

Supplementary

Supplementary Table 1. Compounds identified by GC-MS (retention time [RT], mass [M^+], and chemical formula) from methanolic extract of selected treated potato peel in comparison to control.

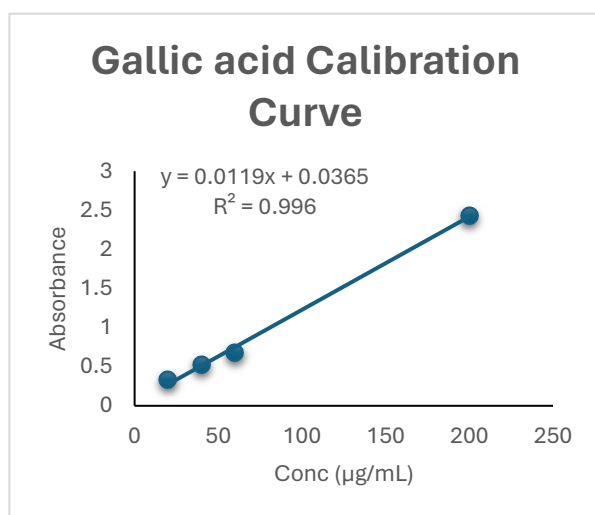
No.	Compound	RT (min)	M^+ (m/z)	Formula
1.	1-Hexadecanol, 2-methyl	6.99	256	$C_{17}H_{36}O$
2.	Dodecanoic acid	18.26	200	$C_{12}H_{24}O_2$
3.	Hexadecanoic acid, methyl ester	25.62	270	$C_{17}H_{34}O_2$
4.	n-hexadecanoic acid	26.40	256	$C_{16}H_{32}O_2$
5.	9,12-Octadecadienoic acid (Z, z)-, methyl ester	28.62	294	$C_{19}H_{34}O_2$
6.	9-Octadecenoic acid (Z)-, methyl ester	28.80	296	$C_{19}H_{36}O_2$
7.	Heneicosane	29.19	296	$C_{21}H_{44}$
8.	Methyl stearate	29.37	298	$C_{19}H_{38}O_2$
9.	Oleic Acid	29.59	282	$C_{18}H_{34}O_2$
10.	9-Octadecenoic acid, (E)-	29.75	282	$C_{18}H_{34}O_2$
11.	Octadecanoic acid	30.08	284	$C_{18}H_{34}O_2$
12.	9-Octadecenoic acid (Z)-, 2-hydroxy-1-(hydroxymethyl)ethyl ester	31.09	356	$C_{21}H_{40}O_4$
13.	1-Heptatriacotanol	31.77	536	$C_{37}H_{76}O$
14.	Cis-13-Eicosenoic acid	32.29	310	$C_{20}H_{38}O_2$
15.	Cyclopropanebutanoic acid, 2-[[2-[[2-[(2-pentylcyclopropyl)methyl]cyclopropyl]methyl]methyl]-, methyl ester	32.81	374	$C_{25}H_{42}O_2$

16. Linoleic acid ester	34.24	308	C ₂₀ H ₃₆ O ₂
17. 11-Octadecenal	34.61	266	C ₁₈ H ₃₄ O
18. 2-Monolinolenin, 2TMS derivative	35.35	496	C ₂₇ H ₅₂ O ₄ Si ₂
19. Hexadecanoic acid	35.37	330	C ₁₉ H ₃₈ O ₄
20. 1,2-Benzene dicarboxylic acid	35.80	390	C ₂₄ H ₃₈ O ₄
21. Arabinitol, pentaacetate	40.68	362	C ₁₅ H ₂₂ O ₁₀
22. Betulin	42.17	442	C ₃₀ H ₅₀ O ₂
23. Ethyl iso-allocholate	42.29	436	C ₂₆ H ₄₄ O ₅
24. 9,12-Octadecadienoic acid (Z, Z)-,2,3-Bis[(trimethylsilyl)oxy]propyl ester	42.52	498	C ₂₇ H ₅₄ O ₄ Si ₂
25. Solanidine-5-en-ol	43.16	397	C ₂₇ H ₄₃ NO
26. Stigmast-5-en-ol, (3a, 24S)-	44.22	414	C ₂₉ H ₅₀ O
27. Methyl-hydroxy-11-hydroxy (180)-3,11-dimethyl-2,6-Tridecadienoate	45.00	312	C ₁₈ H ₃₂ O ₄

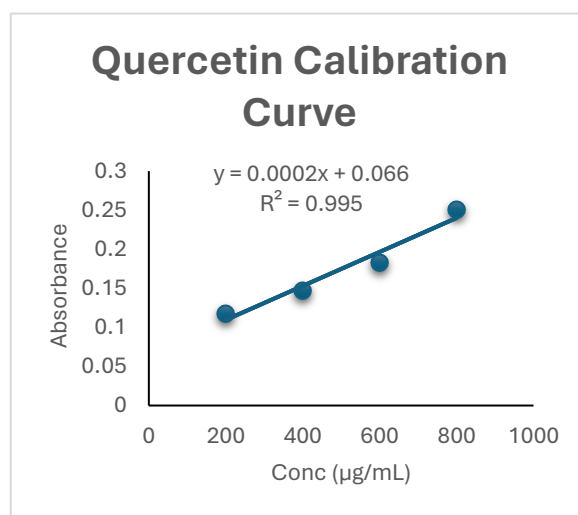
Supplementary Table 2. Compounds identified by LC-ESI-MS/MS from meth. ext. of selected treated potato peel in comparison to control.

