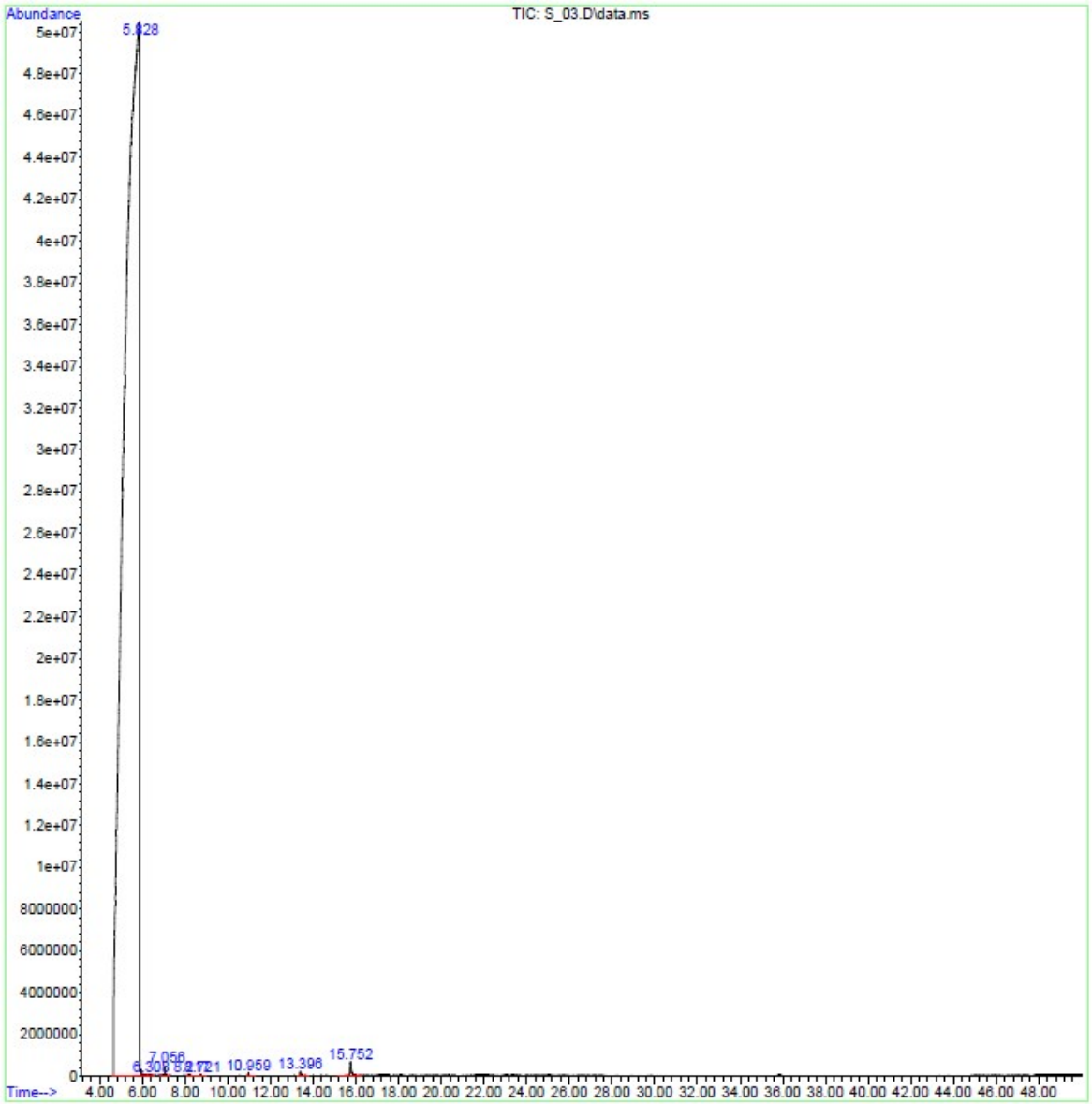
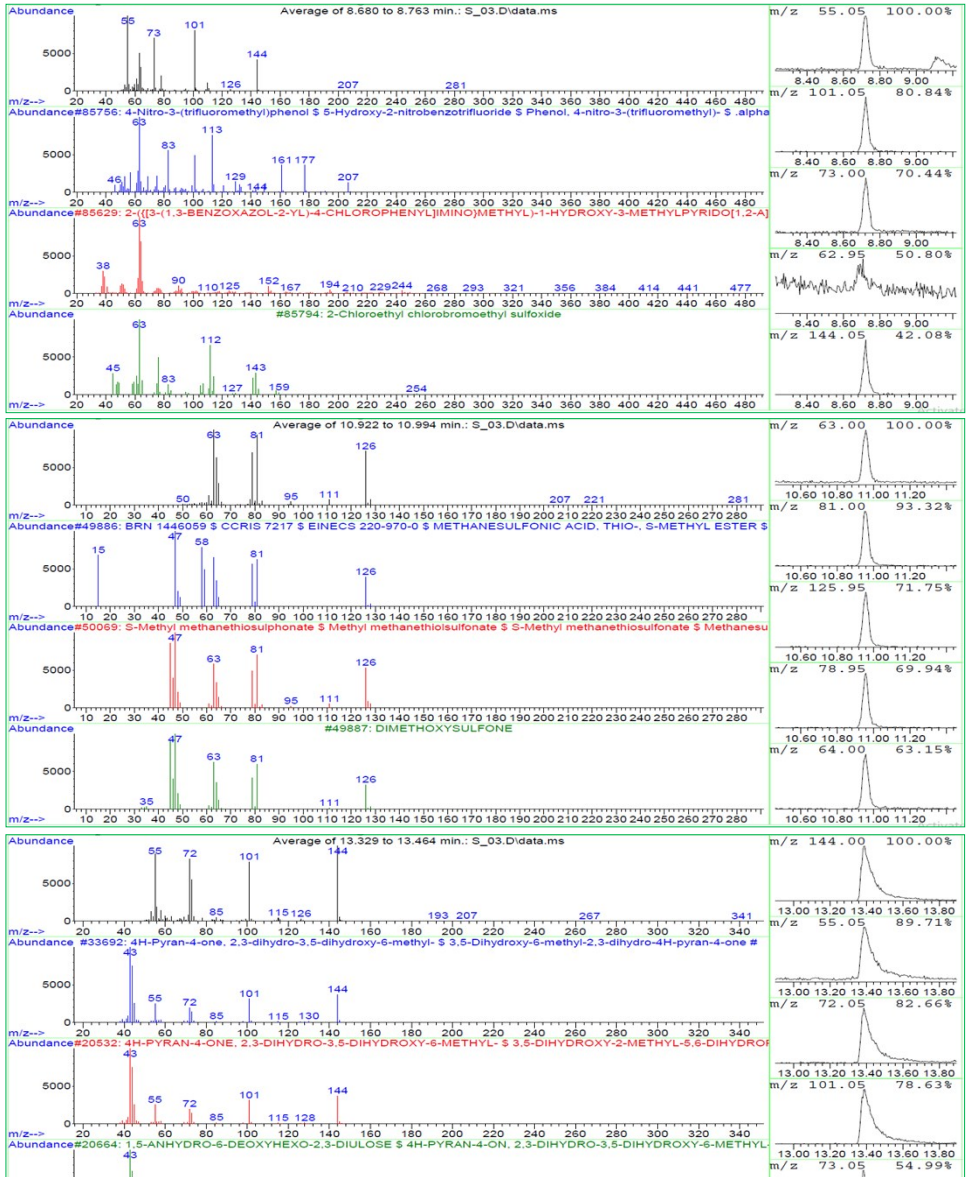
Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information S2. GC-MS chromatogram of WCC extract



