

**Botany Evolution LLC**

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

**Certificate Of Analysis****Sample Identification Information**Date of Analysis 6/24/2019Sample: S0683Product Name LATERAL ROOTSLot# VFE190527LRCountry of Origin VANUATUCountry of Processing VANUATUManufacture Date 05/27/19Best By Date 05/27/22**General Product Specifications**Product Species Piper MethysticumPart Used RootCommon Names Kava kava, Awa, YagonaAppearance Yellow powder**Analyzed Characteristics****Specification****Result****Test Method**Standardization

2-17% Kavalactones

14.17%

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

4.38

Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2349.48			
Methysticin	M	1	2.21	1048.931	7.71%	1.27%	6
Dihydromethysticin	DHM	2	3.38	585.475	4.30%	1.05%	5
Kavain	K	3	1	8284.507	60.91%	4.59%	4
Dihydrokavain	DHK	4	3.08	1741.088	12.80%	4.07%	2
Desmethoxyyangonin	DMY	5	2.52	932.197	6.85%	1.42%	1
Yangonin	Y	6	3.12	1009.36	7.42%	1.77%	3
<b>Kavalactones</b>			<b>Total:</b>	<b>13601.558</b>	<b>100.00%</b>	<b>14.17%</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.

Chemist

*Misti Youngs*

Date

6/27/19

SAMPLE S0683  
Vial 13

0.76438g/50ml

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA\_6\_24\_2019\_15MINSTDTESTMETHOD 2019-06-24 16-31-18\013->

SEQUENCE C:\CHEM32\1\DATA\KAVA\_6\_24\_2019\_ ->

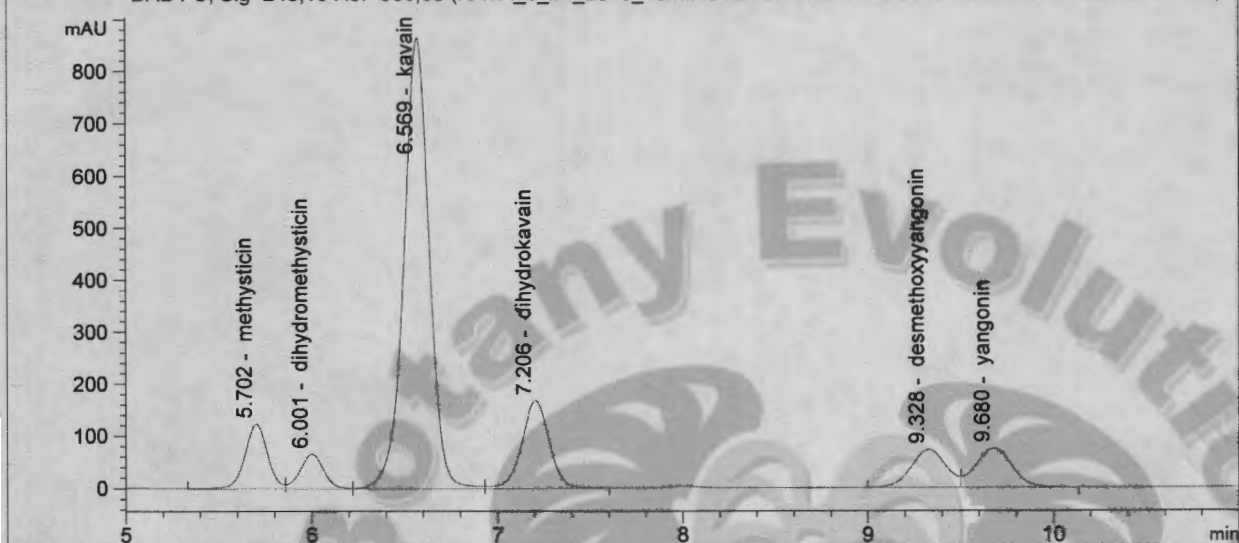
Injection date 6/24/2019

Injection time 8:50:32 PM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA\_6\_24\_201->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA\_6\_24\_2019\_15MINSTDTESTMETHOD 2019-06-24 16-31-18\013-1301.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.702	1048.931	7.71	0.000
2	dihydromethysticin	6.001	585.475	4.30	0.000
3	kavain	6.569	8284.507	60.91	0.001
4	dihydrokavain	7.206	1741.088	12.80	0.000
5	desmethoxyyangonin	9.328	932.197	6.85	0.000
6	yangonin	9.680	1009.360	7.42	0.000

6/27/19  
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