

Supporting Information

Figure S1. Randomized block design with five replications.

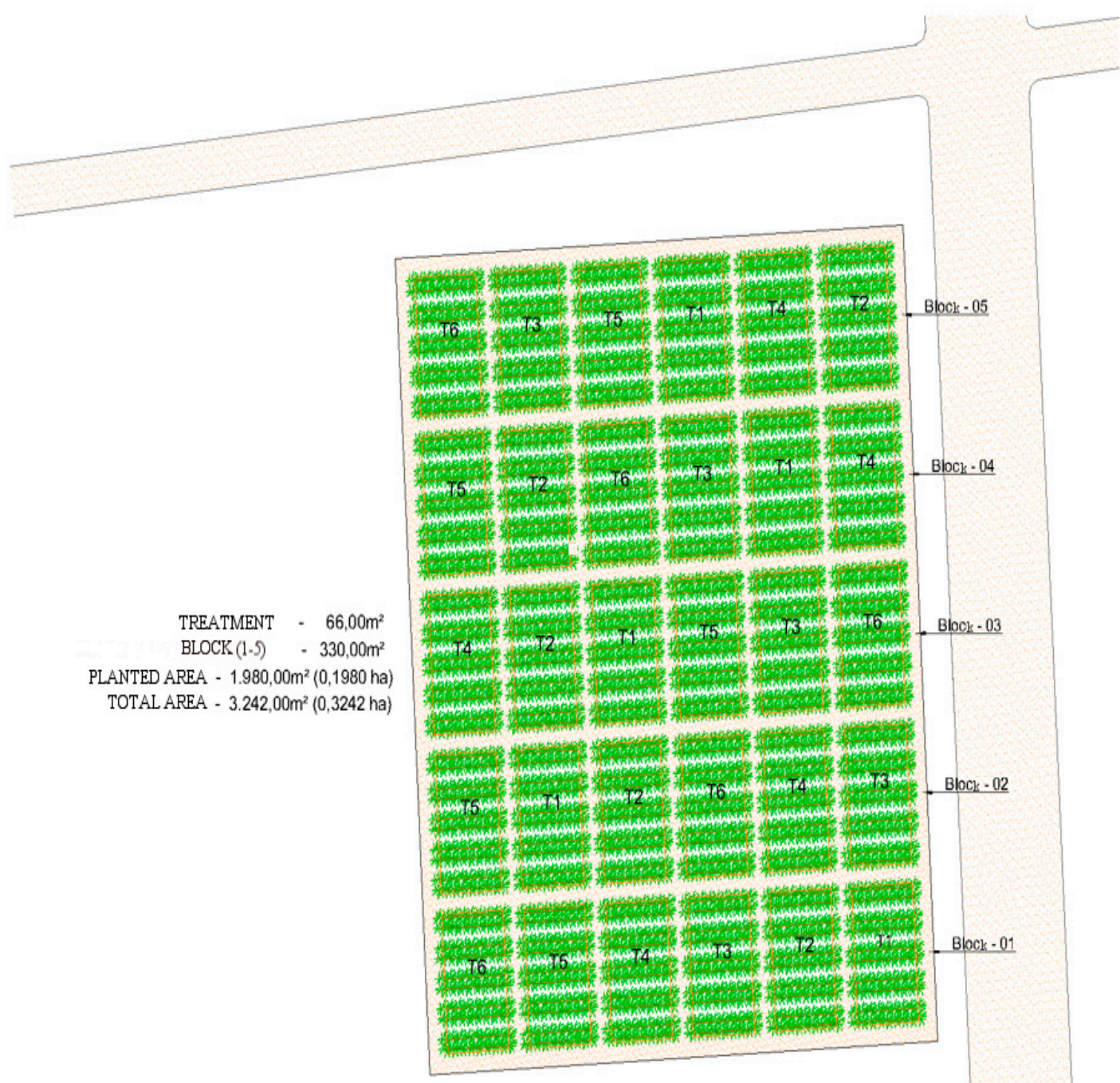


Table S1. Results of Total Recoverable Sugar (TRS) analyses for each treatment (T).

