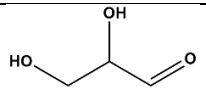
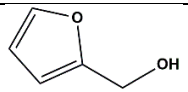
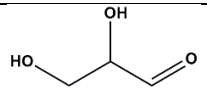
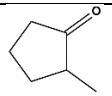
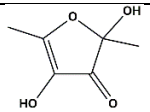
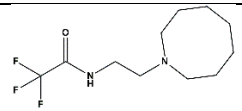
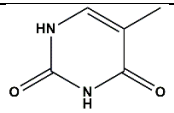
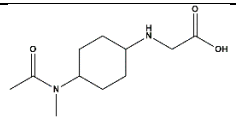
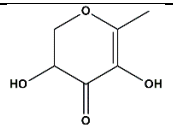
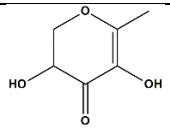
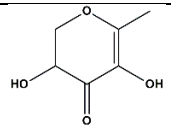
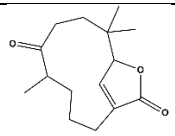
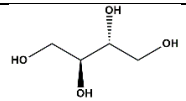
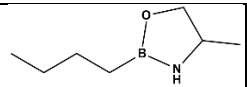
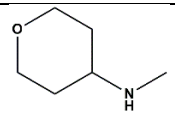
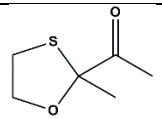
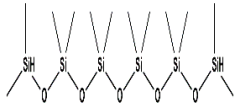
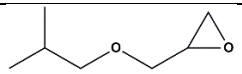
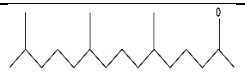
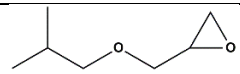
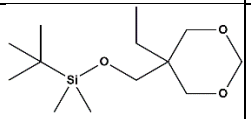
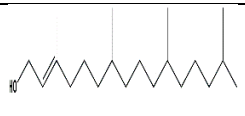
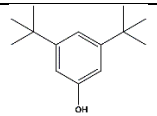
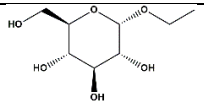
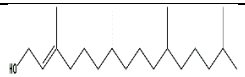
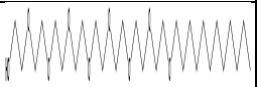
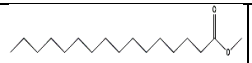
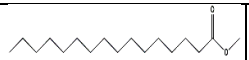
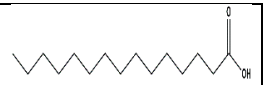
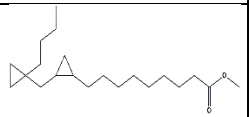
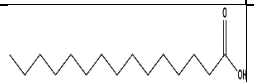
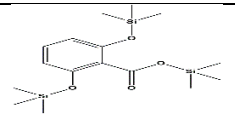
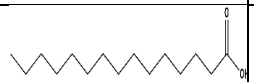
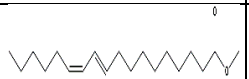
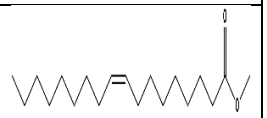
Supplementary Table 1. Gas Chromatography-Mass Spectrometric (GC-MS) profile of *M. lutea* active extracts.

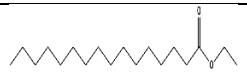
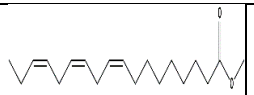
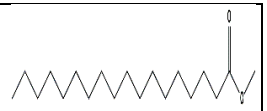
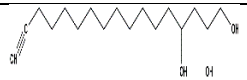
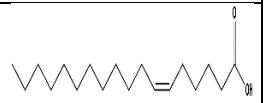
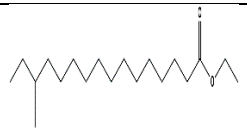
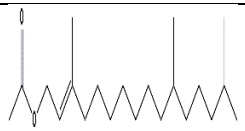
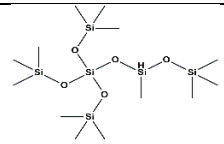
Ethanol Stembark				**Methanol Leaf**				**Methanol Stembark**			
Ret. Time	**Compound (molecular weight)**	**% Area**	**Structure**	**Ret. Time**	**Compound (molecular weight)**	**% Area**	**Structure**	**Ret. Time**	**Compound (molecular weight)**	**% Area**	**Structure**
4.458	Glyceraldehyde (90.08 g/mol)	1.29		**4.025**	2-Furanmethanol (98.10 g/mol)	0.24		**4.508**	Glyceraldehyde (90.08 g/mol)	2.08	
4.792	2-methyl Cyclopentanone (98.14 g/mol)	0.30		**4.58**	2,4-Dihydroxy-2,5-dimethyl-3(2H)-furan-3-one (144.12 g/mol)	0.99		**6.217**	Acetamide, 2,2,2-trifluoro-N-[2-(hexahydro-1(2H)-azocinyl)ethyl]-	1.07	