NO.	Compound Class	Compound	Formula	Observed Mass [M+H] ⁺	Observed mass [M-H] ⁻	MS/MS Fragmentation n	Ref.
1.	Steroidal alkaloids	Leptinine II	C ₄₅ H ₇₃ NO ₁₆	884.5		866; 704; 396; 558; 720	54
2.		Leptinine I	C ₄₅ H ₇₃ NO ₁₅	868.4		850; 704; 396; 558	54
3.		α -solanine	C ₄₅ H ₇₃ NO ₁₅	868.5	912.4	398; 706; 560; 383; 327; 253; 157	53, 54
4.		α -chaconine	C ₄₅ H ₇₃ NO ₁₄	852.5	896.4	706; 560; 398; 253	53, 54
5.		β -chaconine	C ₃₉ H ₆₃ NO ₁₀	706.3		560; 493; 398; 307; 214; 196	56
6.		Tomatidinol	C ₂₇ H ₄₃ NO ₂	414.1		394; 272; 256; 204	57
7.		Solanidine	C ₂₇ H ₄₃ NO	399.1		157; 383; 327; 253; 142	57, 58

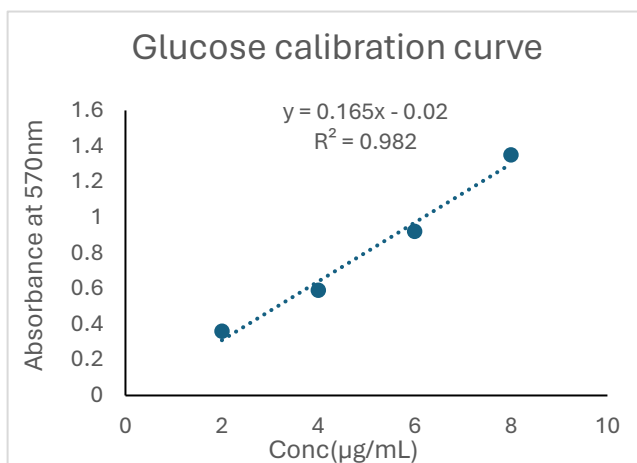
8.	Flavonoids	Flavonol	Quercetin dimethyl ether	$C_{17}H_{14}O_7$		329	171, 125, 210	59
9.		Flavone	Chrysoeriol [Chryseriol]	$C_{16}H_{12}O_6$	301.1		269; 169; 241	60
10.	Phenylpropanoid		Triandrin [Sachaliside]	$C_{15}H_{20}O_7$		311.1	293; 201; 171 265; 185	61
11.	Phenolic amine		N-feruloyloctopamine	$C_{18}H_{19}NO_5$	330.1	328.1	310 295; 161; 135	55
12.	Polyhydroxycarboxylic acid		Quinic acid	$C_7H_{12}O_6$		191	173; 129; 111	55, 61
13.	Tricarboxylic acid		Citric acid [Anhydrous; Citrate]	$C_6H_8O_7$		191	111; 173	61
14.			13-TrihydroxyOctadecenoic acid [THODE]	$C_{18}H_{34}O_5$		329	309; 229; 171; 127 153	62
15.	Oxylipin		9,12,13-Trihydroxytrans-10-octadecenoic acid	$C_{18}H_{34}O_5$		329	171; 201; 311 153	61
16.			Chlorogenic acid [3-O-Caffeoylquinic acid]	$C_{16}H_{18}O_9$	353.2		191; 127; 171	63
17.	Hydroxycinnamic acid		Caffeic acid	$C_9H_8O_4$		179	107, 75	59



A



B



C

Figure 1. Gallic acid and quercetin Standard calibration curves. (A) Calibration curve of standard gallic acid (B) calibration curve of standard quercetin and (C) Calibration curve of standard glucose showing absorbance on the Y-axis and concentration (µg/mL) on the X-axis.

