

Botany Evolution LLC

2510 Kirby Circle NE
 Palm Bay, FL 32945
 321-802-4583

Certificate Of Analysis

Sample Identification Information

Date of Analysis 5/24/2018
Sample: S0419
Product Name LATERAL ROOTS [GOLD]
Lot# SIV180511YLR

Country of Origin/Region SOLOMON ISLANDS
Country of Processing SOLOMON ISLANDS
Manufacture Date 05/11/18
Expiration Date 05/11/21

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	13.31%	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>		245361	HPLC
<u>K/DHM</u>		1.96	Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			3001.885			
Methysticin	M	1	2.19	1365.158	10.64%	1.410%	6
Dihydromethysticin	DHM	2	3.23	973.56	7.59%	1.48%	5
Kavain	K	3	1	6157.372	47.98%	2.90%	4
Dihydrokavain	DHK	4	4.21	2473.824	19.28%	4.91%	2
Desmethoxyyangonin	DMY	5	2.74	913.727	7.12%	1.18%	1
Yangonin	Y	6	3.16	949.144	7.40%	1.415%	3
Kavalactones			Total:	12832.785	100.00%	13.31%	245361

*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.

Mustel Youngs 5/25/18

SAMPLE S0419
Vial 15

0.75569g/50ml

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_5_24_2018_15MINSTDTESTMETHOD 2018-05-24 18-16-27\015->

SEQUENCE C:\CHEM32\1\DATA\KAVA_5_24_2018_ ->

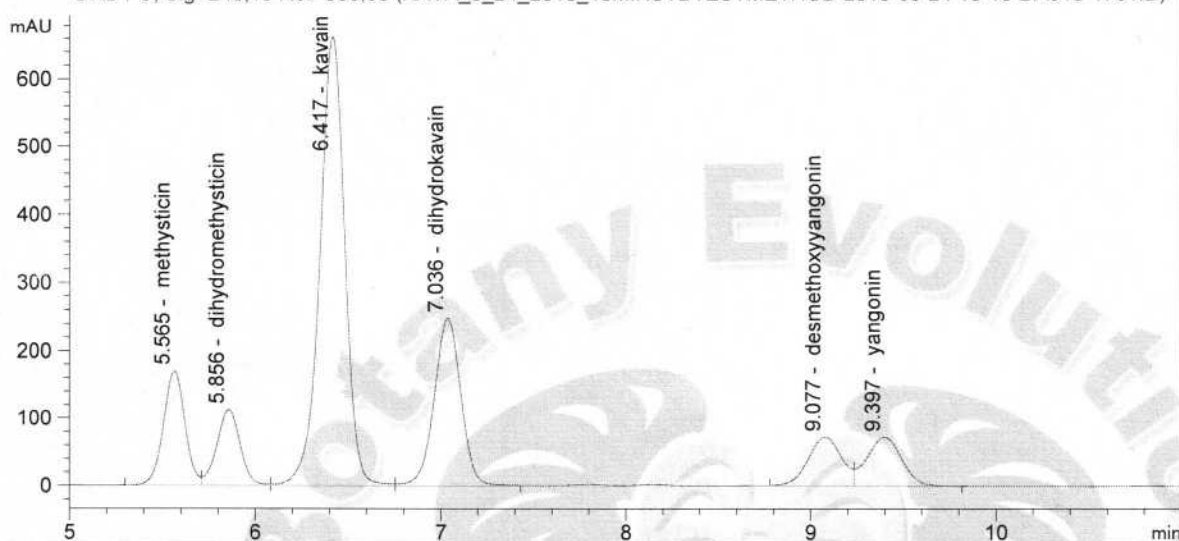
Injection date 5/24/2018

Injection time 11:40:03 PM

Acq. operator KRISTL

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

DAD1 C, Sig=246,10 Ref=500.60 (KAVA_5_24_2018_15MINSTDTESTMETHOD 2018-05-24 18-16-27\015-1701.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.565	1365.158	10.64	0.000
2	dihydromethysticin	5.856	973.560	7.59	0.000
3	kavain	6.417	6157.372	47.98	0.000
4	dihydrokavain	7.036	2473.824	19.28	0.001
5	desmethoxyyangonin	9.077	913.727	7.12	0.000
6	yangonin	9.397	949.144	7.40	0.000

5/25/18
VS