

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 1/22/2019Sample: S0592Product Name KAKAMORALot# SIV181228TK5050Country of Origin SOLOMON ISLANDSCountry of Processing SOLOMON ISLANDSManufacture Date 12/28/18Best By Date 12/28/21**General Product Specifications**Product Species Piper MethysticumPart Used RootCommon Names Kava kava, Awa, YagonaAppearance Beige powder**Analyzed Characteristics****Specification****Result****Test Method**Standardization

2-17% Kavalactones

10.14%

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

243156

HPLC

K/DHM

3.75

Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2561.166			
Methysticin	M	1	2.21	516.071	5.42%	0.59%	6
Dihydromethysticin	DHM	2	3.38	445.871	4.69%	0.75%	5
Kavain	K	3	1	5394.394	56.69%	2.80%	4
Dihydrokavain	DHK	4	3.08	1742.02	18.31%	3.81%	2
Desmethoxyyangonin	DMY	5	2.52	603.531	6.34%	0.86%	1
Yangonin	Y	6	3.12	813.995	8.55%	1.34%	3
Kavalactones			Total:	9515.882	100.00%	10.14%	243156

*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.

Austle Youngs 1/23/19

SAMPLE S0592
Vial 12

0.76508g/50 ML

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_1_22_2019_15MINSTDTESTMETHOD 2019-01-22 16-28-52\012->

SEQUENCE C:\CHEM32\1\DATA\KAVA_1_22_2019_ ->

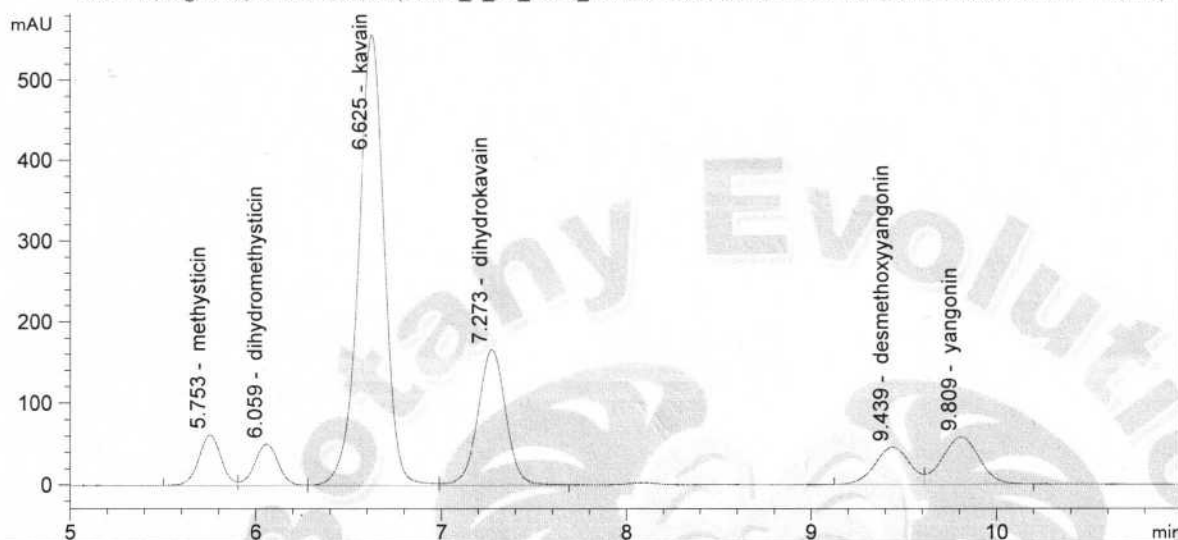
Injection date 1/22/2019

Injection time 8:48:05 PM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA_1_22_201->

DAD1 C, Sig=246,10 Ref=500.60 (KAVA_1_22_2019_15MINSTDTESTMETHOD 2019-01-22 16-28-52\012-1301.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.753	516.071	5.42	0.000
2	dihydromethysticin	6.059	445.871	4.69	0.000
3	kavain	6.625	5394.394	56.69	0.000
4	dihydrokavain	7.273	1742.020	18.31	0.000
5	desmethoxyyangonin	9.439	603.531	6.34	0.000
6	yangonin	9.809	813.995	8.55	0.000

1/23/19
KR