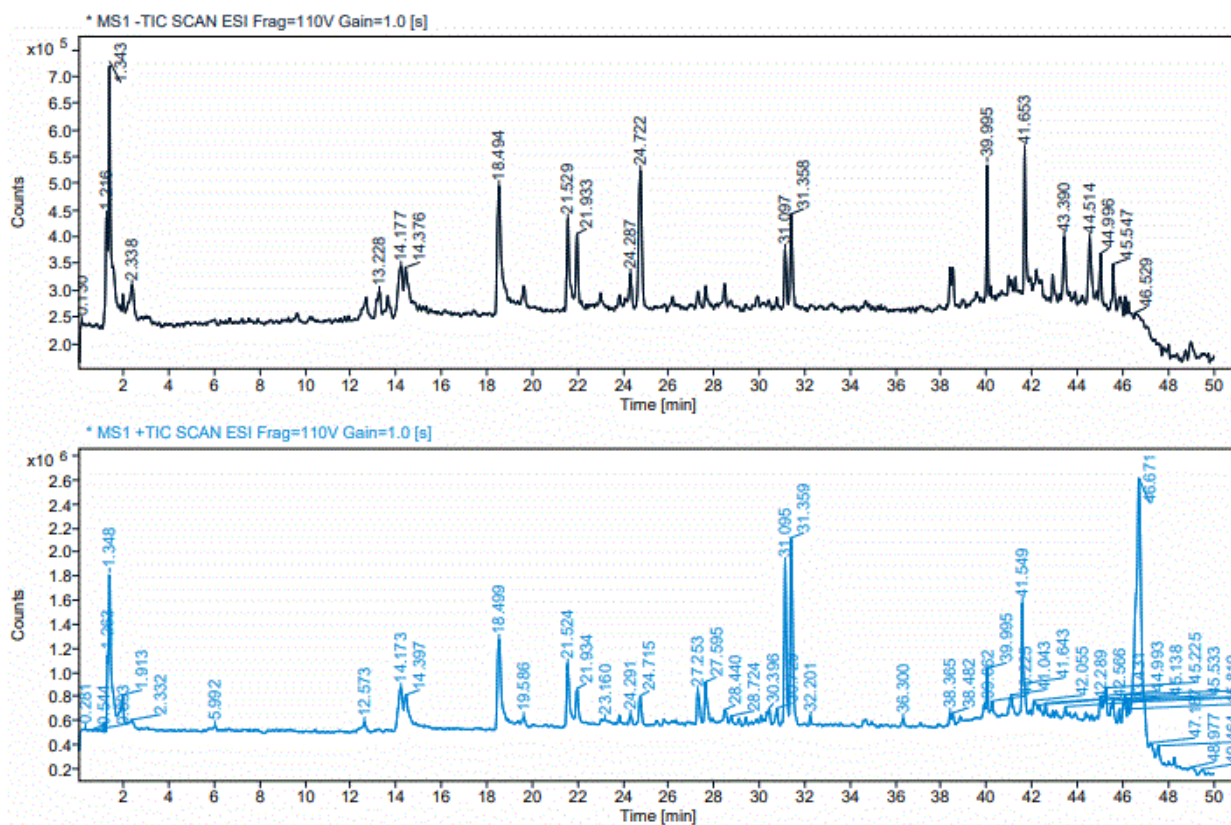


Figure 2. LC-ESI-MS/MS data for potato peel treated with Pomegranate outer peel 0.0025% meth. ext. as bio-elicitor, showing representative total ion current chromatograms in (black) negative and (blue) positive modes.

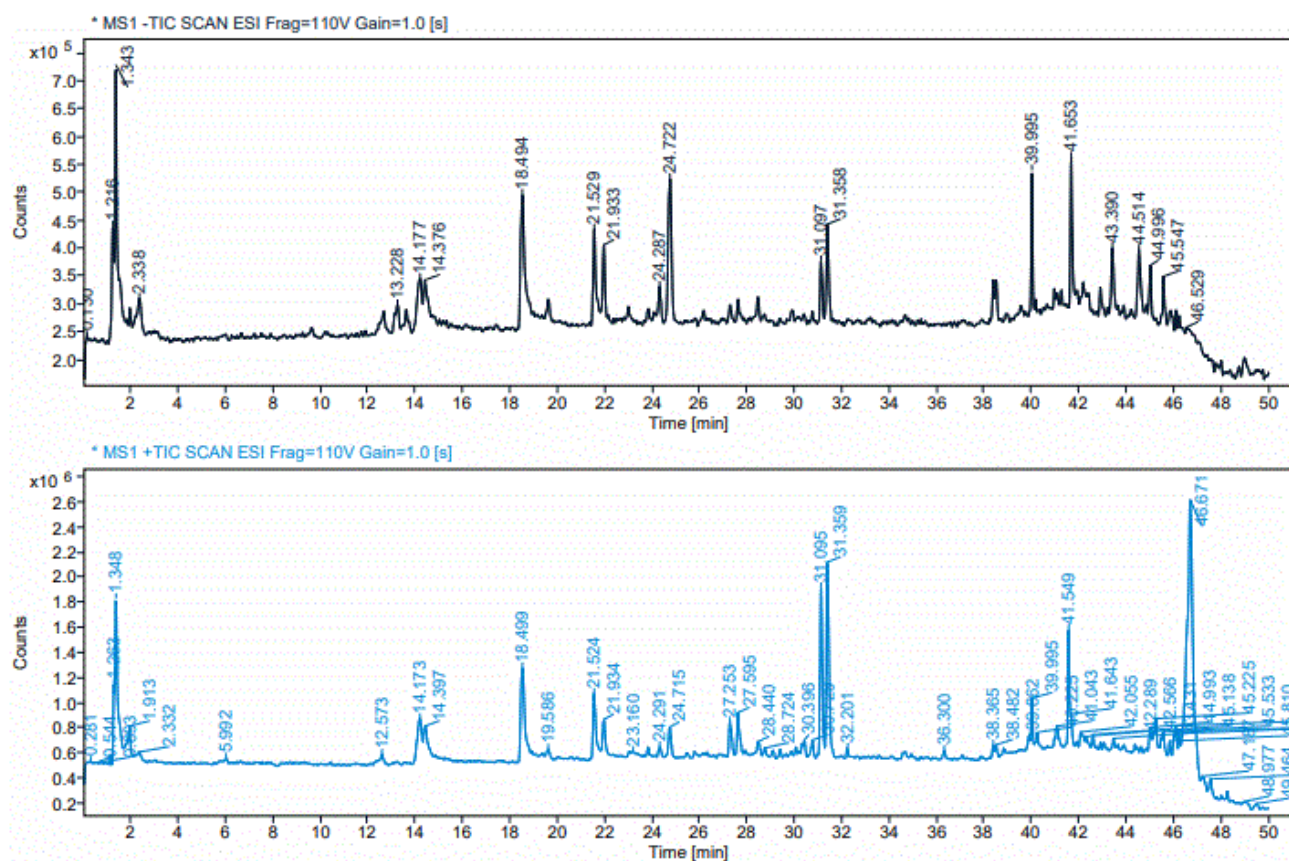


Figure 3. LC-ESI-MS/MS data for potato peel treated with Pomegranate outer peel 0.05% aqu. ext. as bio-elicitor, showing representative total ion current chromatograms in (black) negative and (blue) positive modes.

