

Table S1. Constituents of the fraction F7–8 identified by Gas Chromatography Analysis (CPG).

Noun	Retention Time	percentage	structure
Alcohols			
Hexadecanol	21,58	1,54	
4-Hydroxy-3-(4-methylphenylthio)butanenitrile	33,22	0,82	
Pentadecanol	15,09	0,68	
2,5-Di-tert-butylhydroxybenzene	16,27	2,69	
Aldehydes			
Citronellyl formate	14,07	0,63	
Cetones			
4-Hydroxy-2-methylacetophenone	14,52	2,34	
6,10-Dimethylundecan-2-one	18,72	3,52	
Ester			
Methyl oleate	20,79	2,05	
Methyl 9-oxononanoate	19,27	2,27	
Ethers			

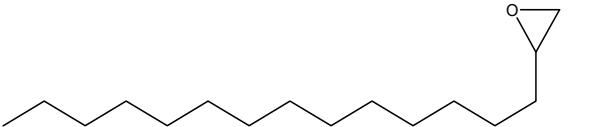
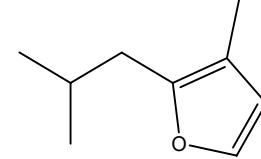
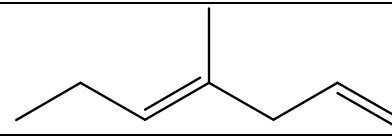
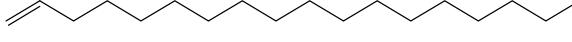
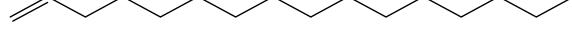
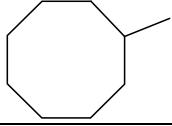
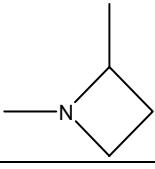
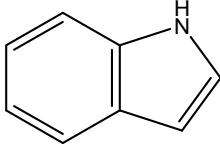
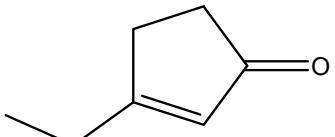
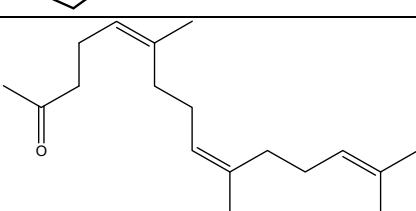
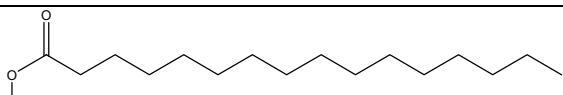
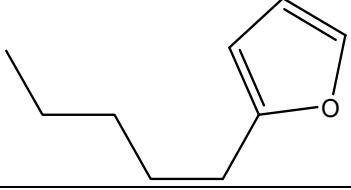
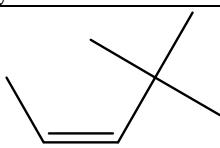
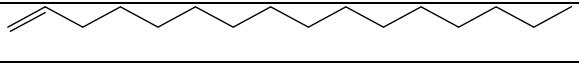
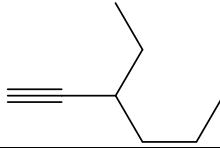
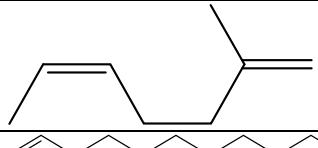
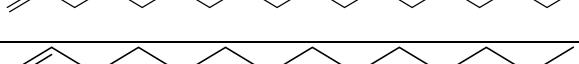
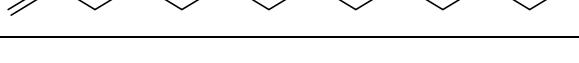
Hexadecene epoxide	18,86	1,58	
2-Isobutyl-3-methylfuran	17,60	1,18	
Unsaturated hydrocarbons			
4-Methyl-1,4-heptadiene	13,69	1,82	
1-Octadecene	18,28	23,64	
1-Hexadecene	16,74	17,71	
Saturated hydrocarbons			
Methylcyclooctane	16,99	1,15	

Table S2. Constituents of the fraction F9 identified by Gas Chromatography Analysis (CPG) .

