

Botany Evolution LLC

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Certificate Of Analysis**Sample Identification Information****Date of Analysis** 12/17/2016**Sample:** S0070**Product Name** Ceremonial**Lot#** VFE161112C**Country of Origin** Vanuatu**Country of Processing** Vanuatu**Manufacture Date** Nov-16**Expiration Date** Nov-19**General Product Specifications****Product Species** Piper Methysticum**Part Used** Root**Common Names** Kava kava, Awa, Yagona**Appearance** Beige powder**Analyzed Characteristics****Specification****Result****Test Method****Standardization**

2-15% Kavalactones

7.90%

HPLC

Identification

Complies by HPLC

Conform

HPLC

Kavalactone Profile

Noble

Pass

HPLC

Mesh Size

60-30

60

Sieve

Color

Beige to Yellow

Pass

Visual

Odor

Pass

Organoleptic

Taste

Pass

Organoleptic

Chemotype

245361

HPLC

K/DHM

2.21

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2687.04			
Methysticin	M	1	2.28	690.249	8.79%	0.86%	6
Dihydromethysticin	DHM	2	2.99	614.201	7.82%	1.00%	5
Kavain	K	3	1	4059.923	51.70%	2.21%	4
Dihydrokavain	DHK	4	3.15	1326.352	16.89%	2.27%	2
Desmethoxyyangonin	Y	5	2.26	489.92	6.24%	0.60%	1
Yangonin	DMY	6	2.63	672.606	8.56%	0.96%	3
Kavalactones			Total:	7853.251	100.00%	7.90%	

*See data in attachment HPLC1100 Agilent Certificate with Chromatogram graph.

This result are in house tested and the best of our knowledge and experience. Using calibrated equipment.

We are dedicated to offer the best Quality of Botanical products on the market. We test and stand behind our products.

Disclaimer* the test results are accurate to the best of our knowledge and are based upon reputable laboratory and industry standard testing methods.

These results should not be used as a final determination for use in a finished product. It is recommended that you verify these test results with an in house quality control department or obtain an additional independent third party lab to verify that this material meets specifications

Botany Evolution, its board of directors, contract laboratories, employees, and affiliates are held harmless from any loss or damages resulting from the use or misuse of this document. The appropriate use of this product is the sole responsibility of the user of the purchasing party.

SAMPLE S0070
Vial 13

0.73206g

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_12_17_16_15MINMETHOD 2016-12-17 17-44-32\013-1201.D

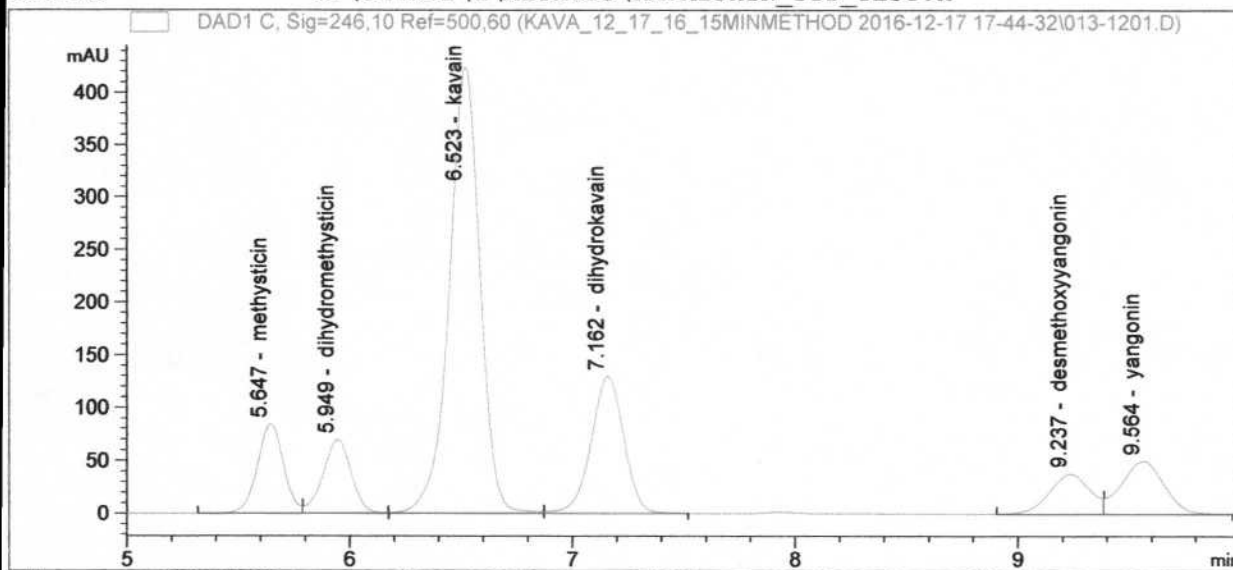
SEQUENCE C:\CHEM32\1\DATA\KAVA_12_17_16_15MINMETHO->

Injection date 12/17/2016

Injection time 9:31:16 PM

Acq. operator KRISTL

Method C:\CHEM32\1\METHODS\KAVA15MIN_STD_TEST.M



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.647	690.249	8.79	0.049
2	dihydromethysticin	5.949	614.201	7.82	0.057
3	kavain	6.523	4059.923	51.70	1.530
4	dihydrokavain	7.162	1326.352	16.89	0.344
5	desmethoxyyangonin	9.237	489.920	6.24	0.035
6	yangonin	9.564	672.606	8.56	0.057