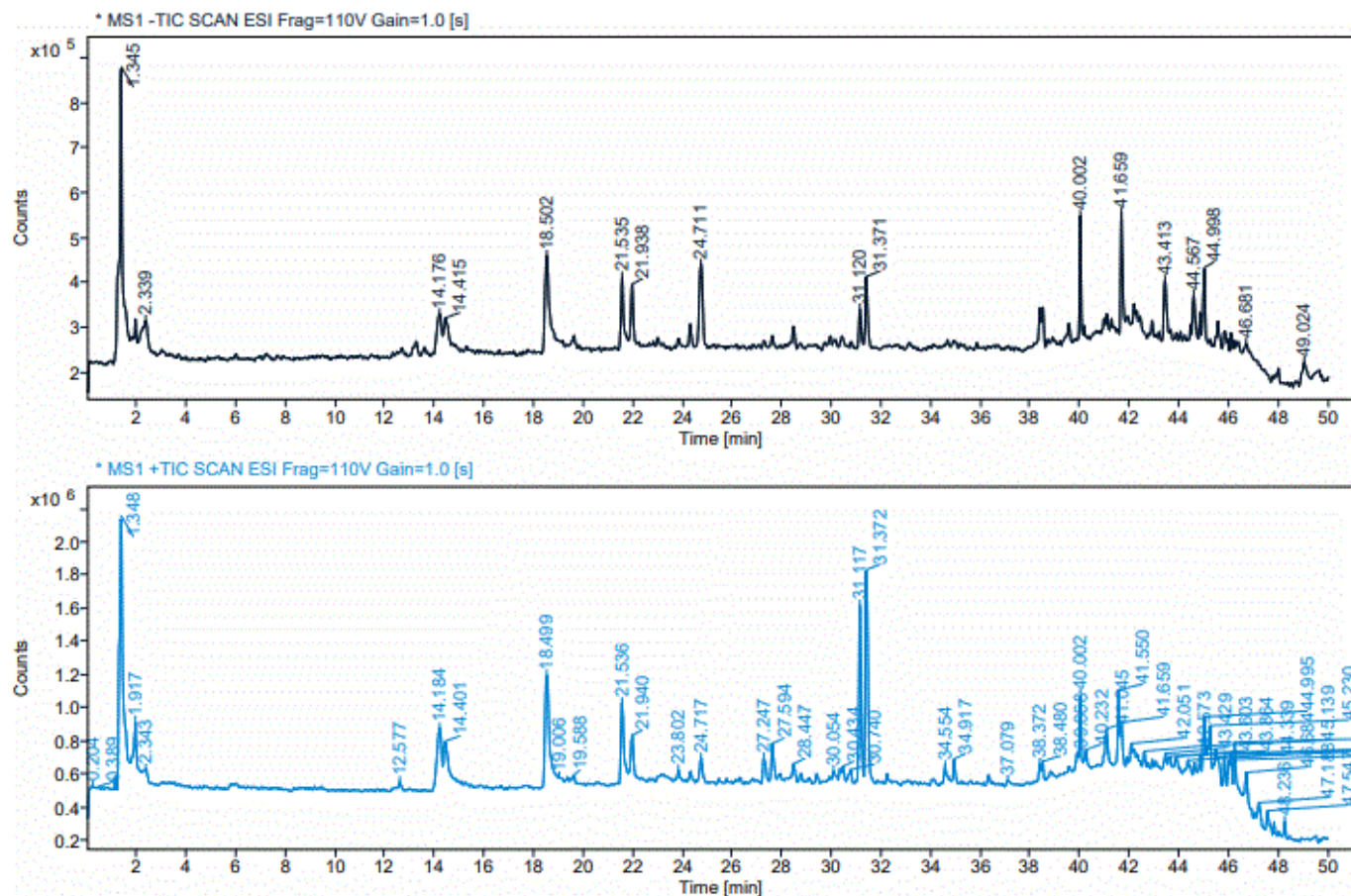


Figure 4. LC-ESI-MS/MS data for potato peel treated with Red Beetroot 0.0025 % meth. ext. as bio-elicitor, showing representative total ion current chromatograms in (black) negative and (blue) positive modes.