Noun	Retention Time	Percentage	Structure
Carboxylic Acids			
Acide -2-méthylundec-10-énoïque	15,59	0,69	
Alcohol			
Hexahydrofarnesol	17,80	1,77	
1-Octanol, 2-butyl	15,70	0,87	
2,4-Di-tert-butylphenol	16,29	2,98	
1-Octadecanol	13,25	0,76	
7-HYDROXYDISPIRO(2.0.2.2)OCTANE	13,45	0,74	
2-Hexyn-1-ol	12,00	0,51	
Aldehydes			
2-PENTYNAL	17,24	1,2	
beta.-Methylcrotonaldehyde	13,37	0,53	
2-Decenal, (E)	14,06	4,59	
Amine			

Azetidine, 1,2-dimethyl	9,19	1,73	
1H-Indole	14,71	11,55	
Cetones			
3-ETHYLCYCLOPENT-2-EN-1-ONE	14,36	0,80	
Hexahydrofarnesyl acetone			
Ester			
Hexadecanoate de méthyle	19,29	3,97	
Ether			
Furan, 2-pentyl	11,23	1,57	
Unsaturated hydrocarbons			
4,4-Dimethyl-cis-2-pentene	15,88	1,88	
1-Hexadecene	16,76	8,61	
Ethylbutyl acetylene	16,98	2,59	
1,5-Heptadiene, 2-methyl-, (Z)	18,06	1,31	
1-Octadecene	18,27	5,30	
1-Tetradecene	15,10	3,59	

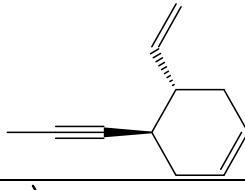
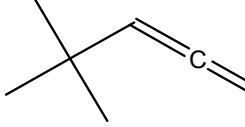
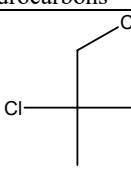
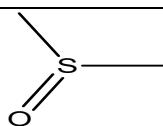
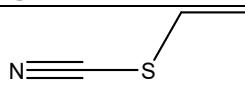
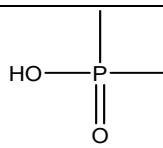
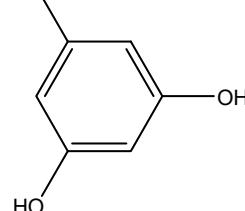
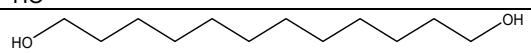
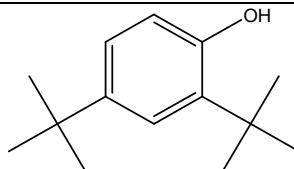
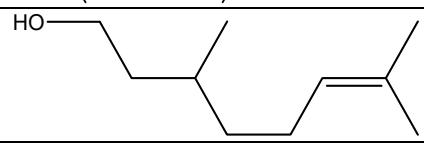
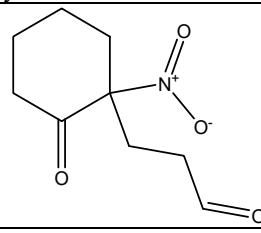
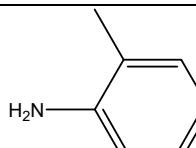
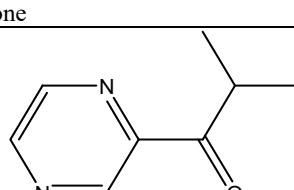
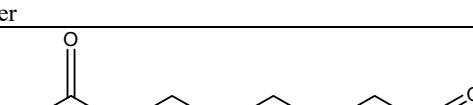
(4R,5S)-4-(1-propyn-1-yl)-5-vinylcyclohexene	15,34	2,39	
1,2-Pentadiene, 4,4-dimethyl	12,44	0,77	
Saturated hydrocarbons			
Isobutylene dichloride	14,98	1,60	
Others			
Methane, sulfinylbis	9,81	5,68	
Thiocyanic acid, ethyle	13,76	3,93	
DIMETHYLPHOSPHINIC ACID acide	10,63	0,65	

Table S3. Constituents of the fraction F10 identified by Gas Chromatography Analysis (CPG).