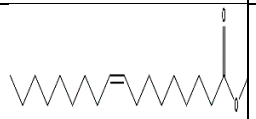
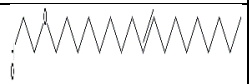
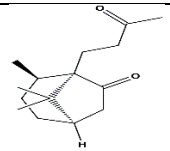
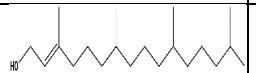
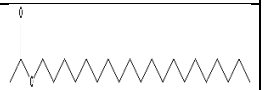
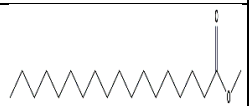
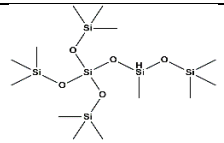
									(252.28 g/mol)		
6.117	Thymine (126.11 g/mol)	1.07		**5.758**	[4-(Acetyl-methyl-amino)-cyclohexylamino]-acetic acid (228.29 g/mol)	1.40		**6.375**	4H-Pyran-4-one, 2,3-dihydro-3,5-dihydroxy-6-methyl- (144.12 g/mol)	5.36	
6.280	4H-Pyran-4-one, 2,3-dihydro-3,5-dihydroxy-6-methyl- (144.12 g/mol)	3.71		**5.950**	4H-Pyran-4-one, 2,3-dihydro-3,5-dihydroxy-6-methyl- (144.12 g/mol)	9.07		**7.792**	2,2,6-trimethyl-12-oxabicyclo[8.2.1]tridec-10(13)-ene-5,11-dione	1.20	

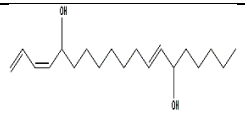
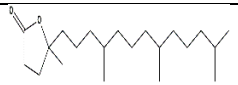
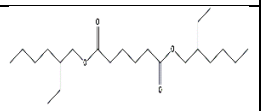
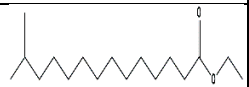
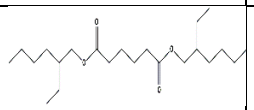
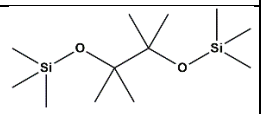
6.746	Erythritol (122.12 g/mol)	2.61		**10.591**	2-butyl-4-methyl-1,3,2-Oxazaborolidine (141.02 g/mol)	0.15		**8.067**	N-Methyltetrahydro-2H-pyran-4-amine, TMS (115.17 g/mol)	1.32	
7.400	Ketone, methyl 2-methyl-1,3-oxothiolan-2-yl (146.21 g/mol)	0.14		**11.987**	3-Eicosyne (278.5 g/mol)	1.79		**8.228**	Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecamethyl- (428.92 g/mol)	0.82	
8.656	2-(Isobutoxymethyl)oxirane	7.46		**12.108**	2-Pentadecano	0.44		**8.831**	2-(Isobutoxymethyl)oxirane	7.73	

