

# Botany Evolution LLC

2510 Kirby Circle NE

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321-802-4583

## Certificate Of Analysis

### Sample Identification Information

Date of Analysis 8/18/2017

Sample: S0177

Product Name LATERAL ROOT

Lot# VFE170718LR

Country of Origin VANUATU

Country of Processing VANUATU

Manufacture Date 07/18/17

Expiration Date 07/18/20

### General Product Specifications

Product Species Piper Methysticum

Part Used Root

Common Names Kava kava, Awa, Yagona

Appearance Beige powder

<u>Analyzed Characteristics</u>	<u>Specification</u>	<u>Result</u>	<u>Test Method</u>
<u>Standardization</u>	2-15% Kavalactones	12.36%	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>		5.16	Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2776.014			
Methysticin	M	1	2.19	864.88	6.47%	0.94%	6
Dihydromethysticin	DHM	2	3.23	495.805	3.71%	0.79%	5
Kavain	K	3	1	8271.442	61.84%	4.09%	4
Dihydrokavain	DHK	4	4.21	1703.912	12.74%	3.55%	2
Desmethoxyyangonin	Y	5	2.74	963.122	7.20%	1.31%	1
Yangonin	DMY	6	3.16	1077.194	8.05%	1.68%	3
Kavalactones			<b>Total:</b>	<b>13376.355</b>	<b>100.00%</b>	<b>12.36%</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 8/18/17*

SAMPLE S0177  
Vial 30

0.77898g/50ml

wavelength 246 nm

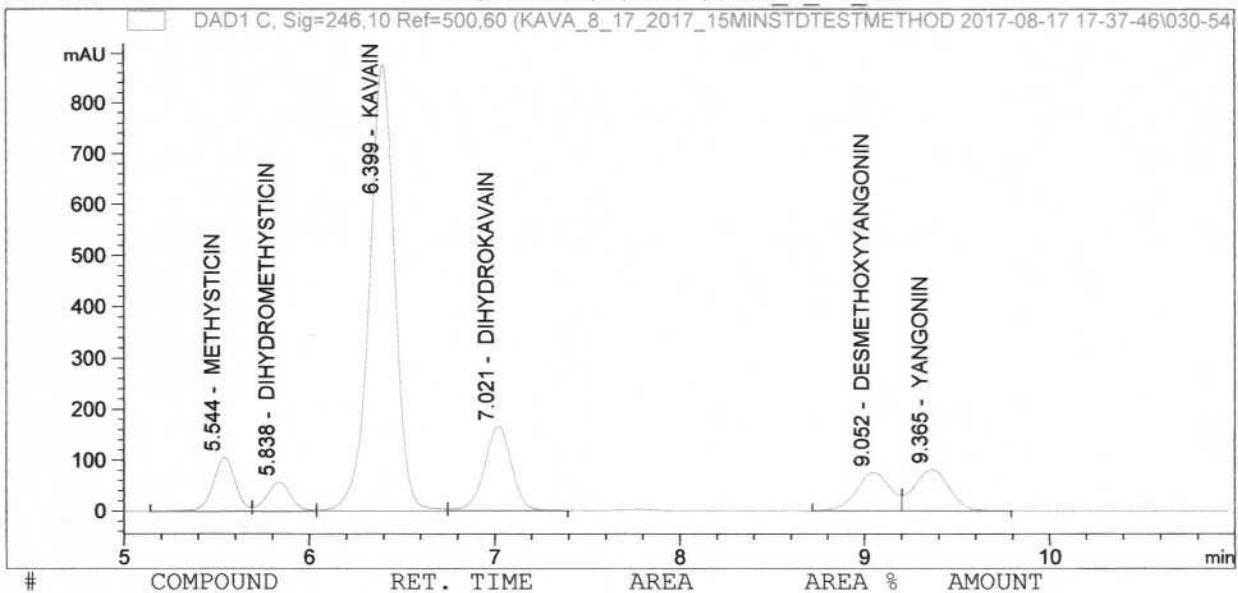
C:\CHEM32\1\DATA\KAVA\_8\_17\_2017\_15MINSTDTESTMETHOD 2017-08-17 17-37-46\030->  
SEQUENCE

Injection date 8/18/2017

Injection time 8:25:51 AM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA\_8\_17\_201->



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	METHYSTICIN	5.544	864.880	6.47	0.000
2	DIHYDROMETHYSTICIN	5.838	495.805	3.71	0.000
3	KAVAIN	6.399	8271.442	61.84	0.000
4	DIHYDROKAVAIN	7.021	1703.912	12.74	0.001
5	DESMETHOXYANGONIN	9.052	963.122	7.20	0.000
6	YANGONIN	9.365	1077.194	8.05	0.000

*ug*  
8/18/17