Noun	Retention Time	Percentage	Structure
Alcohols			
1,3-Benzenediol, 3-methyl	18,72	16,70	
1,12-Dodecanediol	20,77	0,77	
Phenol, 2,4-bis(1,1-dimethylethyl)	16,26	3,82	
beta.-Citronellol	16,55	0,50	
Aldehyde			
3-(1-Nitro-2-oxocyclohexyl)propanal	13,71	1,12	
Amine			
Benzenamine, 2-methyl	17,70	3,20	
Cetone			
1-Propanone, 2-methyl-1-pyrazinyl	17,22	1,08	
Ester			
8-oxooctanoate de méthyle	19,27	0,88	
Ethers			

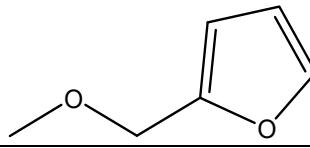
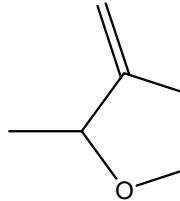
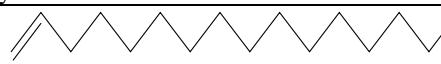
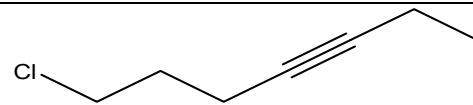
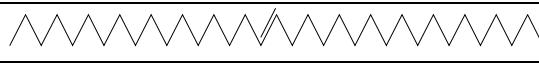
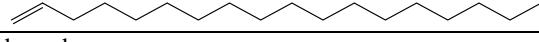
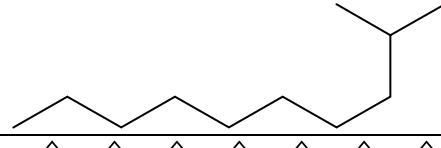
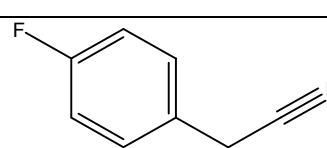
Furan, 2-(methoxymethyl)	11,18	2,12	
Tetrahydro-2-methyl-3-methylene-furan	14,02	1,81	
Unsaturated hydrocarbons			
1-Hexadecene	16,74	13,61	
7-chloro Hept-3-yne	13,86	0,73	
Pentatriacont-17-ene	21,57	0,81	
Octadecene	18,25	10,22	
Saturated hydrocarbons			
Decane, 2-methyl	15,67	0,81	
Hexadecane, 1-chloro	16,98	0,81	
Nitrile			
Benzeneacetonitrile, 4-fluoro	1 4, 5 3	2,70	

Table S4. Constituents of the fraction F11 identified by Gas Chromatography Analysis (CPG) .

Noun	Retention Time	Percentage	Structure
Alcohols			
6-Methyl-1-heptanol	15,10	1,34	
Phenol, 3,5-bis(1,1-dimethylethyl)	16,27	4,09	
2-Heptyn-1-ol	17,26	0,82	
1,5-Pentanediol, 3-methyl	18,86	1,10	
trans -2-Hepten-1-ol	20,78	0,99	
Hexacosylalcohol	21,57	1,44	
1-Hexadecanol	27,84	0,51	
4-Nitro-2,6-dichlorophenol	32,75	0,69	
Aldehyde			
2-trans-Hexenal	17,02	1,65	
Amides			
4-Aminobutyric acid lactam	10,24	0,94	
(1RS,2RS,3RS,7RS)-1,2,6,6-tetramethyl-10-oxatricyclo[5.2.1.0(2,7)]dec-3-yl N-phenylcarbamate	26,82	1,25	
Amines			

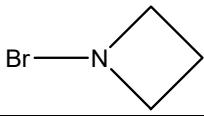
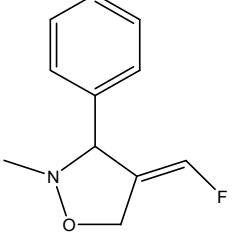
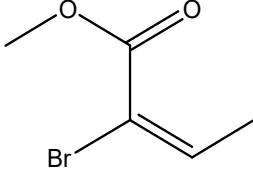
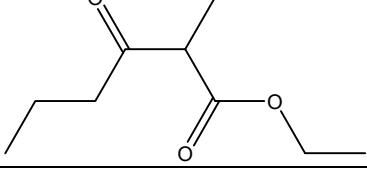
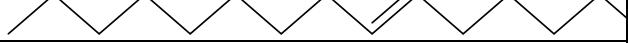
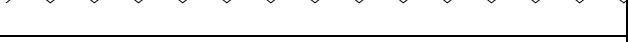
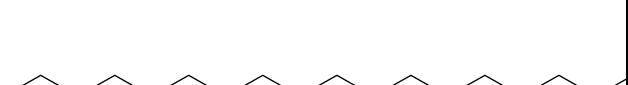
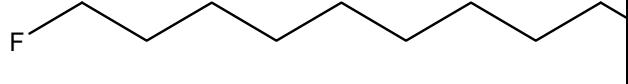
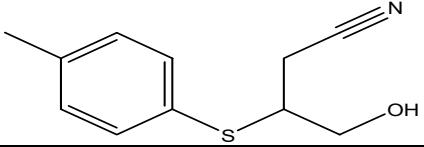
Azetidine, 1-bromo-amine	32,23	0,75	
Isoxazolidine, 4-(fluoromethylene)-2-methyl-3-phenyl-, (Z)-amine	33,38	0,48	
Esters			
methyl 2-bromo-2-butenoate	19,61	1,30	
ETHYL 2-METHYL-3-OXOHEXANOATE	10,50	2,66	
Unsaturated hydrocarbons			
1,cis-3-Pentadiene	16,54	0,66	
1-Hexadecene	16,74	29,13	
9-Octadecene, (E)	18,25	26,26	
17-Pentatriacontene	19,79	7,37	
Saturated hydrocarbons			
Silane, trichloroeicosyl	17,40	0,55	
Decyl fluoride	19,34	1,37	
Nitrile			
Butanenitrile, 4-hydroxy-3-[(4-methylphenyl)thio] nitrile	23,87	0,52	

