

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis

Sample Identification Information

Date of Analysis 3/23/2018

Sample: S0370

Product Name LATERAL ROOTS - K

Lot# SIV180314TLR

Country of Origin/Region SOLOMON ISLANDS

Country of Processing SOLOMON ISLANDS

Manufacture Date 03/14/18

Expiration Date 03/14/21

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
<u>Standardization</u>	2-15% Kavalactones	14.83%	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>		423165	HPLC
<u>K/DHM</u>		5.48	Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2962.707			
Methysticin	M	1	2.19	853.053	5.22%	0.89%	6
Dihydromethysticin	DHM	2	3.23	573.585	3.51%	0.88%	5
Kavain	K	3	1	10147.298	62.04%	4.846%	4
Dihydrokavain	DHK	4	4.21	2414.156	14.76%	4.854%	2
Desmethoxyyangonin	DMY	5	2.74	1084.995	6.63%	1.42%	1
Yangonin	Y	6	3.16	1283.123	7.84%	1.94%	3
Kavalactones			Total:	16356.210	100.00%	14.83%	423165

*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.

Misti Youngs 3/26/18

SAMPLE S0370
Vial 11

0.75621g/50ML

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_3_23_2018_15MINSTDTESTMETHOD 2018-03-23 14-52-20\011->

SEQUENCE C:\CHEM32\1\DATA\KAVA_3_23_2018_ ->

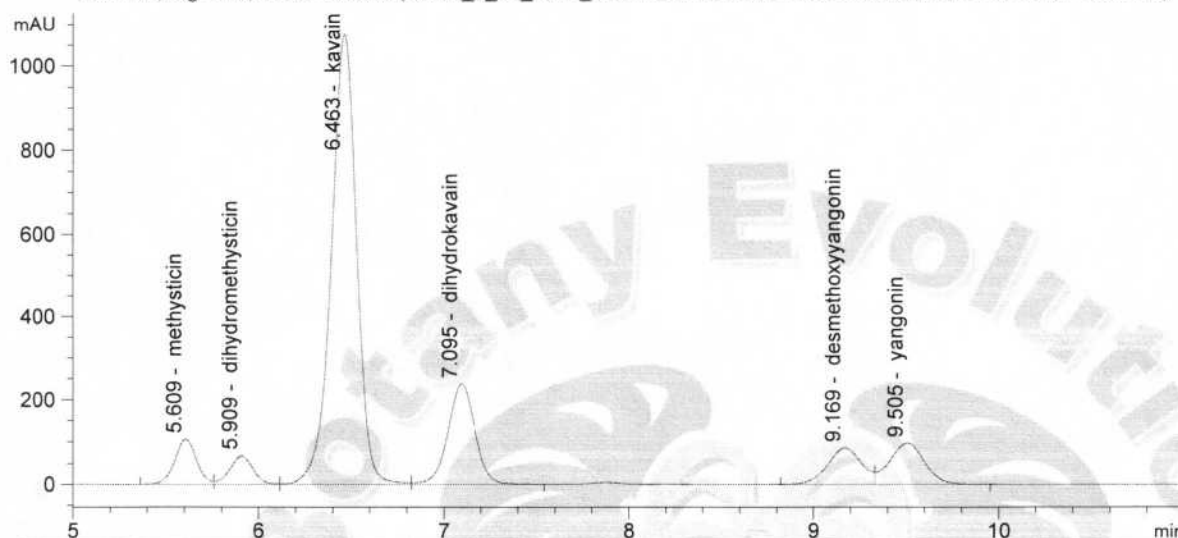
Injection date 3/23/2018

Injection time 5:18:10 PM

Acq. operator KRISTL

Method C:\CHEM32\1\METHODS\KAVA15MIN STD TEST.M

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_3_23_2018_15MINSTDTESTMETHOD 2018-03-23 14-52-20\011-0601.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.609	853.053	5.22	0.000
2	dihydromethysticin	5.909	573.585	3.51	0.000
3	kavain	6.463	10147.298	62.04	0.001
4	dihydrokavain	7.095	2414.156	14.76	0.001
5	desmethoxyyangonin	9.169	1084.995	6.63	0.000
6	yangonin	9.505	1283.123	7.84	0.000

3/26/18
UG