	T1	TRS	T2	TRS	T3	TRS	T4	TRS	T5	TRS	T6	TRS
28/11/2019	B1	150.13	B1	157.91	B5	143.9	B1	158.83	B2	157.66	B1	163.21
28/11/2019	B2	161.88	B2	144.09	B1	153.6	B2	152.54	B3	156.85	B2	172.37
28/11/2019	B3	160.16	B3	154.91	B2	171.9	B3	147.24	B4	152.88	B3	144.02
28/11/2019	B4	165.75	B4	160.42	B3	152.16	B4	160.44	B5	159.1	B4	154.79
28/11/2019	B5	156.95	B5	149.57	B4	155.85	B5	148.48	B1	151.28	B5	160.72
09/01/2020	B1	148.58	B1	155.1	B1	154.33	B1	162.08	B1	154.14	B1	154.67
09/01/2020	B2	156.64	B2	147.74	B2	138.13	B2	152.91	B2	159.58	B2	160.95
09/01/2020	B3	149.54	B3	156.3	B3	168.95	B3	158.2	B3	155.93	B3	154.93
09/01/2020	B4	165	B4	153.38	B4	140.85	B4	159.34	B4	158.5	B4	155.33
09/01/2020	B5	148.75	B5	158.6	B5	151.79	B5	152.05	B5	155.6	B5	150.85
05/11/2020	B2	157.49	B5	163.12	B4	164.29	B4	154.37	B4	163.9	B5	156.21
05/11/2020	B5	151.89	B3	148.86	B5	152.44	B5	151.70	B1	159.03	B3	148.92
05/11/2020	B3	170.10	B4	141.31	B3	158.62	B3	177.18	B2	161.5	B4	136.68
05/11/2020	B1	140.41	B1	151.22	B1	158.70	B1	151.86	B3	166.32	B1	156.32
05/11/2020	B4	169.67	B2	155.19	B2	157.15	B2	151.54	B5	144.6	B2	156.72
Average	-	156.86	-	153.18	-	154.8	-	155.9	-	157.12	-	155.11
Standard deviation	-	8.37	-	5.66	-	8.78	-	7.11	-	5.1	-	7.97

*B - Block

Figure S2. (A) Base peak chromatogram (BPC) in negative ion mode of T1 (collection 4). (B). 2D Expansion showing the main ions present in sugarcane stem extract between 4–7.0 min by HPLC-DAD-ESI-MSⁿ.