Table S5. Constituents of the fraction F12 identified by Gas Chromatography Analysis (CPG).

Noun	Retention Time	Percentage	Structure
Alcohols			
3-methoxyphenol	18.79	2.01	
2,5-Di-tert-butylhydroxybenzene Phenol, 2,4-bis(1,1-dimethylethyl)	16.24	5.24	
1-Tetracosanol	18.07	0.95	
Aldehydes			
Tetradecanal	19.23	2.90	
n-Dodecyl aldehyde	16.94	1.10	
Cetone			
3,9,10-Tribromo-(+)-camphor cetone	21.53	1.90	
Ethers			
Spiro[7-oxabicyclo[4.1.0]heptane-2,2'-oxirane], 1,5,5-trimethyl-6-(3-methyl-1,3-butadienyl)[1.alpha.,2.alpha.,6.alpha.(E)]	17.90	0.99	
Epoxycycloheptane	20.74	2.58	
1-methoxy-2-methylidenecyclopropane	11.01	2.90	

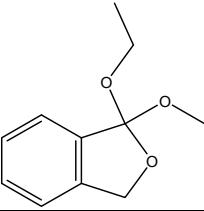
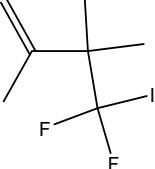
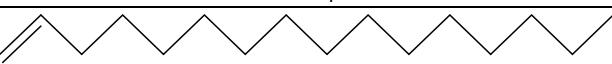
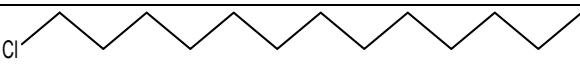
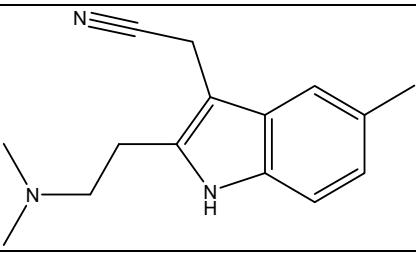
1,3-Dihydro-1-ethoxy-1-methoxyisobenzofuran	20.37	1.74	
Unsaturated hydrocarbons			
4,4-Difluoro-4-iodo-2,3,3-trimethyl-1-butene	18.51	0.80	
HEXADECENE-1	16.72	9.39	
Saturated hydrocarbons			
Tetradecyl chloride hydrocarburesaturé	19.13	0.83	
Others			
2-(2-dimethylaminoethyl)-3-cyanome thyl-5-methylindole indole	18.68	3.81	
Dioctadecyl phosphonate	18.23	13.77	
1-methyl-2-carboxaldehyde-3(1-carboxaldehyde)-ethenyl-cyclopentane	17.73	1.39	
Oct-2-yn-1-o 2-Nitro-1-decen-4-yne	17.51	2.41	
Octanoic acid, 7-chloro-, chlorome thyl ester	17.21	1.48	
Furo[3,4 -c]pyridine, 1,3-dihydro-6-methyl-7(trimethylsilyl)-Azetidine, 2-methyl-	20.98	1.57	

Table S6. Constituents of the fraction F17 identified by Gas Chromatography Analysis (CPG).