Peak	R.T time	Area
1	8.722	1713374
2	10.958	3799225
3	13.397	10526946
4	15.752	34830707

Library report - C:\Database\W8N05ST.L



List of microorganisms	Zone of inhibition (mm)							
	4-Nitro-3-(trifluoromethyl) phenol		Methanesulfonic acid		4H-Pyran-4-one		2-Furancarboxaldehyde	
	0.5 mg mL^{-1}	1.0 mg mL^{-1}	0.5 mg mL^{-1}	1.0 mg mL^{-1}	0.5 mg mL^{-1}	1.0 mg mL^{-1}	0.5 mg mL^{-1}	1.0 mg mL^{-1}
Gram-negative bacteria								
ATCC 14028	09.00 ± 0.03^{b}	15.00 ± 0.01^{a}	09.00 ± 0.03^{b}	11.00 ± 0.05^{a}	-	-	-	-
ATCC 35150	10.00 ± 0.02^{b}	15.00 ± 0.04^{b}	-	-	-	-	-	-
ATCC 43894	11.00 ± 0.03^{b}	20.00 ± 0.05^{b}	-	-	-	-	-	-
Gram-positive bacteria								
ATCC 13150	11.00 ± 0.01^{a}	15.00 ± 0.05^{a}	-	-	-	-	-	-
ATCC 12600	10.00 ± 0.04^{a}	17.00 ± 0.03^{a}	11.00 ± 0.01^{a}	11.00 ± 0.04^{a}	-	-	-	-
ATCC 19118	10.00 ± 0.02^{a}	19.00 ± 0.03^{b}	10.00 ± 0.04^{a}	10.00 ± 0.03^{a}	-	-	-	-
ATCC 14579	10.00 ± 0.05^{a}	20.00 ± 0.05^{a}			-	-	-	-
Fungi								
KCTC 7965	11.00 ± 0.01^{a}	11.00 ± 0.05^{a}	-	-	-	-	-	-
KCTC 6145	10.00 ± 0.04^{a}	13.00 ± 0.05^{a}	-	-	-	-	-	-
KCTC 6143	10.00 ± 0.04^{a}	13.00 ± 0.03^{a}	-	-	-	-	-	-
KCTC 6317	10.00 ± 0.03^{a}	11.00 ± 0.05^{a}	-	-	-	-	-	-