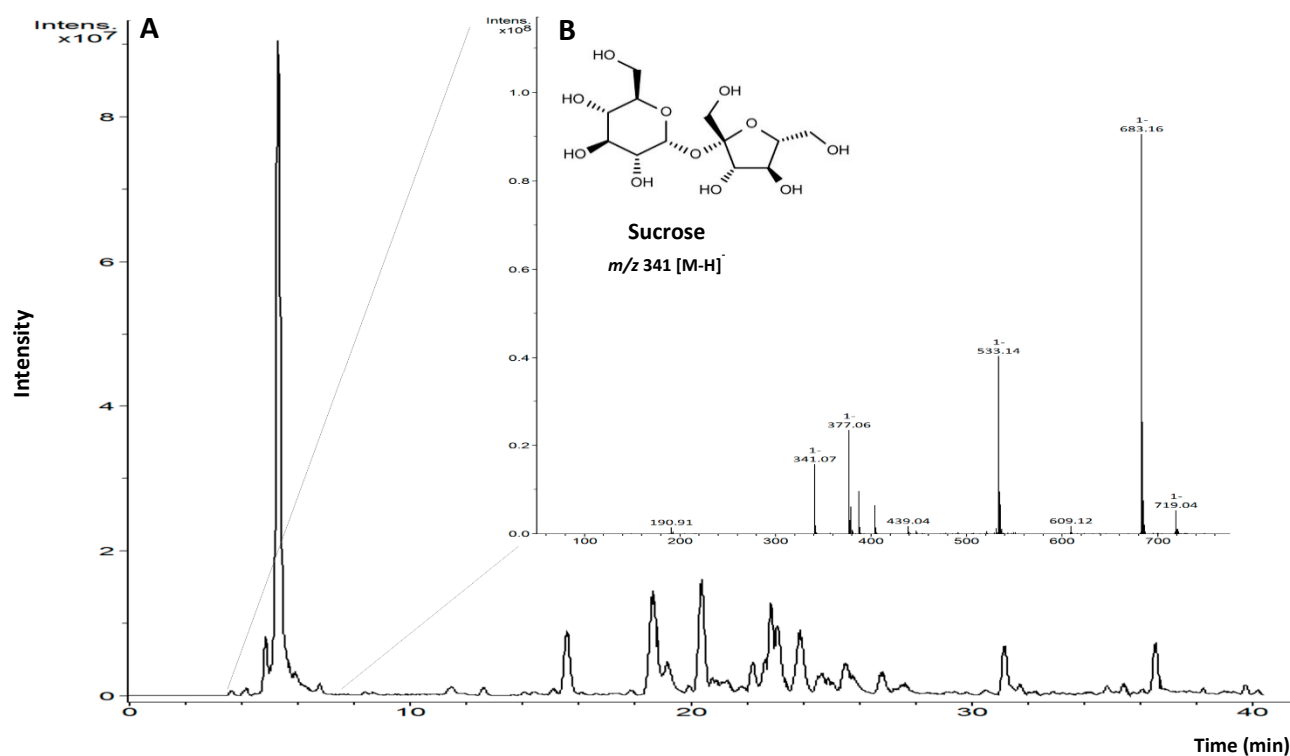


Figure S3. Expansion of the Base peak chromatogram (BPC) in negative ion mode between 4–7.0 min of T1 to T6. (collection 4) by HPLC-DAD-ESI-MSⁿ.

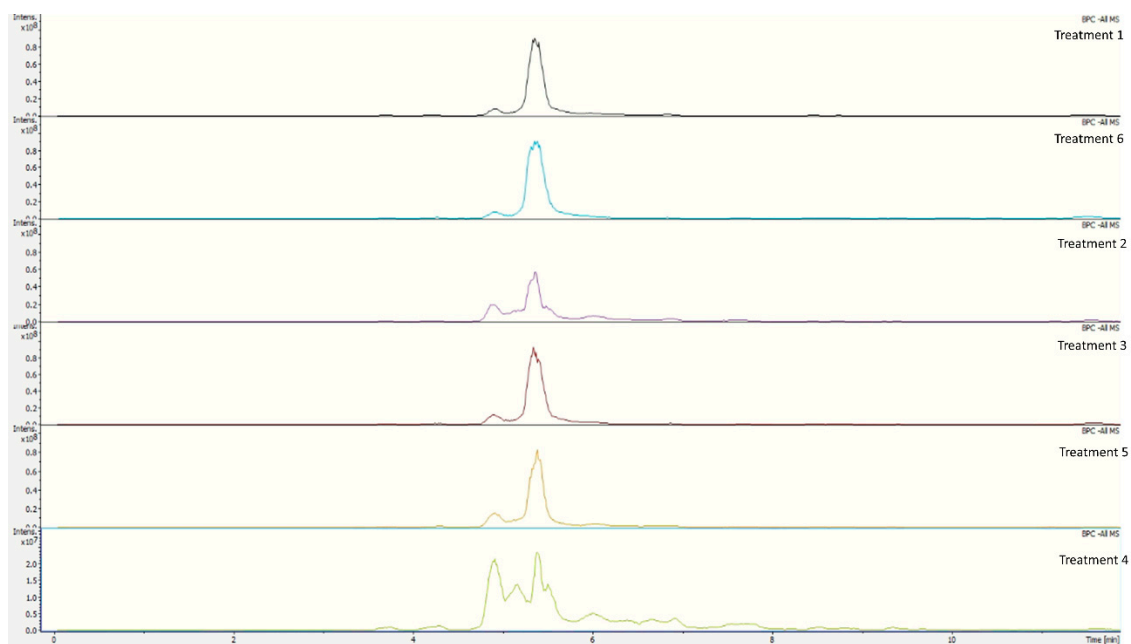


Figure S4. Graph of PCA scores (**left**) and loadings plots (PC1 vs. PC2) (**right**) for treatments 2 (red) and 4 (blue) analyzed by mass spectrometry.