Noun	Retention Time	Percentage	Structure
Alcohols			
3,5-Di-tert-butylphenol	16.23	3.95	
2-Heptanol, 5-ethyl	17.00	1.18	
1H-Imidazole-2-methanol	14.00	0.67	
2-Pentadecyn-1-ol	20.74	3.05	
2 Hydroxy Undecane	17.39	1.12	
Cetone			
2-Undecanone, 6,10-dimethyl	18.68	9.68	
Esters			
Nicotinic acid, 1,6-dihydro-4-hydroxy-2-methyl-6-oxo- ethyl ester ester	18.07	0.85	
methacrylic acid octyl ester ester	17.21	0.86	

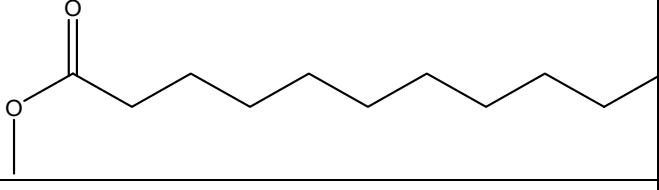
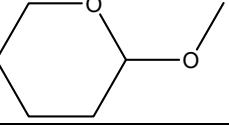
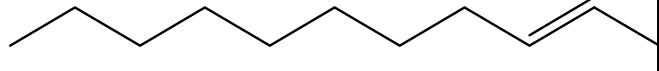
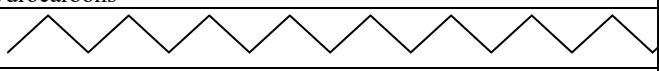
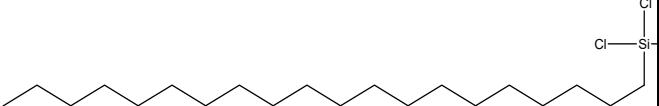
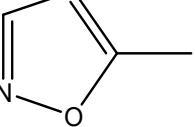
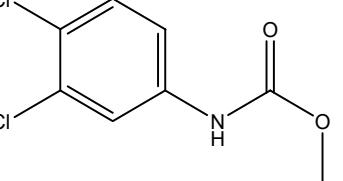
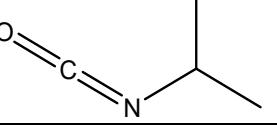
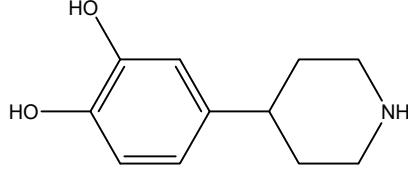
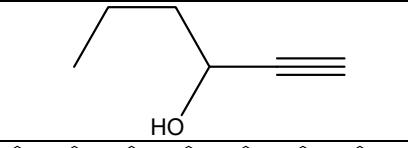
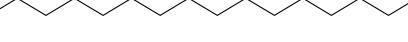
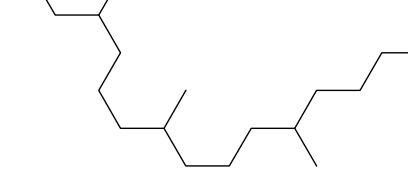
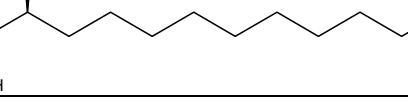
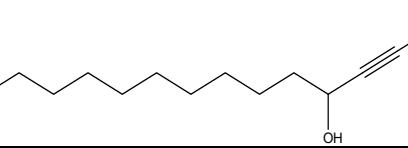
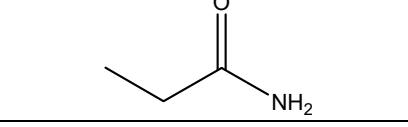
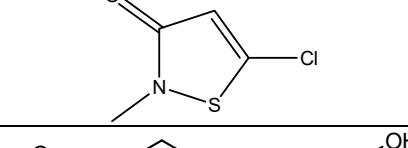
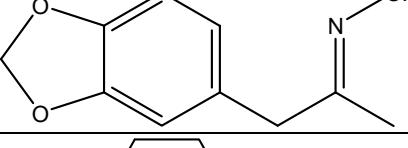
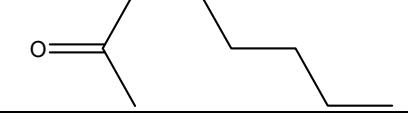
Hexadecanoic acid, methyl ester ester	19.24	3.64	
Ether			
2-Methoxytetrahydropyran ether	15.06	1.27	
Unsaturated hydrocarbons			
9-Octadecene Hydrocarbure insaturé	16.71	18.34	
9-Octadecene, (E) Hydrocarbure insaturé	18.22	18.61	
Saturated hydrocarbons			
Chlorooctadecane	17.72	0.98	
Others			
Acetic acid, bicyclo[2.2.1]hept-2-en-7-ylidene-Sydnone, 3-(4-nitrophenyl)-	19.02	3.46	
Acetic acid, bicyclo[2.2.1]hept-2-en-7-ylidene-17-Pentatriacontene	19.76	8.35	
Silane, trichloroeicosyl-	21.54	1.02	
Isoxazole, 5-methyl-(azole)	11.13	1.09	
Methyl N-(3,4-dichlorophenyl) Carbamate carbamate	19.58	3.11	
Propane, 2-isocyanato cyanate	21.74	0.63	

Table S7. Constituents of the fraction F18 identified by Gas Chromatography Analysis (CPG).