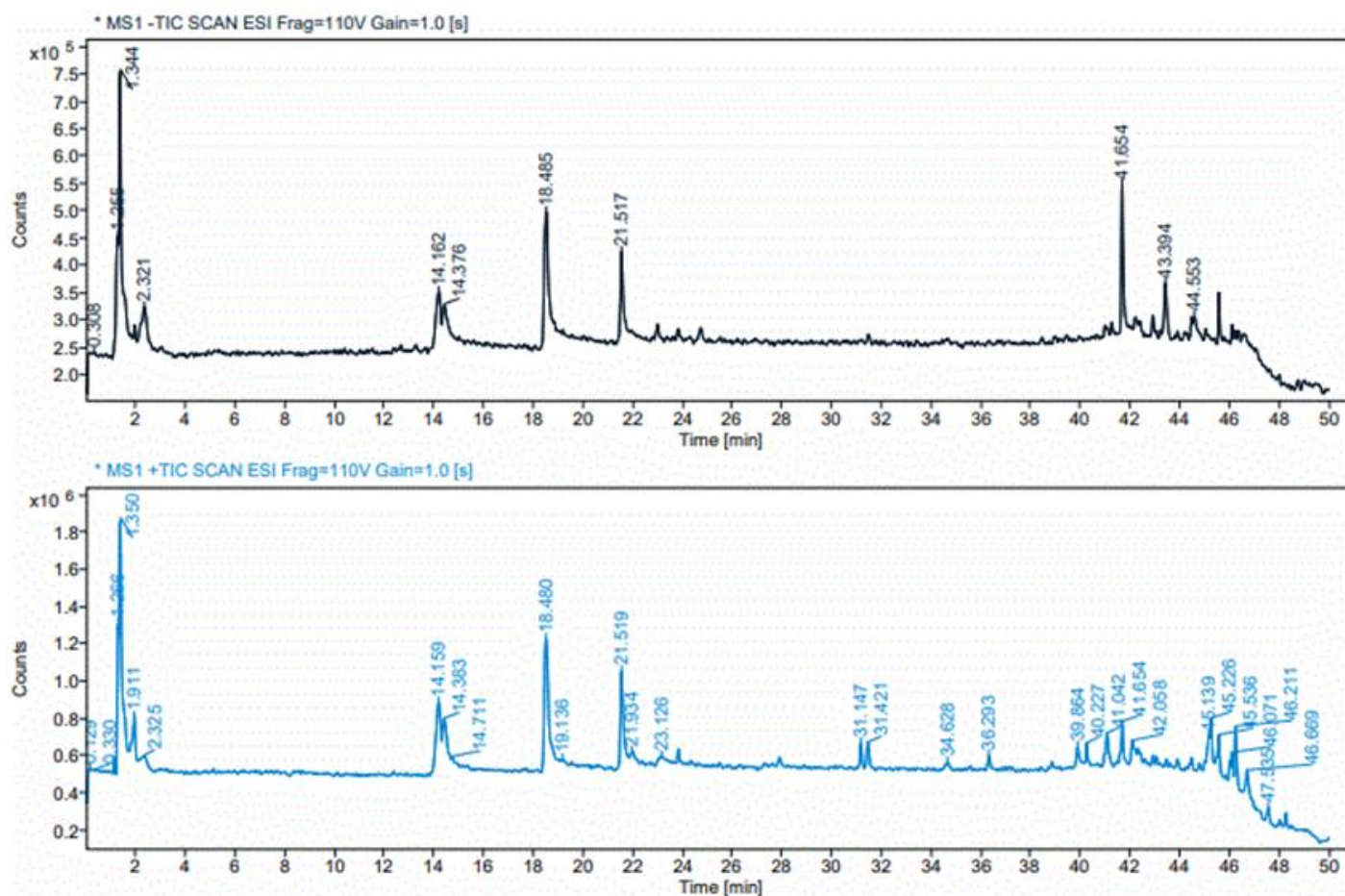


Figure 5. LC-ESI-MS/MS data for potato peel treated with Olive leaves 0.1% aqu. ext. as bio-elicitor, showing representative total ion current chromatograms in (black) negative and (blue) positive modes.

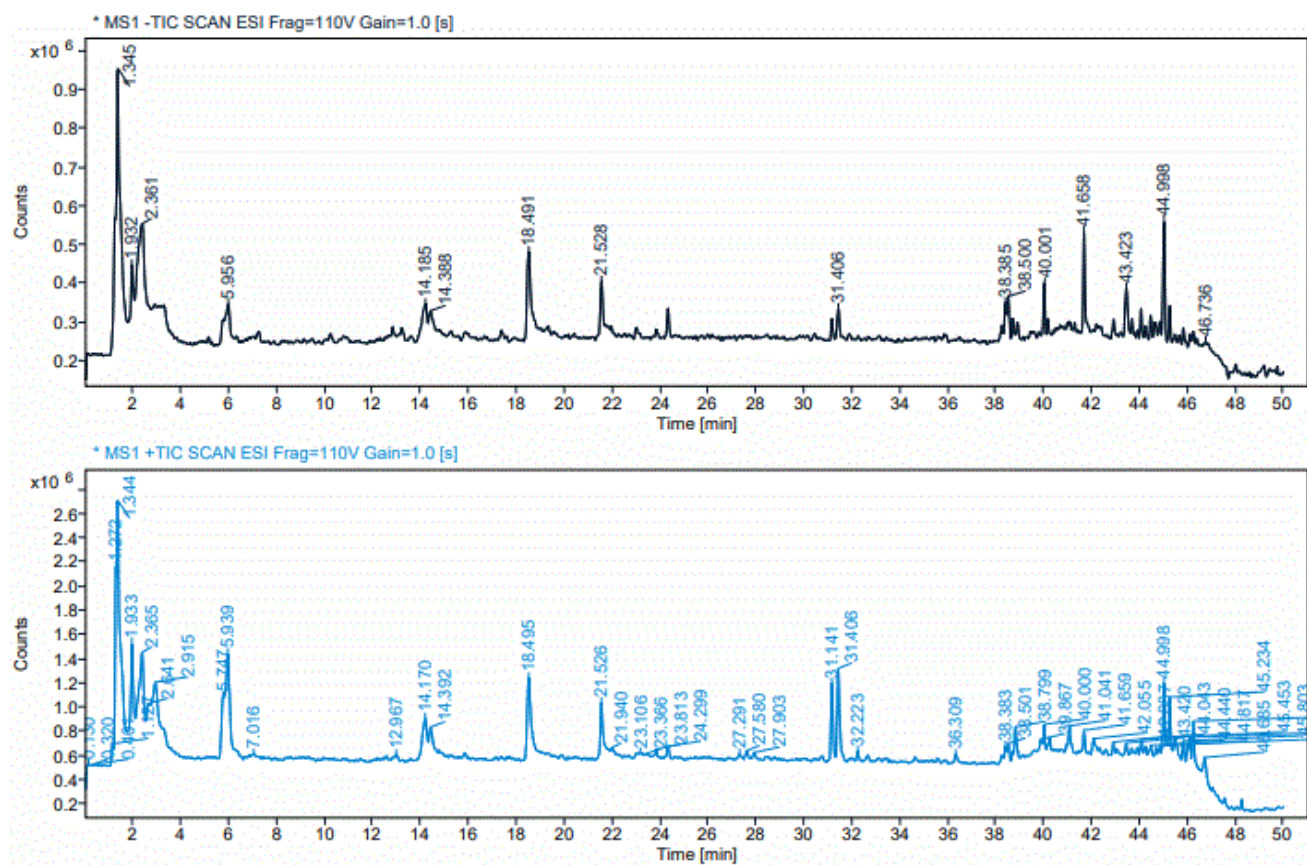


Figure 6. LC-ESI-MS/MS data for potato peel treated with Lantana leaves 0.05% aqu. ext. as bio-elicitor, showing representative total ion current chromatograms in (black) negative and (blue) positive modes.

