regions, so the data from the closest weather station may not completely coincide with the weather at the site.

	Maximum Temperature (ºC)	Mean Temperature (ºC)	Minimum Temperature (ºC)	Precipitation (mm)	Evaporation (mm)	Days with rainfall
January	13.6	9.7	5.8	15.3	82.3	5.6
February	14.7	10.3	5.9	16.2	104.9	3.6
March	15.6	11.6	7.5	16.8	143.2	2.8
April	16.2	12.7	9.1	41.7	145	4.4
May	16.5	13.2	9.9	74.8	131.9	7.3
June	15.6	13	10.3	224.4	95.3	16.6
July	14.6	12.2	9.7	252.6	77.5	18.8
August	14.4	12.1	9.7	255.5	75.8	20
September	14.6	12.2	9.8	239.5	61.9	21.1
October	13.9	11.1	8.4	111.6	66.3	13
November	13.2	10	6.8	41.7	67	8.1
December	13.7	10	6.3	20.4	71.8	5.4
Yearly Mean	14.7	11.5	8.3	1310.5	1122.9	126.7

Supplementary table 4: Results of statistical analysis of crop yields using ANOVA.

Site	Year	Factor	Degrees of freedom	Sum of squares	Mean square error	F Value	P
Teopoxco	2016	Treatment	4	496627	124157	0.343	0.843
		Residuals	10	3624122	362412		
	2017	Treatment	2	79029	39515	1.004	0.42
		Residuals	6	236053	39342		
	2018	Treatment	4	3903164	975791	5.322	0.0147*
		Residuals	10	1833536	183354		
	2019	Treatment	2	3946979	1973490	1.513	0.294
		Residuals	6	7828715	1304786		
	2019	Treatment	4	682591	170648	1.604	0.248
		Residuals	10	1064186	106419		
	2020	Treatment	2	488845	244422	0.321	0.737
		Residuals	6	4566629	761105		
Tamazulapam	2014	Treatment	4	238026961	59506740	5.273	0.0151*
		Residuals	10	112851700	11285170		
	2015	Treatment	4	47540085	11885021	0.865	0.517
		Residuals	10	137346758	13734676		
	2016	Treatment	2	244770	122385	0.573	0.592
		Residuals	6	1282388	213731		
	2018	Treatment	4	11833024	2958256	4.33	0.0274*
		Residuals	10	6831618	68316		
	2019	Treatment	4	6199892	1549973	6.974	0.00599*
		Residuals	10	2222565	222256		

*Indicates significant effects (P<0.05).

Supplementary table 5: Results of statistical analysis of crop profits using ANOVA.

Site	Year	Factor	Degrees of freedom	Sum of squares	Mean square error	F Value	P
Teopoxco	2016	Treatment	4	496627	124157	0.343	0.843
		Residuals	10	3624122	362412		
	2017	Treatment	2	79029	39515	1.004	0.42
		Residuals	6	236053	39342		
	2018	Treatment	4	3903164	975791	5.322	0.0147*
		Residuals	10	1833536	183354		
	2019	Treatment	2	3946979	1973490	1.513	0.294
		Residuals	6	7828715	1304786		
	2019	Treatment	4	682591	170648	1.604	0.248
		Residuals	10	1064186	106419		
	2020	Treatment	2	488845	244422	0.321	0.737
		Residuals	6	4566629	761105		
Tamazulapam	2014	Treatment	4	238026961	59506740	5.273	0.0151*
		Residuals	10	112851700	11285170		
	2015	Treatment	4	47540085	11885021	0.865	0.517
		Residuals	10	137346758	13734676		
	2016	Treatment	2	244770	122385	0.573	0.592
		Residuals	6	1282388	213731		
	2018	Treatment	4	11833024	2958256	4.33	0.0274*
		Residuals	10	6831618	68316		
	2019	Treatment	4	6199892	1549973	6.974	0.00599*
		Residuals	10	2222565	222256		

*Indicates significant effects (P<0.05).