

SERVICE DE SPECTROMETRIE DE MASSE DE L'ISIC (SSMI)

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ANALYSES GC-MS

Le 19 Octobre 2011

Objet: Analyse d'une huile essentielle par GC-MS
Nom: **Galanga des Indes**
Lot: **GAL2001**
Destinataire : Entreprise Gedane (Lausanne, Suisse)
Composés majoritaires: **Eucalyptol ; Sesquisabinene A**

CONDITIONS EXPERIMENTALES

Type d'instrument : GC CP-3800 couplé au 1200L Triple quadrupole MS/MS (Varian)

Mode d'ionisation : Impact électronique (IE), 70 eV (mode positif)

Gamme de masse : m/z 50-250 en 0.5 sec

Colonne : FactorFour VF-5ms (5% phenyl-methyl 95% dimethyl polysiloxane, 0.25mm x 30 m)

Débit : 1 mL/min

Gradient : 50°C pendant 3 min; Montée à 150°C en 20 min; Montée à 250°C en 7 min

Calibrant : FC43

Echantillons : Huile essentielle diluée 1:500 dans l'éther. Injection de 1 μ L.

Table 1 – Composition de l'huile essentielle de Galanga des Indes (GAL2001)

N°	Retention Time (min.)	Area	% of Total	Identification (NIST 08 / Massfinder)	Prob (%)
1	7.44	1.00E+07	0.10	α -Thujene	65
2	7.67	2.61E+08	2.68	α-Pinene	81
3	8.18	6.02E+06	0.06	Camphene	61
4	8.88	3.98E+07	0.41	Sabinene	87
5	9.04	4.68E+07	0.48	β -Pinene	84
6	9.39	2.73E+07	0.28	Myrcene	25
7	9.44	1.71E+07	0.17	2,3-Dehydro-1,8-cineol	68
8	10.54	1.83E+07	0.19	p/m-Cymene	81/79
9	10.68	4.38E+07	0.45	D-Limonene	93
10	10.84	2.49E+09	25.51	Eucalyptol	94
11	11.57	1.44E+07	0.15	γ -Terpinene	64
12	15.19	1.18E+07	0.12	δ -Terpineol	64
13	15.41	4.59E+07	0.47	4-Terpineol	69
14	15.91	1.22E+07	0.13	α -Terpineol	71
15	18.28	2.97E+07	0.30	(iso)Bornyl Acetate	43
16	18.58	1.18E+07	0.12	n-Tridecane	30
17	19.59	1.46E+07	0.15	Trans-carvyl Acetate	29
18	19.87	3.23E+07	0.33	Chavicol Acetate	76
19	20.29	2.73E+07	0.28	Eugenol	11
20	20.76	1.18E+08	1.21	Neryl Acetate	79
21	21.07	1.23E+07	0.13	Cis- β -Elemene	12
22	21.24	1.38E+07	0.14	n-Tetradecane	15
23	21.44	1.70E+07	0.17	Methyl Eugenol	75
24	21.89	6.09E+07	0.62	β -Caryophyllene	28
25	22.17	6.64E+07	0.68	Trans- α -Bergamotene	63
26	22.75	2.96E+09	30.38	Sesquisabinene A	66
27	22.83	1.71E+08	1.75	α-Humulene	73
28	23.42	9.39E+07	0.96	γ -Amorphene/ D-Germacrene	84/71
29	23.72	9.67E+08	9.92	n-Pentadecane	65
30	23.81	7.24E+07	0.74	α -Farnesene	64
31	23.90	1.02E+08	1.05	β-Bisabolene	75
32	24.09	8.10E+07	0.83	Eugenyl Acetate	49
33	24.19	1.16E+08	1.19	β-Sesquiphellandrene	62
34	25.17	1.64E+07	0.17	Caryophyllene oxide	38
35	25.52	3.09E+07	0.32	(z)-Asarone	78
36	25.55	2.91E+07	0.30	Humulene Epoxide II	69
37	25.85	7.81E+08	8.01	4-Allyl-1,2-diacetoxybenzene ???	51
38	25.91	2.92E+07	0.30	Hexylresorcinol	58
39	26.10	2.11E+08	2.16	Long chain alkane /alkene MW236	
40	26.18	1.88E+08	1.93	Long chain alkene MW238	
41	26.28	1.28E+07	0.13	Long chain alkane /alkene	
42	26.41	3.61E+07	0.37	Long chain alkane /alkene	
43	26.62	1.50E+07	0.15	Long chain alkane /alkene	
44	27.70	3.27E+08	3.36	Farnesol Acetate	92
45	27.86	5.13E+07	0.53	Unknown, MW234	
46	30.02	1.23E+07	0.13	Retinal, 9-cis-	30

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