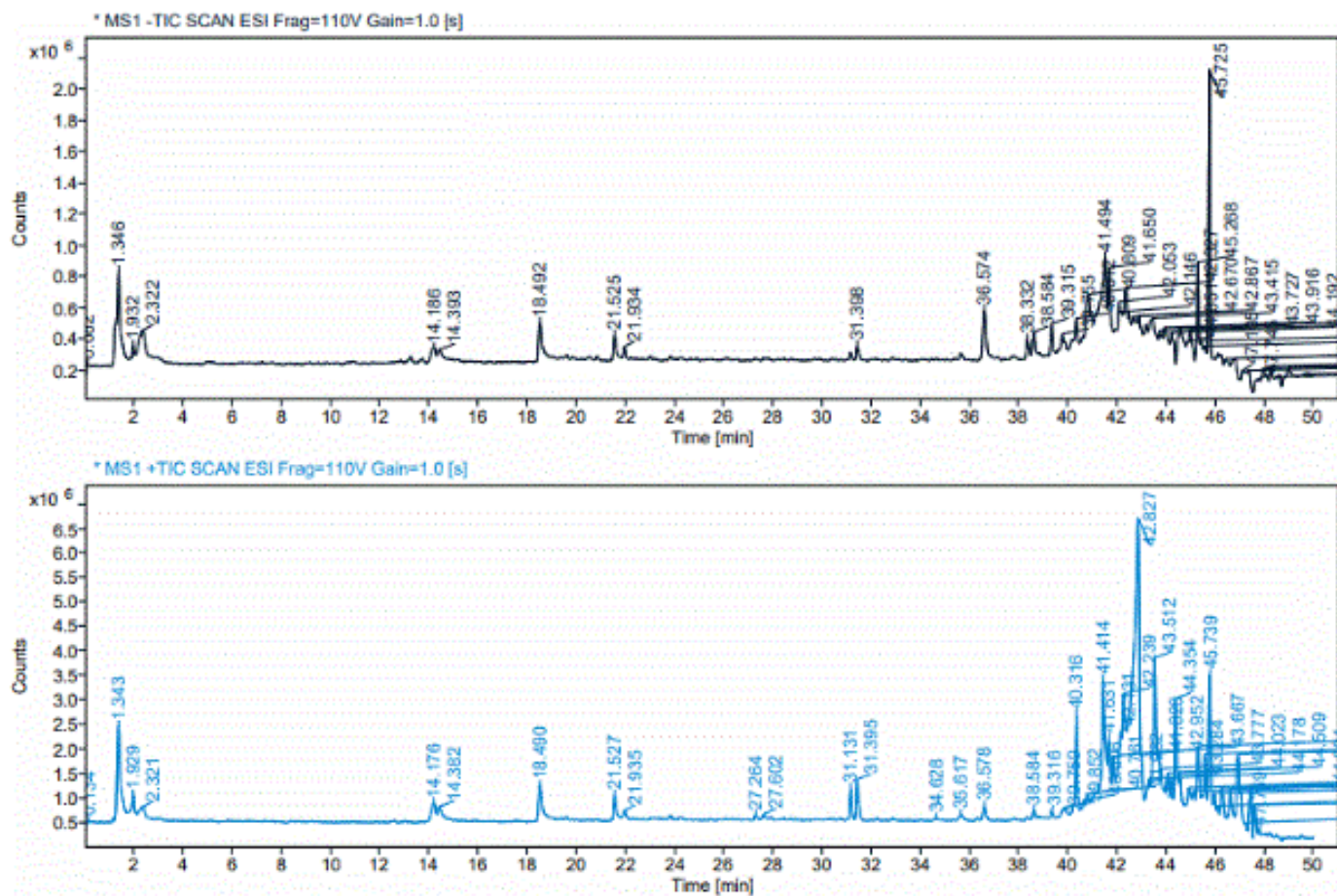


Figure 7. LC-ESI-MS/MS data for control untreated potato peel showing representative total ion current chromatograms in (black) negative and (blue) positive modes.

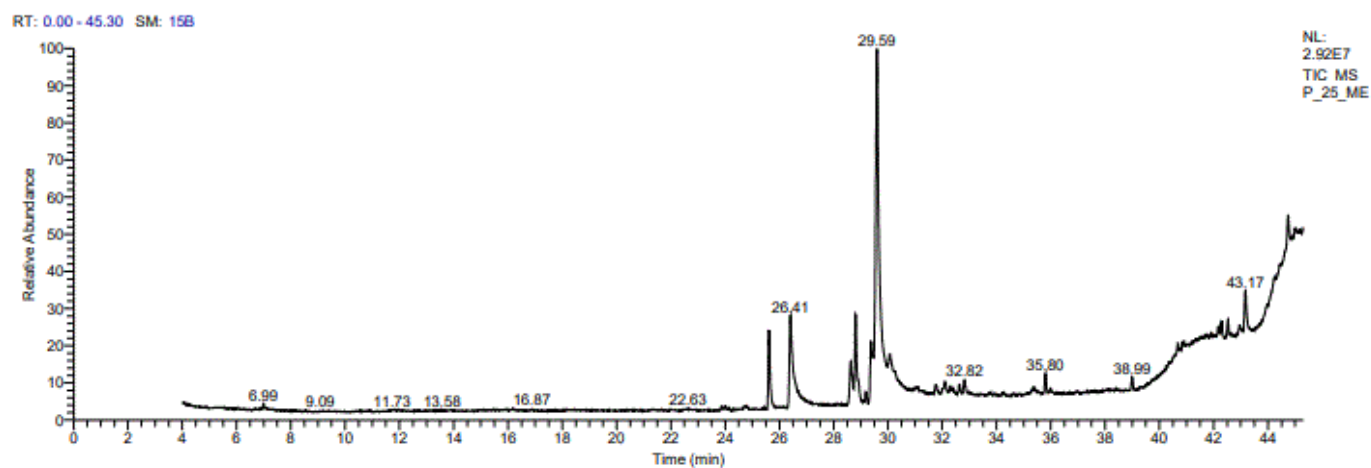


Figure 8. GC-MS chromatogram for potato peel treated with Pomegranate outer peel 0.0025% meth. ext. as bio-elicitor.

