

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information****Date of Analysis** 2/15/2018**Sample:** S0339**Product Name** LATERAL ROOTS**Lot#** SIV180203WLR**Country of Origin**

SOLOMON ISLANDS

REGION

WESTERN PROVINCE/NEW GEORGIA

Country of Processing

SOLOMON ISLANDS

Manufacture Date

02/03/18

Expiration Date

02/03/21

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****Standardization**

2-15% Kavalactones

14.27%

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

245631

HPLC

K/DHM

1.76

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2989.64			
Methysticin	M	1	2.19	1517.923	11.36%	1.58%	6
Dihydromethysticin	DHM	2	3.23	1069.874	8.01%	1.64%	5
Kavain	K	3	1	6066.384	45.42%	2.88%	4
Dihydrokavain	DHK	4	4.21	2623.458	19.64%	5.25%	2
Desmethoxyyangonin	DMY	5	2.74	1048.783	7.85%	1.37%	1
Yangonin	Y	6	3.16	1030.801	7.72%	1.55%	3
Kavalactones			Total:	13357.223	100.00%	14.27%	245631

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

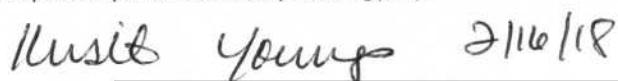
This result are in house tested and the best of our knowledge and experience. Using calibrated equipment.

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 S0341
Vial 18

0.76761g/50ml

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_2_15_2018_15MINSTDTESTMETHOD 2018-02-15 17-23-22\018->

SEQUENCE C:\CHEM32\1\DATA\KAVA_2_15_2018_ ->

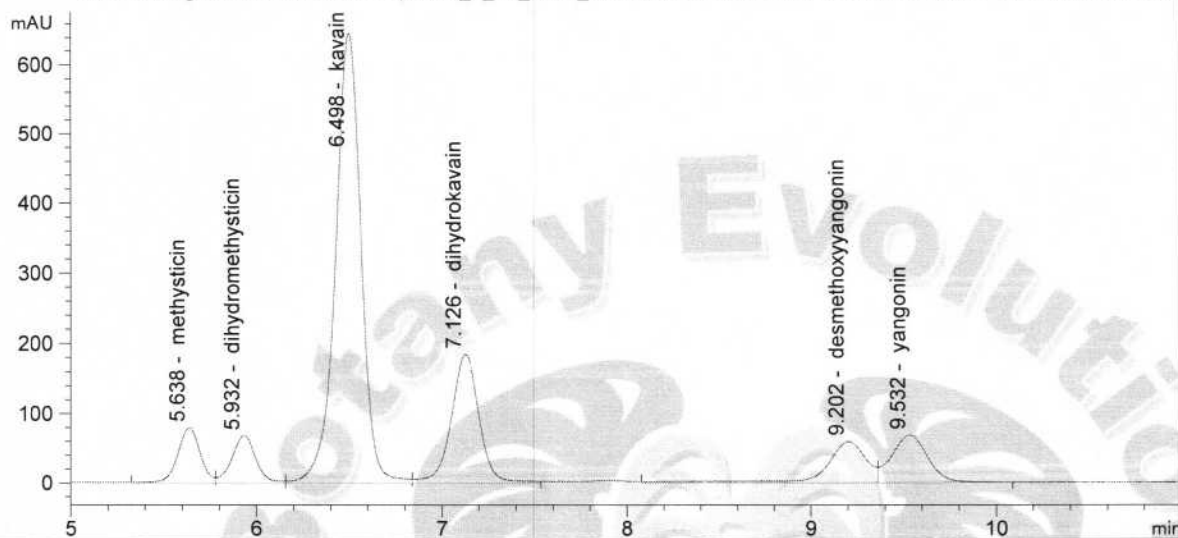
Injection date 2/15/2018

Injection time 11:19:07 PM

Acq. operator KRISTL

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

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_2_15_2018_15MINSTDTESTMETHOD 2018-02-15 17-23-22\018-1901.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.638	664.186	5.90	0.000
2	dihydromethysticin	5.932	611.006	5.43	0.000
3	kavain	6.498	6207.948	55.15	0.000
4	dihydrokavain	7.126	1946.749	17.29	0.001
5	desmethoxyyangonin	9.202	891.868	7.92	0.000
6	yangonin	9.532	935.471	8.31	0.000

Handwritten signature and date:
148
2/16/18