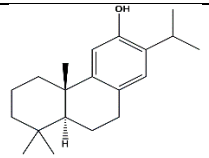
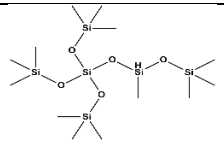
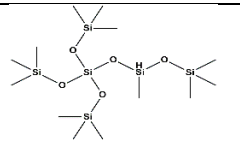
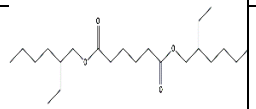
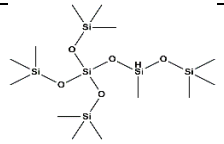
	(130.18 g/mol)				ne, 6,10,14-trimethyl- (268.5 g/mol)				(130.18 g/mol)		
10.208	5-Ethyl-1,3-dioxane-5-methanol, tert-butyldimethyl silyl ether (274.47 g/mol)	0.65		**12.235**	3,7,11,15-Tetramethyl-2-hexadecen-1-ol	0.25		**8.950**	Phenol, 3,5-bis(1,1-dimethylethyl)- (206.32 g/mol)	2.52	
10.426	Ethyl alpha-d-glucopyranoside (208.21 g/mol)	19.35		**12.426**	3,7,11,15-Tetramethyl-2-hexadecen-1-ol (296.5 g/mol)	0.24		**9.067**	Octaethylene glycol monododecyl ether (538.8g/mol)	0.68	

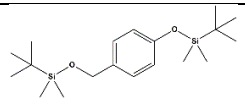
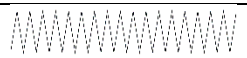
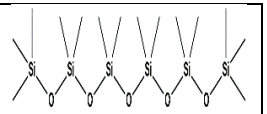
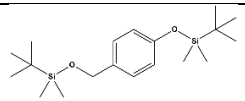
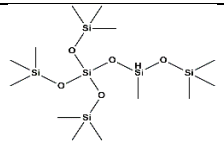
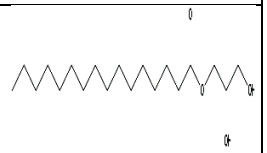
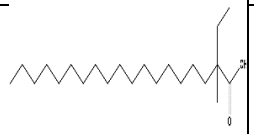
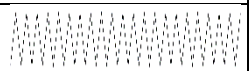
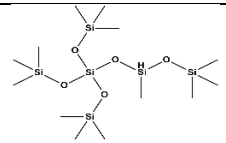
12.933	Hexadecanoic acid, methyl ester (270.5 g/mol)	0.31		**12.923**	Hexadecanoic acid, methyl ester (270.5 g/mol)	0.73		**13.754**	Pentadecanoic acid (242.40 g/mol)	11.67	
13.365	Cyclopropane nonanoic acid, 2-[(butycyclopropyl)methyl]-, methyl ester (322.5 g/mol)	0.33		**13.433**	Pentadecanoic acid (242.40 g/mol)	9.17		**14.208**	2,6-Dihydroxybenzoic acid, 3TMS derivative (370.66 g/mol)	0.71	
13.500	Pentadecanoic acid (242.40 g/mol)	3.96		**14.490**	Methyl 10-trans, 12-cis-octadecadienoate (294.5 g/mol)	0.38		**14.653**	9-Octadecenoic acid(Z)-, methyl ester (296.49 g/mol)	0.99	

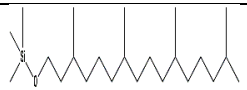
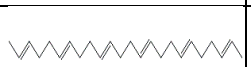
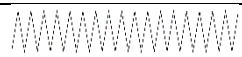
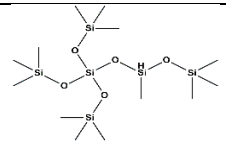
13.561	Hexadecanoic acid, ethyl ester (285.5 g/mol)	9.66		**14.549**	9,12,15-Octadecatrienoic acid, methyl ester (2 (292.5 g/mol)	1.34		**14.870**	Methyl stearate (298.5 g/mol)	1.18	
13.892	Avocadyne, 2Ac derivative (284.4 g/mol)	1.13		**14.628**	Phytol (296.5 g/mol)	13.92		**15.381**	6-Octadecenoic acid, (Z)- (282.5 g/mol)	5.84	
14.483	Ethyl 14-methyl-hexadecanoate (298.5 g/mol)	0.29		**14.975**	2-Hexadecen-1-ol, 3,7,11,15-tetramethyl, acetate (338.6 g/mol)	0.10		**15.450**	1,1,1,5,7,7,7-Heptamethyl-3,3-bis(trimethylsiloxy)tetrasiloxane	5.50	