Noun	Retention Time	Percentage	structure
Alcohols			
Hexahydropyridine, 4-[4,5-dihydroxyphenyl]	23.32	0.21	
3-Hydroxy-1-hexyne	15.07	0.35	
1-Hexadecanol	20.73	2.75	
3,7,11,15-Tetramethylhexadecanol	20.44	1.79	
1-Dodecanol, 2-methyl-, (S)-	21.54	1.10	
Aldehyde			
4-hydroxytetradec-2-ynal	23.87	0.29	
Amide			
Propionamide (amides)	34.05		
Cetones			
5-Chloro-2-methyl-4-isothiazolin-3-one (ketone)	26.71	0.20	
1-(3,4)-Methylenedioxyphenyl-2-propanone oxime (ketone)	28.64	0.32	
Methyl n-hexyl ketone (Cétone)	18.67	8.95	
Amine			

1,2-DIMETHYLAZETIDINE E (Cycloamine)	11.15	0.35	
Esters			
Heptanedioic acid, dimethyl ester (ester)	20.92	0.80	
Hexadecanoic acid, methyl ester (ester)	19.24	4.86	
Ethyl 2,2-Difluoro-4- iodooctanoate (esters)	35.24	0.35	
Saturated hydrocarbons			
Eicosyltrichlorosilane (Hydrocaburesaturé)	19.77	10.24	
Others			
(Z)-cis-6,7- Epoxyheptadec-9-ene (epoxy)	22.77	0.33	
CYANO METHYL- TRIIRON DISULFIDE OCT ACARBONYL	19.14	1.46	
2H-Benzotriazole, 2- ethyl	35.54	0.18	
1,6-dimethyl- pyrimido[5,4-e][1,2,4-]triazine-5-one	28.43	0.23	
Bicycle(2.2.1)hept-2'-en- 7'-ylideneacetic acid	20.06	0.98	

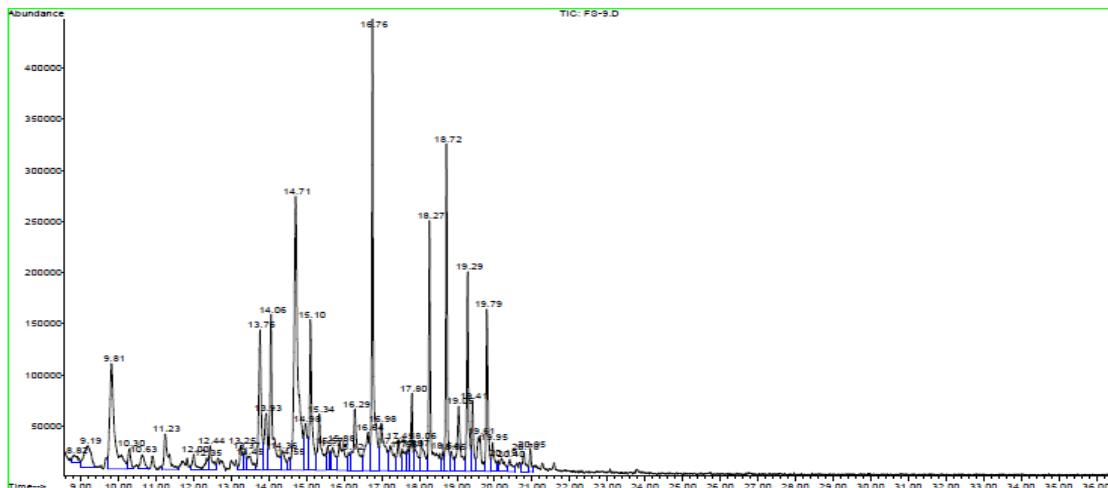


Figure S1. Chromatogram CPG of F9 dichloromethane extract fraction of *Raphanus raphanistrum* recorded on an apolar HP-5 column.