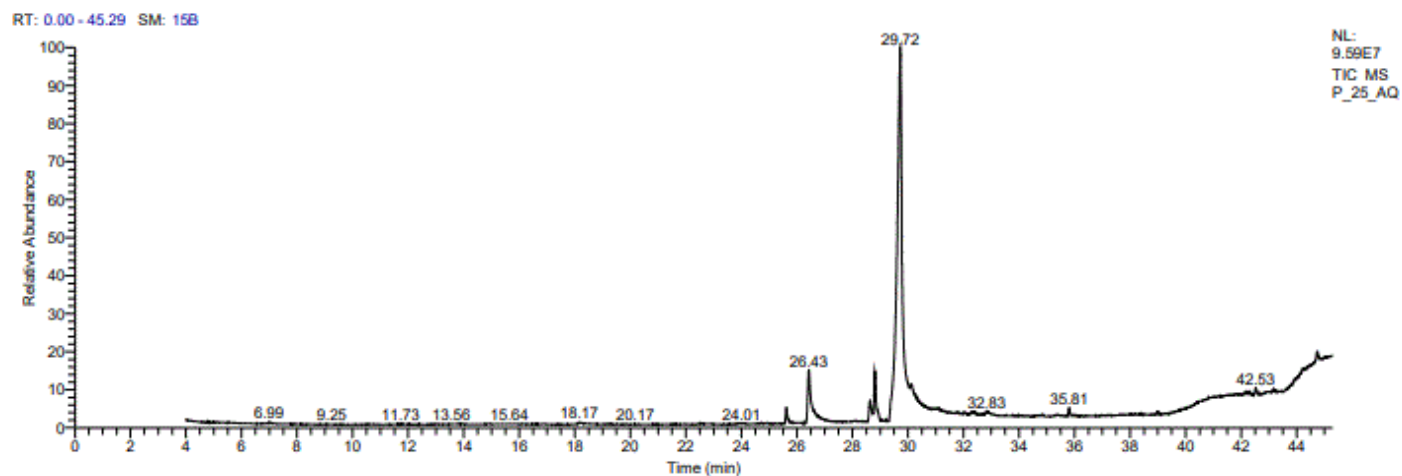


Figure 9. GC-MS chromatogram for potato peel treated with Pomegranate outer peel 0.05% aqu. ext. as bio-elicitor.

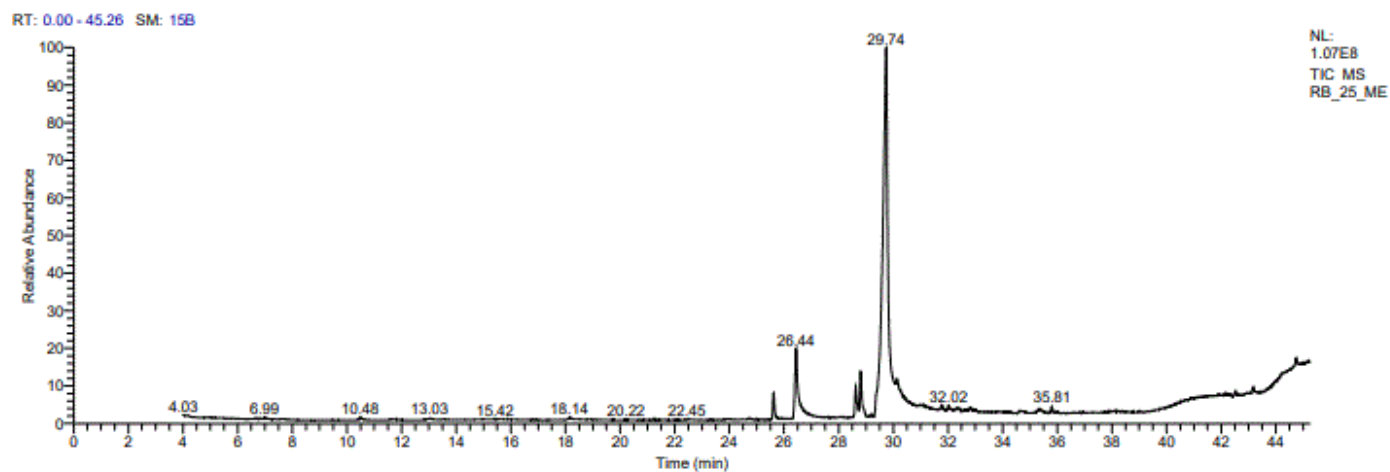


Figure 10. GC-MS chromatogram for potato peel treated with Red Beetroot 0.0025 % meth. ext. as bio-elicitor.