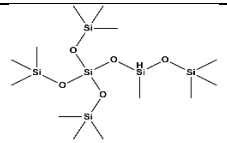
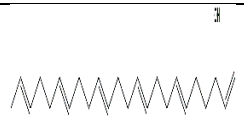
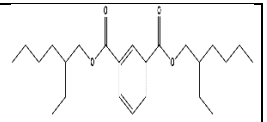
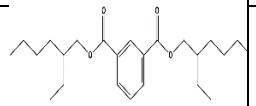
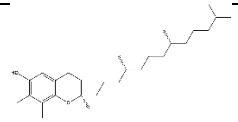
									(443.96 g/mol)		
14.570	9-Octadecenoic acid (Z)-, methyl ester (296.49 g/mol)	0.34		**15.092**	Ethanol, 2-(9-Octadecenyloxy)-(Z)- (312.5 g/mol)	3.60		**15.558**	Cyperadione (236.35 g/mol)	2.40	
14.670	Phytol (296.5 g/mol)	0.93		**15.171**	1,8,11,14-Heptadecatetraene, (Z,Z,Z)- (232.4 g/mol)	7.80		**15.650**	Eicosyl acetate (340.6 g/mol)	4.45	
14.793	Methyl stearate (298.5 g/mol)	0.23		**15.300**	Octadecanoic acid, 2-(2-	9.36		**16.642**	1,1,1,5,7,7,7-Heptamethyl-3,3-	0.77	

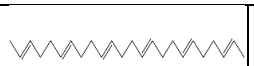
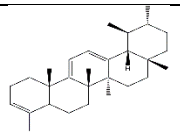
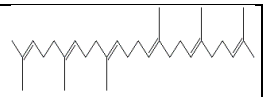
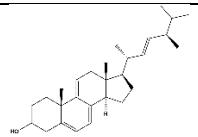
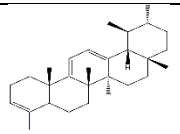
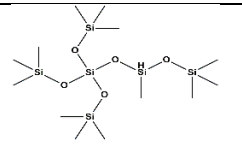
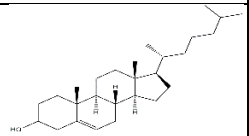
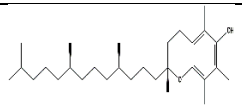
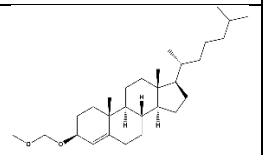
					hydroxyethoxy)ethyl ester (372.58 g/mol)				bis(trimethylsiloxy)tetrasiloxane (443.96 g/mol)		
15.160	E,E,Z-1,3,12-Nonadecatriene-5, 14-diol (294.5 g/mol)	18.83		**16.792**	4,8,12,16-Tetramethylheptadecan-4-olide (324.5 g/mol)	0.28		**17.157**	Hexanedioic acid, bis(2-ethylhexyl) ester (370.57 g/mol)	6.90	
15.386	Ethyl 13-methyl-tetradecanoate (270.5 g/mol)	12.09		**17.079**	Hexanedioic acid, bis(2-ethylhexyl) ester (370.57 g/mol)	0.39		**17.310**	2,2,4,4,5,5,7,7-Octamethyl-3,6-dioxa-2,7-disilaoctane (262.54 g/m0l)	0.71	

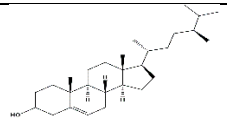
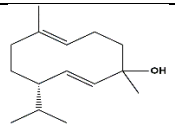
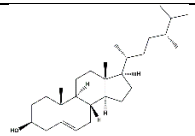
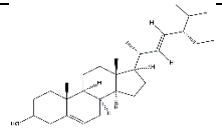
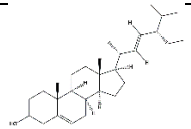
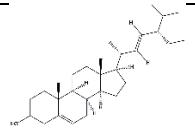
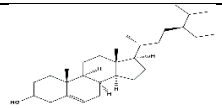
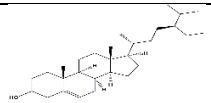
16.724	Ferruginol (286.5 g/mol)	0.46		**17.677**	1,1,1,5,7,7,7-Heptamethyl-3,3-bis(trimethylsiloxy) tetrasiloxane (443.96 g/mol)	0.11		**17.720**	1,1,1,5,7,7,7-Heptamethyl-3,3-bis(trimethylsiloxy) tetrasiloxane (443.96 g/mol)	1.04	
17.111	Hexanedioic acid, bis(2-ethylexyl) ester (370.57 g/mol)	1.17		**18.712**	1,1,1,5,7,7,7-Heptamethyl-3,3-bis(trimethylsiloxy) tetrasiloxane (443.96 g/mol)	0.27		**17.979**	Eicosane (282.5 g/mol)	1.30	