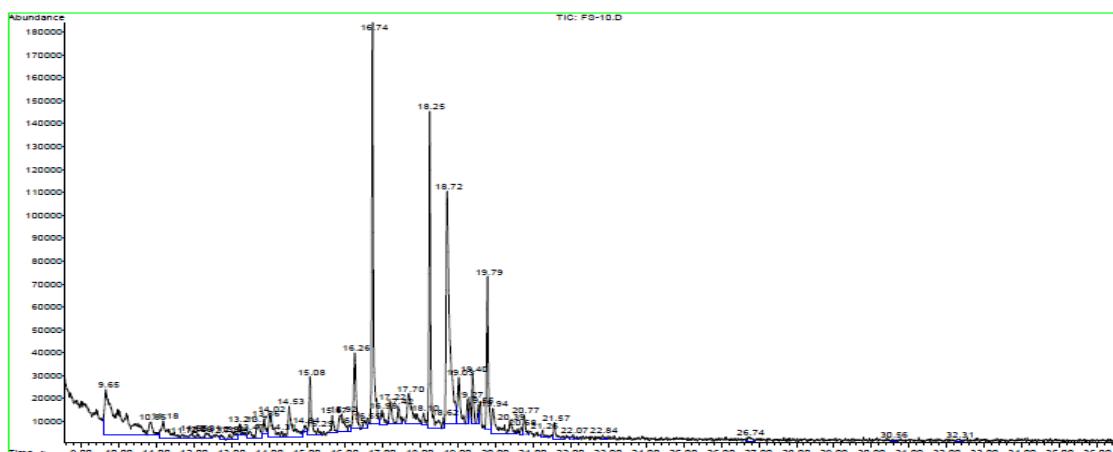


Figure S2. Chromatogram CPG of F10 dichloromethane extract fraction of *Raphanus raphanistrum* recorded on an apolar HP-5 column.

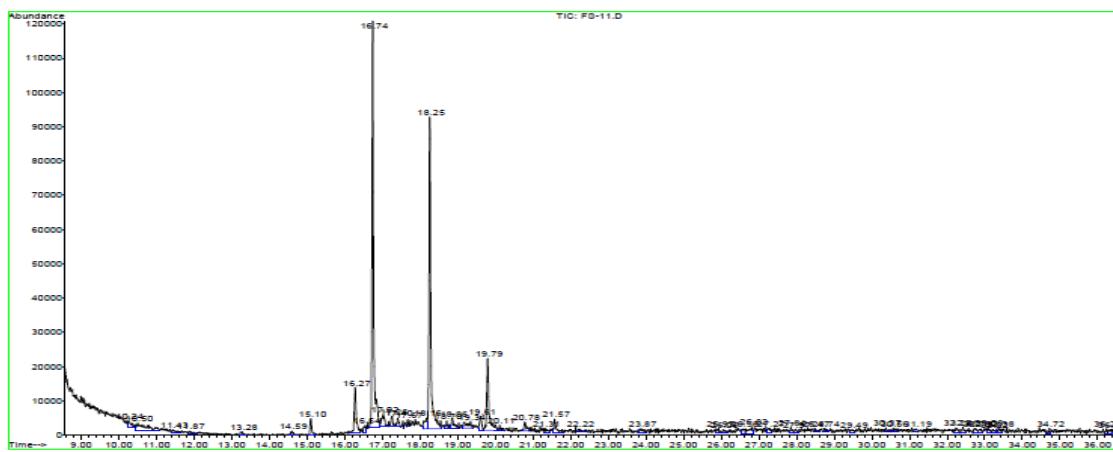


Figure S3. Chromatogram CPG of F11 dichloromethane extract fraction of *Raphanus raphanistrum* recorded on an apolar HP-5 column.