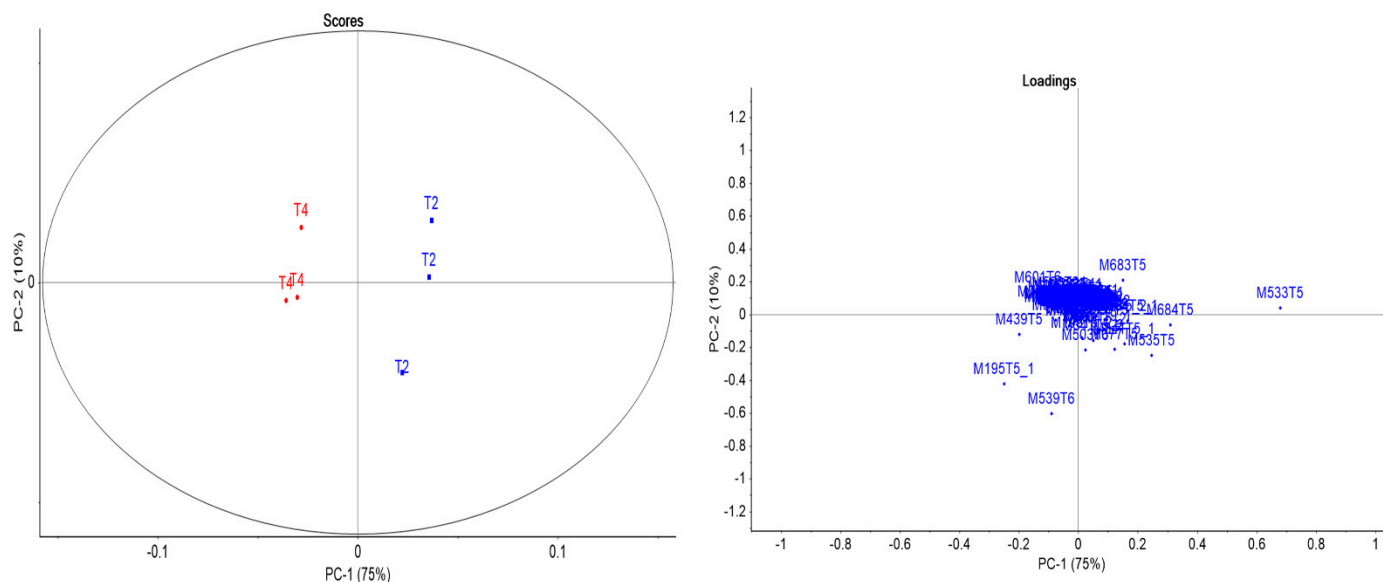


Figure S5 Graph of PCA scores (**left**) and loadings plots (PC1 vs. PC2) (**right**) for treatments 3 (red) and 6 (green) and 1 (blue) analyzed by mass spectrometry.