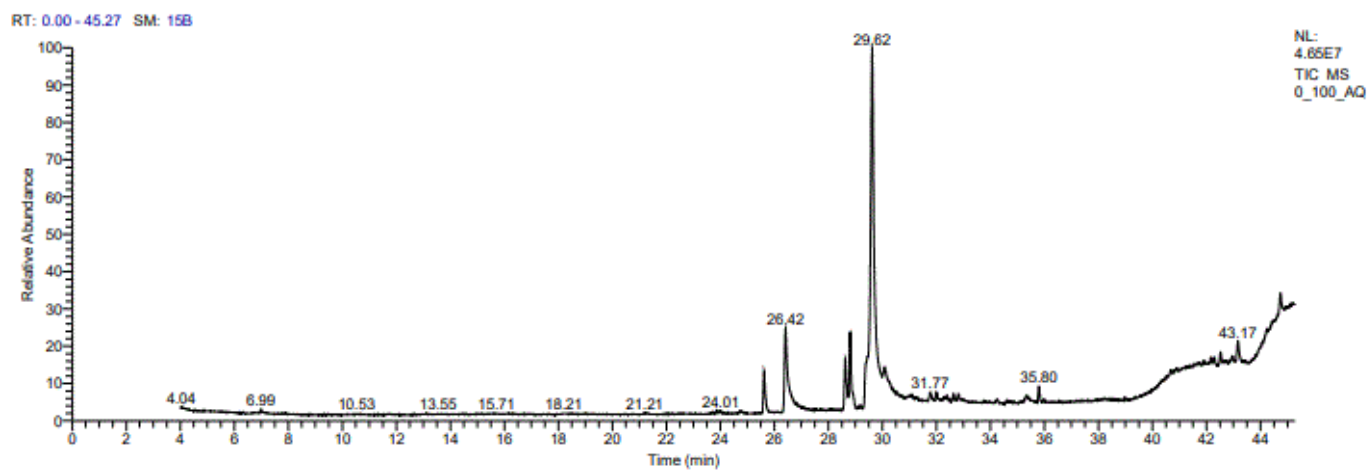


Figure 11. GC-MS chromatogram for potato peel treated with Olive leaves 0.1% aqu. ext. as bio-elicitor.

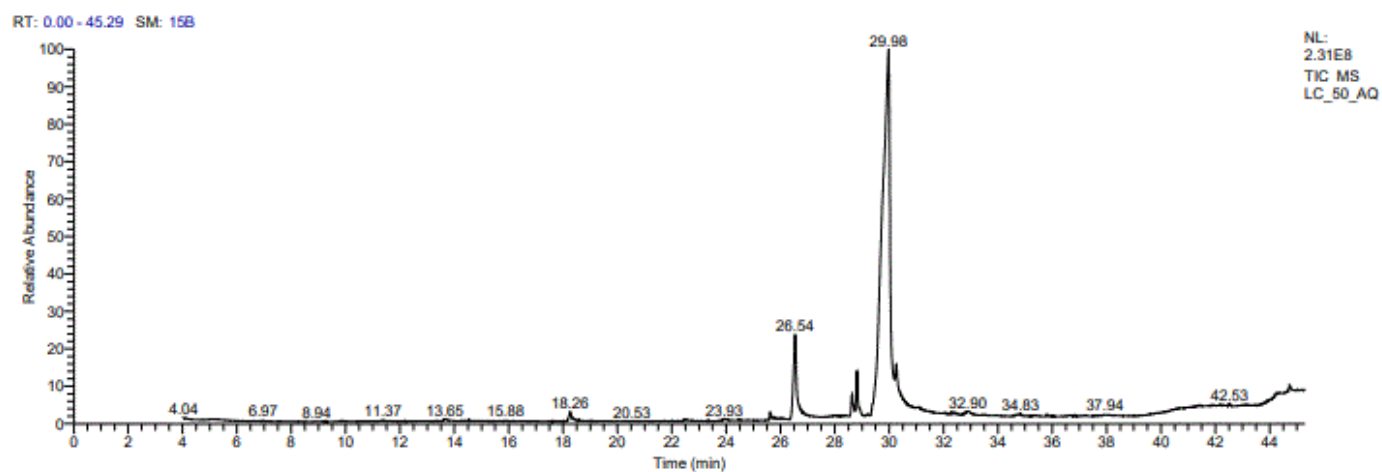


Figure 12. GC-MS chromatogram for potato peel treated with Lantana leaves 0.05% aqu. ext. as bio-elicitor.

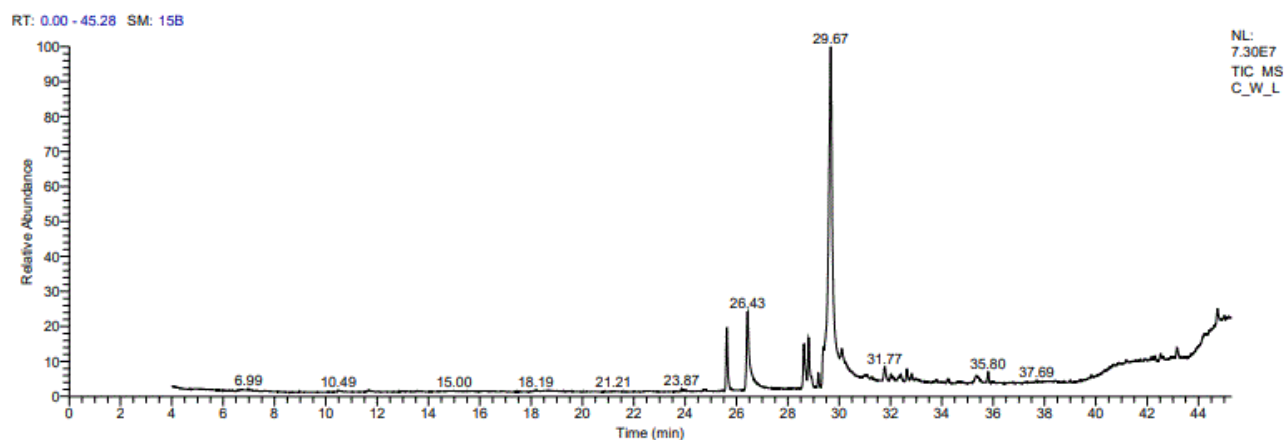


Figure 13. GC-MS chromatogram for control untreated potato peel.