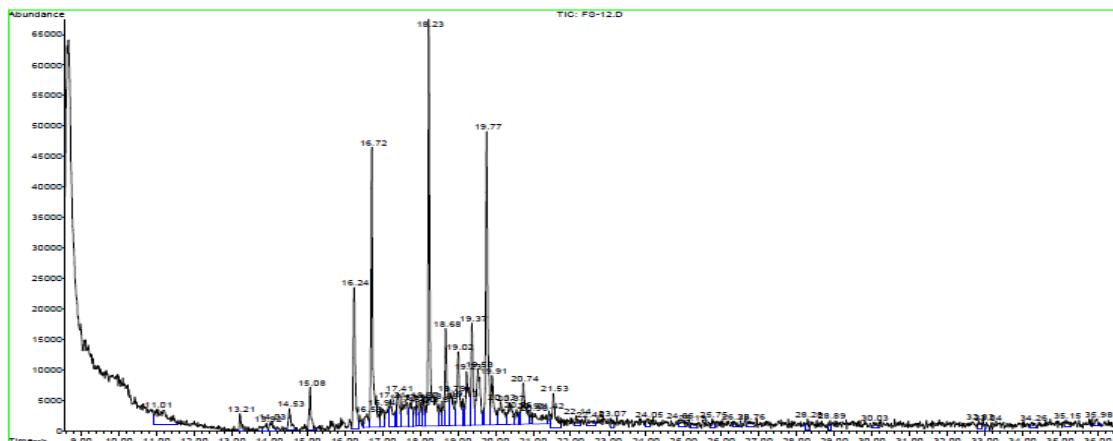


Figure S4. Chromatogram CPG of F12 dichloromethane extract fraction of *Raphanus raphanistrum* recorded on an apolar HP-5 column.

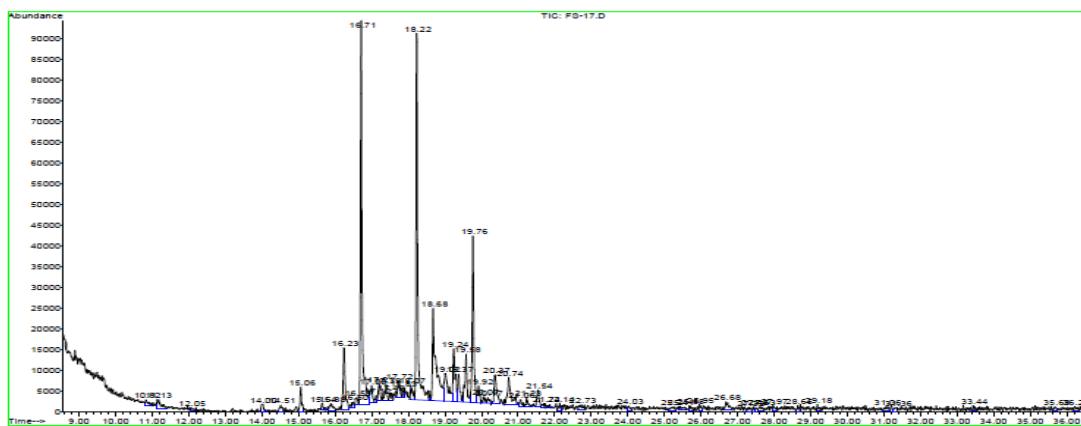


Figure S5. Chromatogram CPG of F17 dichloromethane extract fraction of *Raphanus raphanistrum* recorded on an apolar HP-5 column.

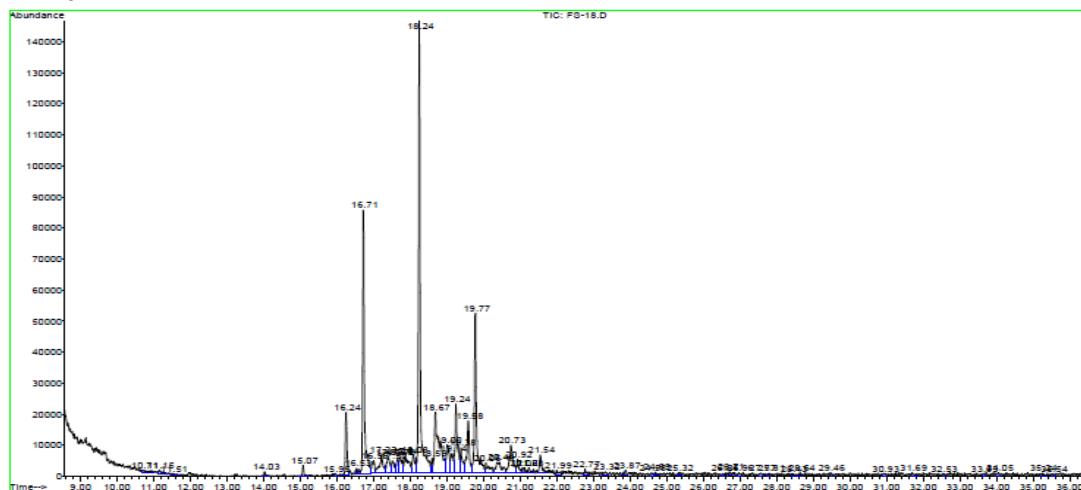


Figure S6. Chromatogram CPG of F18 dichloromethane extract fraction of *Raphanus raphanistrum* recorded on an apolar HP-5 column.