Supporting Information 2: Antimicrobial activity of the compounds present in WC

List of microorganisms	Zone of inhibition (mm)							
	4-Nitro-3-(trifluoromethyl) phenol		Methanesulfonic acid		4H-Pyran-4-one		2-Furancarboxaldehyde	
	0.5 mg mL^{-1}	1.0 mg mL^{-1}	0.5 mg mL^{-1}	1.0 mg mL^{-1}	0.5 mg mL^{-1}	1.0 mg mL^{-1}	0.5 mg mL^{-1}	1.0 mg mL^{-1}
Gram-negative bacteria								
ATCC 14028	09.00 ± 0.03^{b}	15.00 ± 0.01^{a}	09.00 ± 0.03^{b}	11.00 ± 0.05^{a}	-	-	-	-
ATCC 35150	10.00 ± 0.02^{b}	15.00 ± 0.04^{b}	-	-	-	-	-	-
ATCC 43894	11.00 ± 0.03^{b}	20.00 ± 0.05^{b}	-	-	-	-	-	-
Gram-positive bacteria								
ATCC 13150	11.00 ± 0.01^{a}	15.00 ± 0.05^{a}	-	-	-	-	-	-
ATCC 12600	10.00 ± 0.04^{a}	17.00 ± 0.03^{a}	11.00 ± 0.01^{a}	11.00 ± 0.04^{a}	-	-	-	-
ATCC 19118	10.00 ± 0.02^{a}	19.00 ± 0.03^{b}	10.00 ± 0.04^{a}	10.00 ± 0.03^{a}	-	-	-	-
ATCC 14579	10.00 ± 0.05^{a}	20.00 ± 0.05^{a}			-	-	-	-
Fungi								
KCTC 7965	11.00 ± 0.01^{a}	11.00 ± 0.05^{a}	-	-	-	-	-	-
KCTC 6145	10.00 ± 0.04^{a}	13.00 ± 0.05^{a}	-	-	-	-	-	-
KCTC 6143	10.00 ± 0.04^{a}	13.00 ± 0.03^{a}	-	-	-	-	-	-
KCTC 6317	10.00 ± 0.03^{a}	11.00 ± 0.05^{a}	-	-	-	-	-	-

Supporting Information 3: Antimicrobial activity of the compounds present in WC

Supporting Information S3.

Chemical composition of the WC extracts using different solvents

Name of the compound	Chemical formula	Molecular weight (Da)	Area (%)	Retention time
Ethanol				
Acetic formic anhydride	$C_3H_4O_3$	88.062	0.09	3.605
Diethyl hexanedioate	$C_{10}H_{18}O_4$	202.247	0.13	4.092
2-Methyltetrahydro-3-furanone	$C_5H_8O_2$	100.116	0.13	4.542
N-Methyl-D-aspartic acid	$C_5H_9NO_4$	147.129	0.09	7.524
Ethyl cyclopropane	C_5H_{10}	70.133	0.18	7.846
Acetamide, N-(2-aminoethyl-)	$C_4H_{10}N_2O$	102.135	0.10	9.124
1(2H)-pentalenone, hexahydro-4-methyl-5-methylene	$C_{10}H_{10}O$	150.218	0.16	10.432
Cyclopentasiloxane, decamethyl	$C_{10}H_{30}O_5Si_5$	370.770	0.06	13.422

4H-pyran-4-one, 2, 3-dihydro-3,5-dihydroxy-6-methyl	$C_6H_8O_4$	144.125	0.13	14.507
5-methoxy-2,2-dimethyl-1-indanone	$C_{12}H_{14}O_2$	190.238	0.05	16.737
Acetic acid, [bis[(trimethylsilyl)oxy]phosphoryl]-, trimethylsilyl ester	$C_{11}H_{29}O_5\psi_3$	356.575	0.05	18.091
1-Propanamine, N,2-dimethyl-N-nitroso-	$C_5H_{12}N_2O$	116.162	0.12	20.895
Propanethioic acid, o-(trimethylsilyl) ester	$C_8H_{18}OSSi$	190.378	0.05	22.323
2-deoxy-alpha-d-ribopyranose	$C_5H_{10}O_4$	134.130	0.30	22.915
Phenol, 2,4-bis(1,1-dimethylethyl)-	$C_{14}H_{22}O$	206.324	0.06	23.52
1,2,5-Oxadiazole-3-carboxamide, 4-amino-N-(2-aminoethyl)	$C_5H_9N_5O_2$	171.157	0.10	24.905
3-Pyridinecarbonitrile, 1,4-dihydro-1-methyl-4-oxo-	$C_7H_6N_2O$	134.135	0.11	25.636
2-Aminopteridine-4,7-diol	$C_6H_5N_5O_2$	179.136	0.09	25.811
n-propylbutanamide	$C_7H_{15}NO$	129.200	0.05	27.118
2,3,4,6-Tetra-O-methylhexose	$C_{10}H_{20}O_6$	236.262	0.05	27.211
Hexadecanoic acid	$C_{16}H_{32}O_2$	256.424	0.08	33.218
9,12,15-Octadecatrienoic acid, (Z,Z,Z)-	$C_{18}H_{30}O_2$	278.430	0.11	36.468
Benzenesulfonamide, 4-methyl-N-(tetrahydro-2-oxo-3-furanyl)-	$C_{11}H_{13}NO_4S$	255.290	0.04	36.67
Bicyclo[3.2.2]non-6-en-3-one	$C_9H_{12}O$	136.191	0.10	36.849
4-H-pyrazolo[3,4-D]pyrimidin-4-one, 1,5-dihydro	$C_5H_4N_4O$	136.111	0.09	36.938
9-Octadecenamide	$C_{18}H_{35}NO$	281.477	0.07	40.19
3-(2-Phenylethyl)benzonitrile	$C_{15}H_{13}N$	207.270	0.07	41.415
1H-Pyrazole-1-acetamide, 4-iodo-N-(phenylmethyl)-	$C_{12}H_{12}IN_3O$	341.148	0.07	41.738
4,4-Dimethyl-7-oxoandrost-5-en-3-yl acetate	$C_{23}H_{34}O_3$	358.514	0.06	41.942
Benzoic acid, 4-methoxy-3-(4-methoxycarbonylphenoxy)-, methyl ester	$C_{17}H_{16}O_6$	316.305	0.17	42.978
3,20-Allopregnanedione	$C_{21}H_{32}O_2$	316.478	0.05	43.055
1,4-dihydroxy-2-[(hydroxyethyl)thio]anthraquinone	$C_{16}H_{12}O_5S$	316.328	0.07	43.103
Methanol				
3(2H)-Furanone, dihydro-2-methyl	$C_5H_8O_2$	100.116	0.08	3.612
Ethylamine	C_2H_7N	45.084	0.07	4.049
2-methylpropane	C_4H_{10}	58.122	0.16	4.602
1(2H)-pentalenone, hexahydro-4-methyl-5-methylene	$C_{10}H_{10}O$	150.218	0.08	6.385
N-Acetylethylenediamine	$C_4H_{10}N_2O$	102.135	0.03	6.938
3-Amino-2-oxazolidinone	$C_3H_6N_2O_2$	102.092	0.15	7.559
N-Methyl-D-aspartic acid	$C_5H_9NO_4$	147.129	0.24	7.822
1,3-dimethyl trisulfane	$C_2H_6S_3$	126.264	0.07	8.799
N-Methylmorpholine	$C_5H_{11}NO$	101.147	0.10	9.127
5-methyloxazolidine	C_4H_9NO	87.120	0.07	12.477
2-Iodohexane	$C_6H_{13}I$	212.072	0.22	12.841