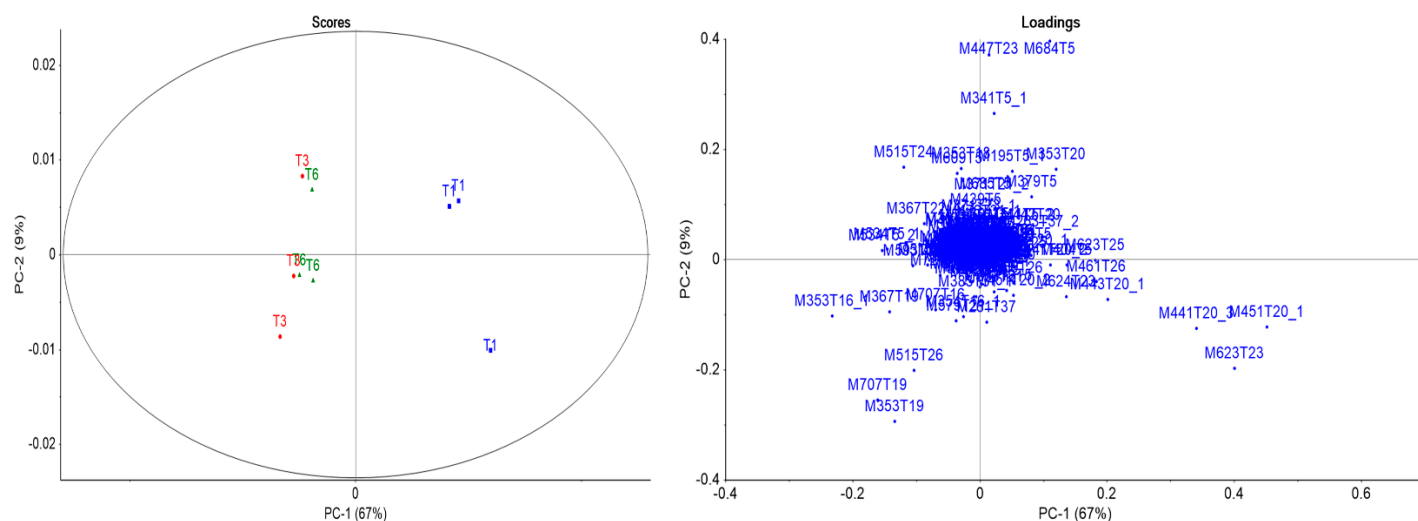


Figure S6. Graph of PCA scores (**left**) and loadings plots (PC1 vs. PC2) (**right**) for treatments 3 (blue) and 6 (red) analyzed by mass spectrometry.

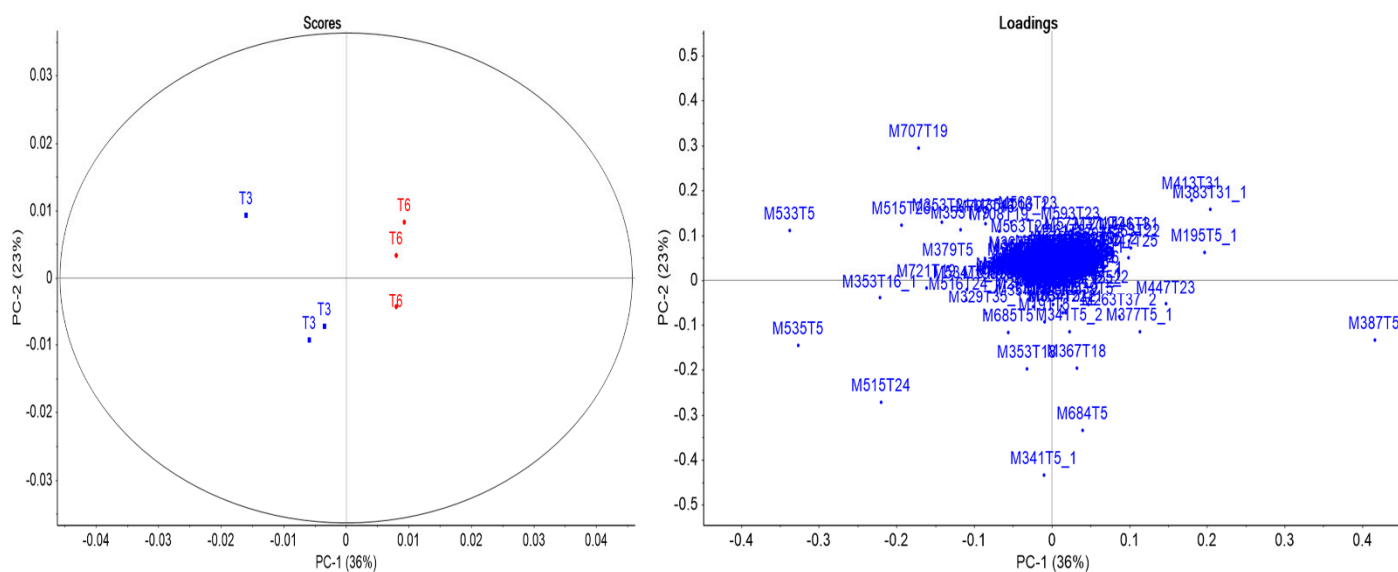


Figure S7. HRMS spectra of the main features annotated and listed in table 3. All the figures contain the molecular formula and retention time of each feature.

