



PLANT THERAPY

100% PURE ESSENTIAL OILS

GC/MS BATCH NUMBER: Y10100

ESSENTIAL OIL: YLANG YLANG COMPLETE
BOTANICAL NAME: CANANGA ODORATA COMPLETE
ORIGIN: MADAGASCAR

KEY CONSTITUENTS PRESENT IN THIS BATCH OF YLANG YLANG OIL	%
GERMACRENE D	13.2
(E,E)- α -FARNESENE	13.1
BENZYL BENZOATE	8.4
BENZYL ACETATE	6.6
LINALOL	6.6
β -CARYOPHYLLENE	6.3
GERANYL ACETATE	4.6
METHYL-p-CRESOL	3.9
BENZYL SALICYLATE	3.9
CINNAMYL ACETATE	3.8
FARNESYL ACETATE	2.9
δ -CADINENE	2.6
METHYL BENZOATE	2.4
α -HUMULENE	2.3
γ -MUUROLENE	1.5
α -CADINOL	1.4
FARNESOL	1.3
α -COPAENE	1.0

Comments from Robert Tisserand:
The odor profile is of warm, sweet ylang-ylang flowers, and the composition is appropriate for a complete distillation oil.

Customer :

**PLANT THERAPY
126 Locust Street South
Twin Falls, ID 83 301
USA**

Sample nature: ESSENTIAL OIL
Botanical name: CANANGA ODORATA COMPLETE
Reference name: YLANG YLANG COMPLETE
Batch number: Y10100
Origin: MADAGASCAR
Part: FLOWER
Pyrenessences reference: C287
Date of reception: 12/15/2014
Date analysis: 12/23/2014
Packaging: Amber flask of 5 ml - ambient temperature
Wanted analysis: Classic

Report validated by :

Daniel Dantin



GAS CHROMATOGRAPHY (norm NF ISO 11024)

Conditions :

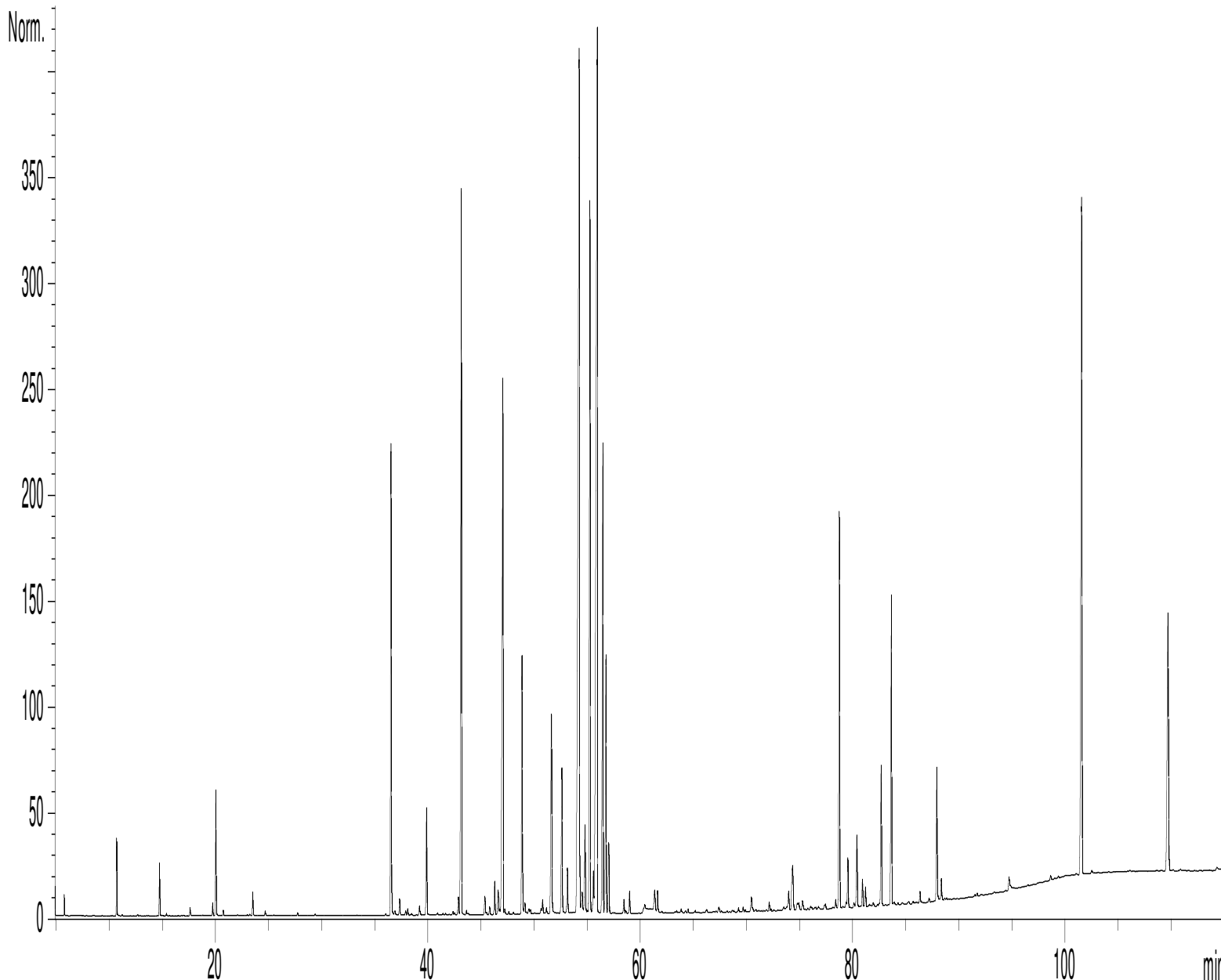
- GC: 7890 - SM : 5975 AGILENT : Column VF WAX polar : 60 m × 0,25 mm × 0,5 µm
- GC/FID 6890 AGILENT : Column VF WAX polar : 60 m × 0,25 mm × 0,5 µm
- Programmation : 6 min to 60°C - 2°C/min → 250°C - 10 min to 250°C
- Carrier gas : He 30 psi/FID ; 23 psi/MS
- Dilution: 10 % in Hexane
- Mass : 30 à 350
- Sample injection : 1 µL