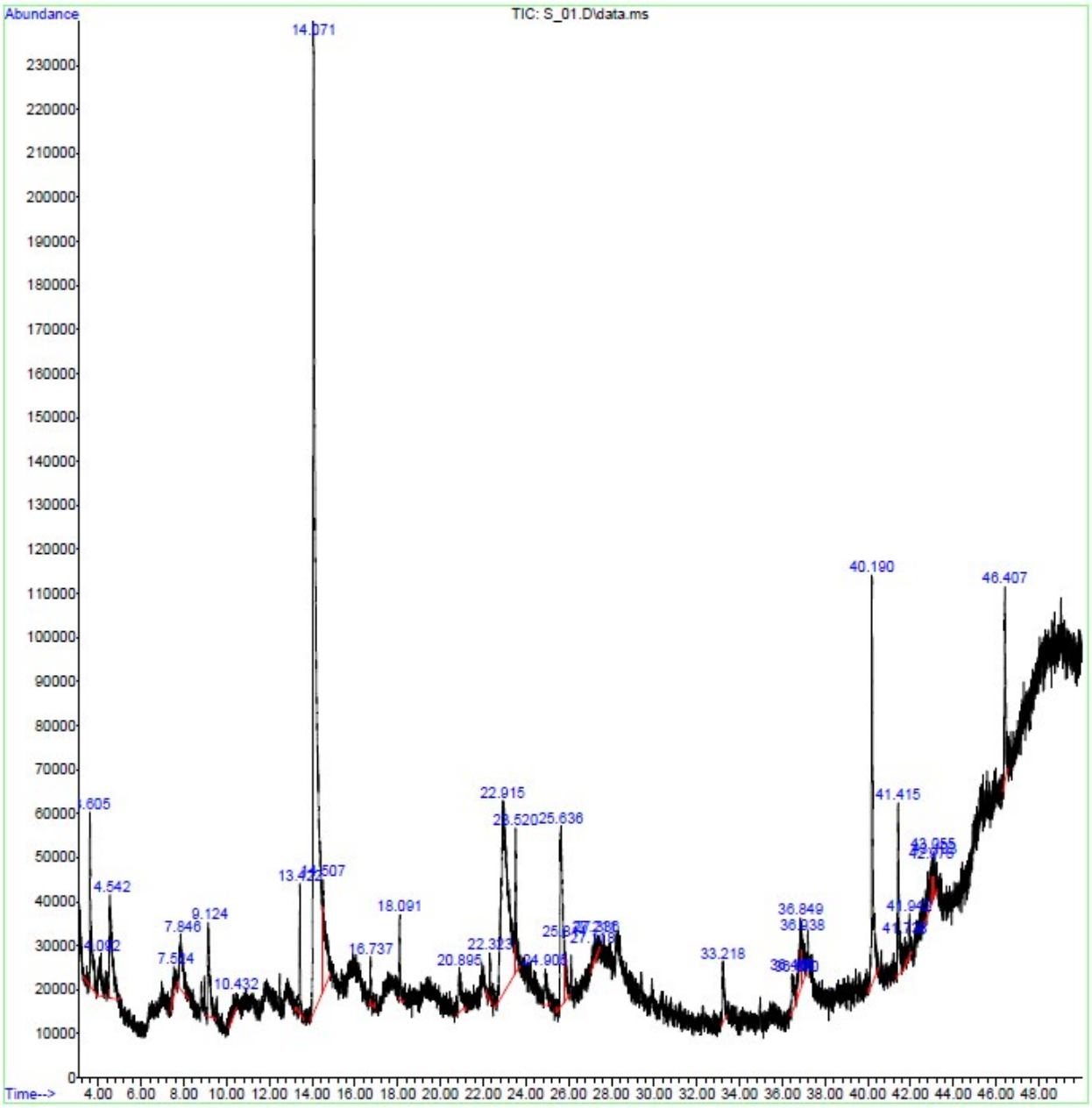
Cyclopentasiloxane decamethyl	$C_{10}H_{30}O_5Si_5$	370.770	0.05	13.422
4H-Pyran-4-one, 2,3-dihydro-3,5-dihydroxy-6-methyl-	$C_6H_8O_4$	144.125	0.27	14.684
1,2,4,5-Tetrazine, hexahydro-1,2,4,5-tetramethyl-	$C_6H_{16}N_4$	144.218	0.49	15.963
2-Hexynoic acid	$C_6H_8O_2$	112.127	0.51	17.495
1-Nitro-.beta.-d-arabinofuranose, tetraacetate	$C_{13}H_{17}NO_{11}$	363.274	0.07	18.092
2-Propenoic acid, 2-(acetylamino)-	$C_5H_7NO_3$	129.114	0.32	21.492
1-butanol, 2-amino	$C_4H_{11}NO$	89.136	0.37	22.948
(5-Methoxy-2H-tetrazol-2-yl)acetic acid	$C_4H_6N_4O_3$	158.115	0.23	23.522
Vinylpyrazine	$C_6H_6N_2$	106.125	0.17	25.649
2-Propanone, 1-(1,3-dioxolan-2-yl)-	$C_6H_{10}O_3$	130.142	0.66	27.248
3-Hydroxy-N,N-dimethylpropanamide	$C_5H_{11}NO_2$	117.146	0.29	28.386
Hexadecanoic acid	$C_{16}H_{32}O_2$	256.424	0.18	33.234
erythro-4-Hydroxyarginine lactone	$C_7H_{14}N_4O_2$	186.212	0.18	36.474
4H-Pyrazolo[3,4-d]pyrimidin-4-one, 1,5-dihydro-	$C_5H_4N_4O$	136.111	0.28	37.191
9-Octadecenamide	$C_{18}H_{35}NO$	281.477	0.13	40.196
Benzonitrile, m-phenethyl-	$C_{15}H_{13}N$	207.270	0.11	41.417
Erucylamide	$C_{22}H_{43}NO$	337.583	0.16	46.412
1,1,3,3,5,5,7,7,9,9,11,11,13,13-tetradecamethyl-heptasiloxane	$C_{14}H_{44}O_6Si_7$	505.094	0.19	47.154
Dichloromethane				
Trichloromethane	$CHCl_3$	119.378	0.02	3.758
Methyl dichloroacetate	$C_3H_4Cl_2O_2$	142.969	0.03	4.756
Isobutylmethylmethanol	$C_6H_{14}O$	102.175	0.03	4.828
Ethyl dichloroacetate	$C_4H_6Cl_2O_2$	156.995	0.03	5.08
1,1-dimethylcyclopropane	C_5H_{10}	70.133	0.03	5.346
Pyrrolidine, 1-[8-(3-octyloxiranyl)-1-oxooctyl]-	$C_{22}H_{41}NO_2$	351.566	0.05	7.132
Diisopropylphosphine	$C_6H_{15}P$	118.157	0.04	8.037
n-Decane	$C_{10}H_{22}$	142.282	0.03	9.556
3,3-Dimethylhexane	C_8H_{18}	114.229	0.03	9.863
4-methyloctane	C_9H_{20}	128.255	0.03	11.892
Dodecane	$C_{12}H_{26}$	170.335	0.04	15.379
Benzene, 1,4-bis(1,1-dimethylethyl)-	$C_{14}H_{22}$	190.324	0.04	16.74
2-Hexanone, 3-methyl-4-methylene-	$C_8H_{14}O$	126.196	0.04	18.118
2,3-Dimethyl-3-heptene, (Z)-	C_9H_{18}	126.239	0.04	18.35
2-Pentenal, (Z)-	C_5H_8O	84.116	0.03	18.576
2,3-dimethylundecane	$C_{13}H_{28}$	184.361	0.03	22.11
Oxalic acid, isohexylneopentyl ester	$C_{13}H_{24}O_4$	244.327	0.04	22.554