17.300	4-Hydroxybenzyl alcohol, 2TBDMS derivative (352.7 g/mol)	0.33		**19.488**	Hexatriacontane (507.00 g/mol)	0.18		**18.409**	Hexasiloxane, tetradecamethyl- (458.99 g/mol)	1.11	
18.387	4-Hydroxybenzyl alcohol, 2TBDMS derivative (352.7 g/mol)	0.28		**19.700**	1,1,1,5,7,7,7-Heptamethyl-3,3-bis(trimethylsiloxy)tetrasiloxane (443.96 g/mol)	0.11		**18.542**	Glycerol 1-palmitate (330.5 g/mol)	0.95	
18.542	Butyric acid, 2-methyl-, heptadecyl	0.20		**20.205**	Tetratetracontane (619.2 g/mol)	0.15		**18.754**	1,1,1,5,7,7,7-Heptamethyl-3,3-	2.02	

	(200.32 g/mol)								bis(trimethylsiloxy)tetrasiloxane (443.96 g/mol)		
18.758	Dihydrophytol, TMS derivative (370.7 g/mol)	0.31		**20.319**	Squalene (410.7 g/mol)	10.52		**19.534**	Hexatriacontane (507.0 g/mol)	0.90	
19.514	Tetratetracontane (619.2 g/mol)	0.16		**20.914**	Hexatriacontane (507.0 g/mol)	0.40		**19.721**	1,1,1,5,7,7,7-Heptamethyl-3,3-bis(trimethylsiloxy)tetrasiloxane (443.96 g/mol)	1.81	

19.717	**1,1,1,5,7,7,7,-Heptamethyl-3,3-bis(trimethylsiloxy)tetrasiloxane** (443.96 g/mol)	0.24		**21.092**	1,6,10,14,18,22-Tetracosahexaen-3-ol (342.6 g/mol)	0.17		**19.933**	1,3-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (390.6 g/mol)	5.89	
19.924	1,3-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester (390.6 g/mol)	0.56	 .	**22.058**	γ – Tocopherol (416.7 g/mol)	0.22		**20.248**	Hexatriacontane (507.0 g/mol)	0.88	

20.345	Squalene (410.7 g/mol)	0.20		**22.142**	24-Norursa-3,9(11),12-triene (392.7 g/mol)	2.83		**20.362**	Squalene (410.7 g/mol)	0.85	
21.507	Ergosta-5,7,9(11),22-tetraen-3-ol, (3β,22E) (394.63 g/mol)	0.28		**22.376**	24-Norursa-3,9(11),12-triene (392.7 g/mol)	0.71		**20.644**	1,1,1,5,7,7,7-Heptamethyl-3,3-bis(trimethylsiloxy)tetrasiloxane (443.96 g/mol)	0.70	
22.738	Cholesterol (386.7 g/mol)	2.04		**22.662**	Vitamin E (430.71 g/mol)	11.89		**22.760**	Cholest-4-ene, 3.beta-(methoxymethoxy)- (384.6 g/mol)	2.11	

23.696	Ergost-5-en3-ol, (3β) (400.7 g/mol)	0.45		**23.036**	(2E,4S,7E)-4-Isopropyl-1,7-dimethylcyclodeca-2,7-dienol (222.37 g/mol)	0.81		**23.700**	Campesterol (400.7 g/mol)	0.97	
23.936	Stigmasterol (412.7 g/mol)	2.09		**23.036**	Stigmasterol (412.7 g/mol)	0.68		**23.953**	Stigmasterol (412.7 g/mol)	2.82	
24.590	γ-Sitosterol (414.7 g/mol)	6.53		**24.517**	**γ** –Sitosterol (414.7 g/mol)	9.31		**24.608**	γ-sitosterol (414.7 g/mol)	12.75