Mass range : 30 to 350, Oil components are identified by a combination of retention times (our own database) and mass spectra library NIST 75 000 records,

Percentages are calculated from GC/FID peaks areas without using corrections factors,

Chromatographic profile (GC/FID) :

FID1 A, (Z:\PLANTHER\COMAC287.D)



Identification results 1 – YLANG YLANG COMPLETE BATCH Y10100

Peak	RT (min)	Compound	%	Norm (%)	Allergens (%)
1	5,7	ACETONE	0,08		
2	10,7	α-PINENE	0,46		
3	12,7	CAMPHENE	0,01		
4	14,7	β-PINENE	0,36		
5	14,8	ISOAMYL ACETATE	0,01		
6	15,4	SABINENE	0,02		
7	17,6	β-MYRCENE	0,05		
8	19,7	ISOPRENYL ACETATE	0,09		
9	20,0	LIMONENE	0,95		0,95
10	20,7	1,8-CINEOLE	0,05		
11	22,1	Cis-β-OCIMENE	0,01		
12	23,0	Trans-ARBUSCULONE	0,01		
13	23,2	Trans-β-OCIMENE	0,01		
14	23,5	PRENYL ACETATE	0,18		
15	24,6	HEXYL ACETATE	0,03		
16	24,7	p-CYMENE	0,01		
17	25,5	TERPINOLENE	0,01		
18	27,7	Cis-3-HEXENYL ACETATE	0,02		
19	29,4	6-METHYL-5-HEPTEN-2-ONE	0,01		
20	36,0	α,p-DIMETHYLSTYRENE	0,01		
21	36,5	METHYL-p-CRESOL	3,94		
22	36,6	METHYL-o-CRESOL	0,05		
23	36,9	SESQUITERPENE	0,01		
24	37,3	α-CUBEBENE	0,14		
25	37,9	SESQUITERPENE + LINALOOL trans-OXIDE	0,04		
26	38,1	δ-ELEMENE	0,05		
27	38,4	SESQUITERPENE	0,01		
28	39,2	YLANGENE	0,10		
29	39,9	α-COPAENE	1,02		
30	40,9	SESQUITERPENE	0,02		
31	41,4	PRENYLIC ESTER	0,01		
32	41,6	β-BOURBONENE	0,01		
33	42,3	BENZALDEHYDE	0,06		
34	42,5	α-GURJUNENE	0,04		
35	43,0	LINALOL	6,57		6,57
36	43,1	β1-CUBEBENE	0,18		
37	43,6	TERPENIC ALCOHOL	0,05		
38	43,7	LINALYL ACETATE	0,01		
39	45,3	ε-CADINENE	0,20		
40	45,8	SESQUITERPENE	0,07		
41	46,3	β-ELEMENE	0,29		
42	46,6	β-CUBEBENE	0,28		
43	46,8	TERPINENE-4-OL	0,04		
44	47,0	β-CARYOPHYLLENE	6,25		
45	47,2	SESQUITERPENE	0,06		