N-Hydroxyphthalimide	$C_8H_5NO_3$	163.130	0.02	23.023
Phenol, 2,4-bis(1,1-dimethylethyl)-	$C_{14}H_{22}O$	206.324	0.05	23.521
3-Hexene, 2,3-dimethyl-	C_8H_{16}	112.213	0.05	24.225
2,4-Ditert-butyl-6-nitrophenol	$C_{14}H_{21}NO_3$	251.321	0.035	27.313
Phenethylene	C_8H_8	104.149	0.07	28.949
1-Docosene	$C_{22}H_{44}$	308.585	0.04	35.444
Carbonic acid, isobutyl pentadecyl ester	$C_{20}H_{40}O_3$	328.530	0.05	39.146
9-octadecenamide	$C_{18}H_{35}NO$	281.477	0.05	40.214
3-(2-Phenylethyl)benzonitrile	$C_{15}H_{13}N$	207.270	0.04	41.419
Hexadecenenitrile	$C_{16}H_{29}N$	235.408	0.04	42.195
cis-4-Ethoxy-b-methyl-b-nitrostyrene	$C_{11}H_{13}NO_3$	207.226	0.04	42.779
5-Methoxythiazole	C_4H_5NOS	115.154	0.05	44.047
2-Benzyl-2-methyl-3-oxopropionic acid, ethyl ester	$C_{13}H_{16}O_3$	220.264	0.02	44.689
1-Benzyl-2-hydroxymethyl-cis-3-(p-ethoxyphenylcarbamoyl)aziridine	$C_{18}H_{20}N_2O_3$	312.363	0.03	44.704
Erucylamide	$C_{22}H_{43}NO$	337.583	0.06	46.417
L-Ascorbic acid 6-palmitate	$C_{22}H_{38}O_7$	414.533	0.01	47.126
2,2-Dimethylpropanoic acid, 2,6-dimethylnon-1-en-3-yn-5-yl ester	$C_{16}H_{26}O_2$	250.376	0.03	47.164
Toluene				
Trichloromethane	$CHCl_3$	119.378	0.02	3.776
1,3,5-cycloheptatriene	C_7H_8	92.138	0.10	4.152
Methyl dichloroacetate	$C_3H_4Cl_2O_2$	142.969	0.03	4.763
4-methyl-2-pentanol	$C_6H_{14}O$	102.175	0.03	4.84
2,2,3,3,5,6,6-Heptamethylheptane	$C_{14}H_{30}$	198.388	0.03	5.222
1,3-Dimethylbenzene	C_8H_{10}	106.165	0.06	6.109
1-chloro-3-hydroxypropane	C_3H_7ClO	94.540	0.04	8.038
Dodecane	$C_{12}H_{26}$	170.335	0.04	15.377
1,3-Di-tert-butylbenzene	$C_{14}H_{22}$	190.324	0.04	16.741
2-Decene, 7-methyl-, (Z)-	$C_{11}H_{22}$	154.292	0.04	18.117
2-Methyl-3-ethyl-1-pentene	C_8H_{16}	112.213	0.04	18.352
2,4-Di-tert-butylphenol	$C_{14}H_{22}O$	206.324	0.05	23.517
2,4-Ditert-butyl-6-nitrophenol	$C_{14}H_{21}NO_3$	251.321	0.04	27.314
Phenethylene	C_8H_8	104.149	0.08	28.943
1-Hydroxyheptadecane	$C_{17}H_{36}O$	256.467	0.05	35.442
9-octadecenamide	$C_{18}H_{35}NO$	281.477	0.07	40.202
2-methyl-3-phenyl-1H-indole	$C_{15}H_{13}N$	207.270	0.05	43.292
1-Benzyl-2-hydroxymethyl-cis-3-(p-methoxyphenylcarbamoyl)aziridine	$C_{18}H_{20}N_2O_3$	312.363	0.06	44.698

