

**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:** S0344**Product Name** LATERAL ROOTS**Lot#** SIV180203TLR**Country of Origin**

SOLOMON ISLANDS

**Region**

SANTA CRUZ/TIMOTU

**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

14.81%

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**

423165

HPLC

**K/DHM**

5.24

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2989.64			
Methysticin	M	1	2.19	908.336	5.47%	0.94%	6
Dihydromethysticin	DHM	2	3.23	607.397	3.65%	0.93%	5
Kavain	K	3	1	10285.766	61.89%	4.86%	4
Dihydrokavain	DHK	4	4.21	2264.141	13.62%	4.50%	2
Desmethoxyyangonin	DMY	5	2.74	1209.368	7.28%	1.57%	1
Yangonin	Y	6	3.16	1343.385	8.08%	2.01%	3
Kavalactones			<b>Total:</b>	<b>16618.393</b>	<b>100.00%</b>	<b>14.81%</b>	<b>423165</b>

\*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 2/16/18*

SAMPLE S0343  
 Vial 20

0.76947g/50ml

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA\_2\_15\_2018\_15MINSTDTESTMETHOD 2018-02-15 17-23-22\020->

SEQUENCE C:\CHEM32\1\DATA\KAVA\_2\_15\_2018\_ ->

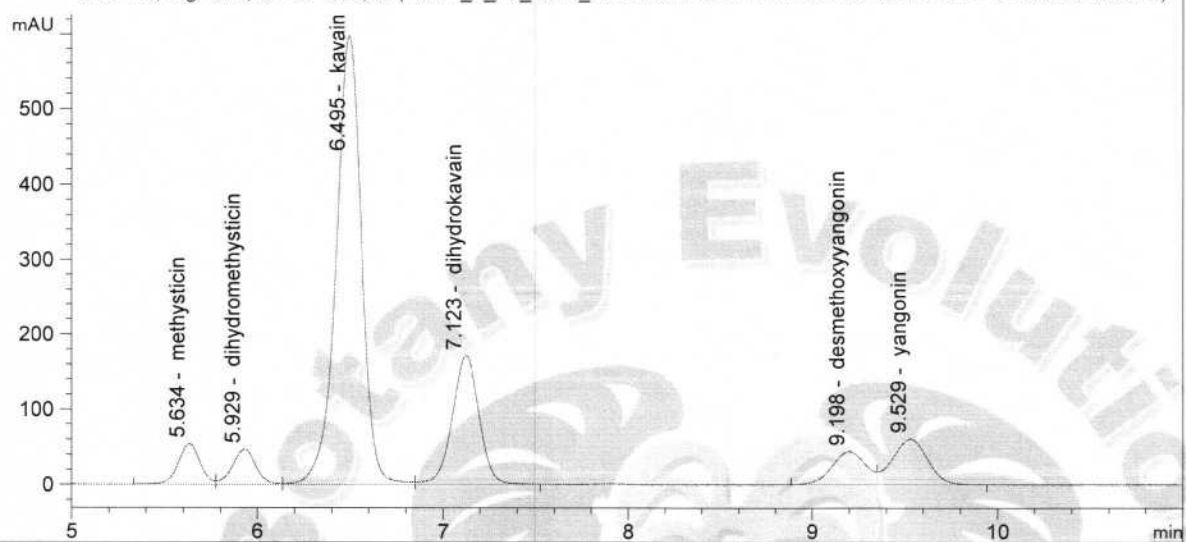
Injection date 2/15/2018

Injection time 11:51:25 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\020-2101.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.634	441.905	4.56	0.000
2	dihydromethysticin	5.929	410.319	4.23	0.000
3	kavain	6.495	5713.955	58.93	0.000
4	dihydrokavain	7.123	1744.038	17.99	0.001
5	desmethoxyyangonin	9.198	565.759	5.84	0.000
6	yangonin	9.529	819.611	8.45	0.000

2/16/18  
 KR