

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 6/8/2017Sample: S0122Product Name CEREMONIAL KAVALot# VFE170413CCountry of Origin VANUATUCountry of Processing VANUATUManufacture Date 04/13/17Expiration Date 04/13/20**General Product Specifications**Product Species Piper MethysticumPart Used RootCommon Names Kava kava, Awa, YagonaAppearance Beige powder

<u>Analyzed Characteristics</u>	<u>Specification</u>	<u>Result</u>	<u>Test Method</u>
<u>Standardization</u>	2-15% Kavalactones	10.37%	HPLC
<u>Identification</u>	Complies by HPLC	Conform	HPLC
<u>Kavalactone Profile</u>	Noble	PASS	HPLC
<u>Mesh Size</u>	60-30	60	Sieve
<u>Color</u>	Beige to Yellow	Pass	Visual
<u>Odor</u>		Pass	Organoleptic
<u>Taste</u>		Pass	Organoleptic
<u>Chemotype</u>		243516	HPLC
<u>K/DHM</u>		2.93	Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2680			
Methysticin	M	1	2.19	732.884	7.46%	0.84%	6
Dihydromethysticin	DHM	2	3.23	584.121	5.95%	0.99%	5
Kavain	K	3	1	5530.552	56.33%	2.90%	4
Dihydrokavain	DHK	4	4.21	1526.473	15.55%	3.38%	2
Desmethoxyyangonin	Y	5	2.74	654.481	6.67%	0.94%	1
Yangonin	DMY	6	3.16	789.736	8.04%	1.31%	3
Kavalactones			Total:	9818.247	100.00%	10.37%	243516

*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 S0122
Vial 6

WT 0.76009 g

wavelength 246 nm

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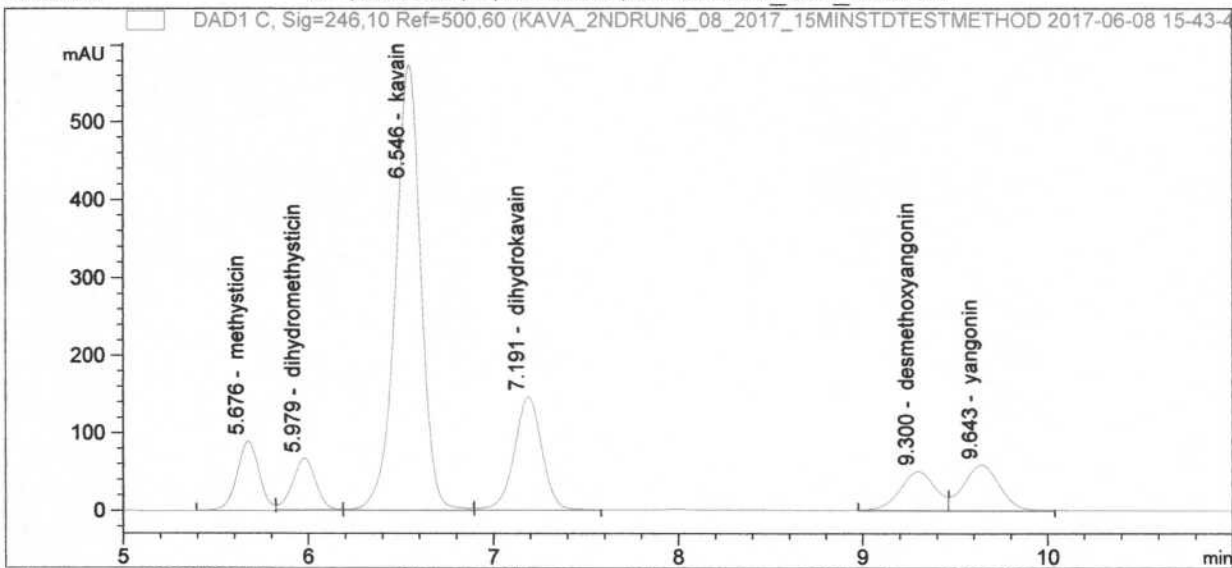
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Injection date 6/8/2017

Injection time 5:05:24 PM

Acq. operator KRISTL

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



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.676	732.884	7.46	0.000
2	dihydromethysticin	5.979	584.121	5.95	0.000
3	kavain	6.546	5530.552	56.33	0.000
4	dihydrokavain	7.191	1526.473	15.55	0.001
5	desmethoxyyangonin	9.300	654.481	6.67	0.000
6	yangonin	9.643	789.736	8.04	0.000