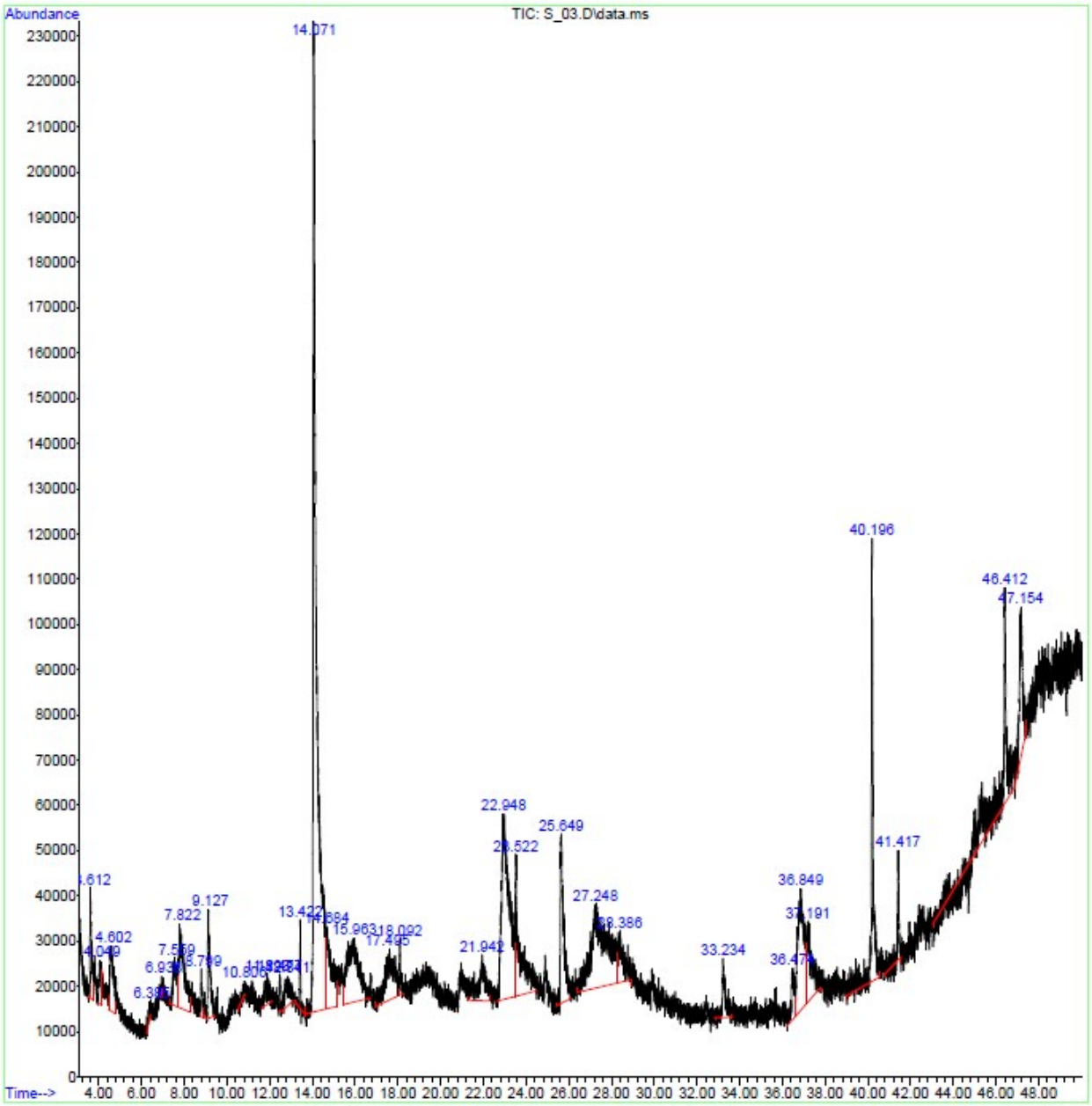
Erucylamide	$C_{22}H_{43}NO$	337.583	0.07	46.413
Fluocortolone-21-pivalate	$C_{27}H_{37}FO_5$	460.578	0.12	79.91
Ether				
Trichloromethane	$CHCl_3$	119.378	0.02	3.432
Methyl dichloroacetate	$C_3H_4Cl_2O_2$	142.969	0.03	4.748
2-pentanol, 4-methyl	$C_6H_{14}O$	102.175	0.03	4.823
Ethyl dichloroacetate	$C_4H_6Cl_2O_2$	156.995	0.04	5.073
2-butene, 2-methyl	C_5H_9	69.126	0.03	5.341
Thioimidodicarbonicdiamide	$C_2H_5N_3S_2$	135.211	0.04	8.033
Decane	$C_{10}H_{22}$	142.282	0.06	9.553
4-Methyldecane	$C_{11}H_{24}$	156.308	0.04	9.739
1-hydroxytetradecane	$C_{14}H_{30}O$	214.387	0.04	11.768
Dodecane	$C_{12}H_{26}$	170.335	0.04	15.377
1,4-Di-tert-butylbenzene	$C_{14}H_{22}$	190.324	0.04	16.743
4-Methyloctane	C_9H_{20}	128.255	0.05	18.117
1,1,3-Trimethylcyclopentane	C_8H_{16}	112.213	0.04	18.352
2-Ethyl-4-pentenal	$C_7H_{12}O$	112.170	0.04	18.573
Henicosane	$C_{21}H_{44}$	296.574	0.06	22.556
2,4-Di-tert-butylphenol	$C_{14}H_{22}O$	206.324	0.05	23.517
2,4-Ditert-butyl-6-nitrophenol	$C_{14}H_{21}NO_3$	251.321	0.04	27.314
9-octadecenamide	$C_{18}H_{35}NO$	281.477	0.06	40.208
3-(2-Phenylethyl)benzonitrile	$C_{15}H_{13}N$	207.270	0.05	41.419
1,2-dipropylacenaphthylene	$C_{18}H_{20}$	236.351	0.05	43.014
Acetamide, N-(4-cyanomethylphenyl)-2-O-tolyloxy-	$C_{17}H_{16}N_2O_2$	280.321	0.07	44.048
Erucylamide	$C_{22}H_{43}NO$	337.583	0.07	46.412
2,2-Dimethylpropanoic acid, 2,6-dimethylnon-1-en-3-yn-5-yl ester	$C_{16}H_{26}O_2$	250.376	0.09	47.185
2,2-Dimethyl-N-(4-methylphenyl)propanamide	$C_{12}H_{17}NO$	191.270	0.17	49.829