Identification results 2 – YLANG YLANG COMPLETE BATCH Y10100

Peak	RT (min)	Compound	%	Norm (%)	Allergens (%)
46	47,6	AROMADENDRENE	0,02		
47	48,0	SESQUITERPENE	0,02		
48	48,8	METHYL BENZOATE	2,41		
49	49,1	CADINA-3,5-DIENE	0,13		
50	49,5	CADINADIENE ISOMER	0,06		
51	49,6	SESQUITERPENE	0,04		
52	50,5	E-β-FARNESENE	0,01		
53	50,6	ZONARENE	0,04		
54	50,8	ETHYL BENZOATE	0,12		
55	51,1	ESTRAGOLE	0,05		
56	51,6	α-HUMULENE	2,34		
57	52,6	γ-MUUROLENE	1,50		
58	52,7	α-TERPINEOL	0,08		
59	53,1	Z,E-α-FARNESENE	0,45		
60	54,2	GERMACRENE D	13,20		
61	54,3	MUUROLADIENE ISOMER	0,38		
62	54,5	CADINENE ISOMER	0,26		
63	54,8	α-MUUROLENE	0,87		
64	55,2	BENZYL ACETATE	6,61		
65	55,3	GERANIAL	0,10		0,10
66	55,6	BICYCLOGERMACRENE	0,40		
67	55,9	E,E-α-FARNESENE	13,08		
68	56,5	GERANYL ACETATE	4,61		
69	56,8	δ-CADINENE	2,59		
70	57,0	γ-CADINENE	0,71		
71	57,3	β-SESQUIPELLANDRENE	0,01		
72	57,4	α-CURCUMENE	0,01		
73	57,6	METHYL SALICYLATE	0,02		
74	58,4	CADINA-1,4-DIENE	0,13		
75	58,6	NEROL	0,03		
76	59,0	α-AMORPHENE	0,20		
77	60,4	2-PHENYLETHYL ACETATE	0,04		
78	61,3	Trans-ANETHOLE	0,26		
79	61,6	GERANIOL	0,18		
80	61,7	CALAMENENE	0,01		
81	63,2	BUTYL BENZOATE	0,03		
82	63,4	2-PHENYLMETHYL BUTYRATE	0,04		
83	63,8	BENZYL ALCOHOL	0,04		0,04
84	64,5	Epi-CUBEBOL	0,03		
85	66,2	α-CALACORENE	0,04		
86	67,4	CUBEBOL	0,07		
87	67,6	BENZENE PROPANOL ACETATE	0,01		
88	69,2	SESQUITERPENIC COMPOUND	0,04		
89	69,7	AROMATIC COMPOUND	0,05		
90	69,9	ISOCARYOPHYLLENE OXIDE	0,02		

Identification results 3 – YLANG YLANG COMPLETE BATCH Y10100

Peak	RT (min)	Compound	%	Norm (%)	Allergens (%)
91	70,4	CARYOPHYLLENE EPOXIDE	0,17		
92	70,6	ISOPRENYL BENZOATE	0,03		
93	70,9	METHYLEUGENOL	0,03		
94	72,1	NEROLIDOL	0,08		
95	72,3	SESQUITERPENOL	0,02		
96	73,5	EPOXY-6,7-HUMULENE	0,07		
97	73,7	GERMACRA-1,5-DIEN-4-OL	0,05		
98	73,9	EPI-CUBENOL	0,25		
99	74,2	PRENYL BENZOATE	0,40		
100	74,3	CUBENOL + LEVOJUNENOL	0,36		
101	74,7	ELEMOL	0,09		
102	74,9	p-CRESOL	0,09		
103	75,2	GUAJOL	0,11		
104	75,8	BENZYL ESTER	0,02		
105	76,0	EUDESMOL ISOMER	0,06		
106	76,5	SESQUITERPENOL	0,07		
107	76,8	cis-3-HEXENYL BENZOATE	0,06		
108	77,4	PHENYLETHYL ESTER + SPATHULENOL	0,09		
109	78,4	SESQUITERPENOL	0,07		
110	78,7	CINNAMYL ACETATE	3,81		
111	79,4	EUGENOL	0,05		0,05
112	79,5	T-CADINOL	0,47		
113	80,1	METHYLISOEUGENOL	0,05		
114	80,3	α-MUUROLOL	0,73		
115	80,9	CUBENOL ISOMER	0,25		
116	81,2	CADINOL ISOMER	0,19		
117	81,5	FARNESYL FORMIATE	0,05		
118	81,9	CADINOL ISOMER	0,06		
119	82,3	α-EUDESMOL	0,03		
120	82,7	α-CADINOL	1,44		
121	83,6	FARNESYL ACETATE	2,94		
122	83,8	FARNESAL	0,04		
123	84,2	SESQUITERPENOL	0,01		
124	84,6	OXYGENED COMPOUND	0,03		
125	85,3	CINNAMIC ALCOHOL	0,04		0,04
126	85,6	7-HYDROXYFARNESEN Mw=220	0,02		
127	86,3	SESQUITERPENOL Mw=222	0,11		
128	87,2	SESQUITERPENOL	0,04		
129	87,9	FARNESOL	1,29		1,29
130	88,3	ISOEUGENOL	0,25		0,25
131	91,7	ISOEUGENYL ACETATE	0,05		
132	94,7	SESQUITERPENOL Mw=220	0,18		
133	98,6	VANILLIN	0,05		
134	99,4	GERANYL BENZOATE	0,04		
135	101,0	2-METHYLPHENYL BENZOATE	0,03		
136	101,5	BENZYL BENZOATE	8,40		8,40
137	109,7	BENZYL SALICYLATE	3,90		3,90
		TOTAL	99,89		21,59