Supporting Information S3.

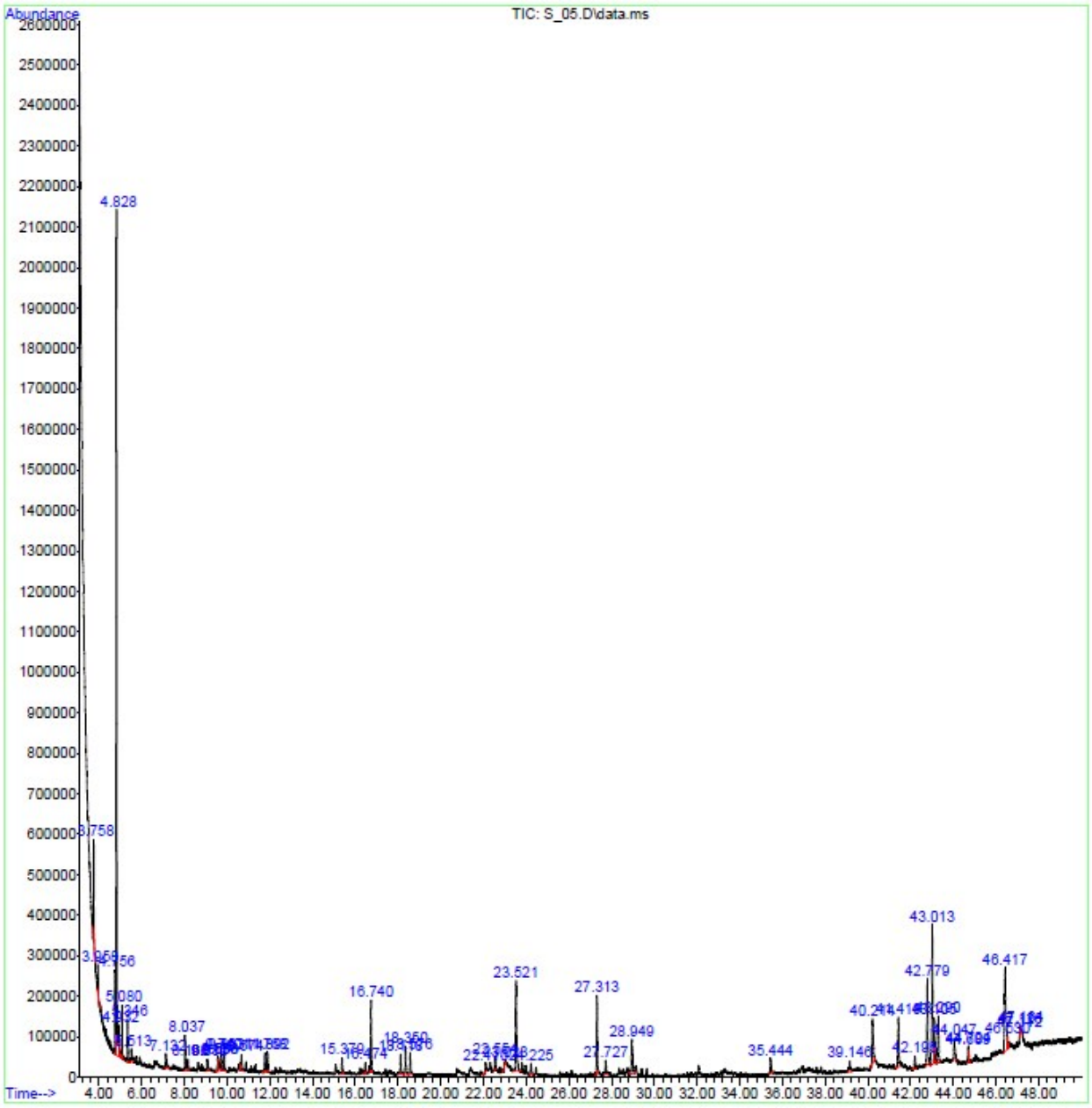
GC-MS chromatogram of WC ethanol extract



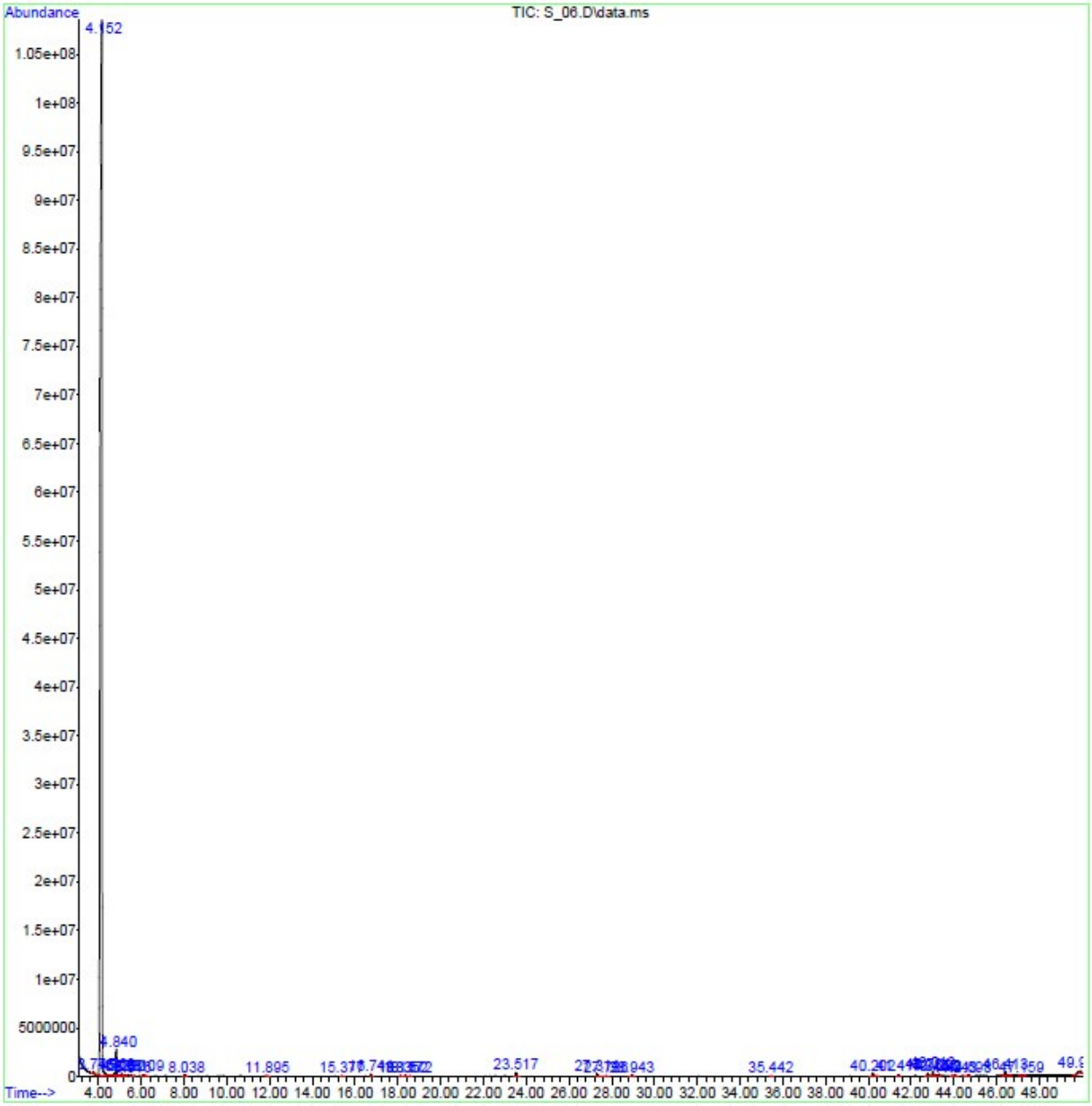
GC-MS chromatogram of WC methanol extract



GC-MS chromatogram of WC dichloromethane extract



GC-MS chromatogram of WC toluene extract



GC-MS chromatogram of WC ether extract