

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 4/10/2019Sample: S0639Product Name GOLDLot# SIV190319YGCountry of Origin SOLOMON ISLANDSCountry of Processing SOLOMON ISLANDSManufacture Date 03/19/19Best By Date 03/19/22**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

10.79%

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

1.49

Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2574.441			
Methysticin	M	1	2.21	1018.321	11.29%	1.16%	6
Dihydromethysticin	DHM	2	3.38	834.998	9.26%	1.41%	5
Kavain	K	3	1	4010.22	44.48%	2.09%	4
Dihydrokavain	DHK	4	3.08	1913.0914	21.22%	4.21%	2
Desmethoxyyangonin	DMY	5	2.52	592.231	6.57%	0.85%	1
Yangonin	Y	6	3.12	647.095	7.18%	1.07%	3
Kavalactones			Total:	9015.956	100.00%	10.79%	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.

Chemist

Misty Youngs

Date

4/11/19

SAMPLE S0639
Vial 18

0.75709g/50mL

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_4_10_2019_15MINSTDTESTMETHOD 2019-04-10 14-46-27\018->

SEQUENCE C:\CHEM32\1\DATA\KAVA_4_10_2019_ ->

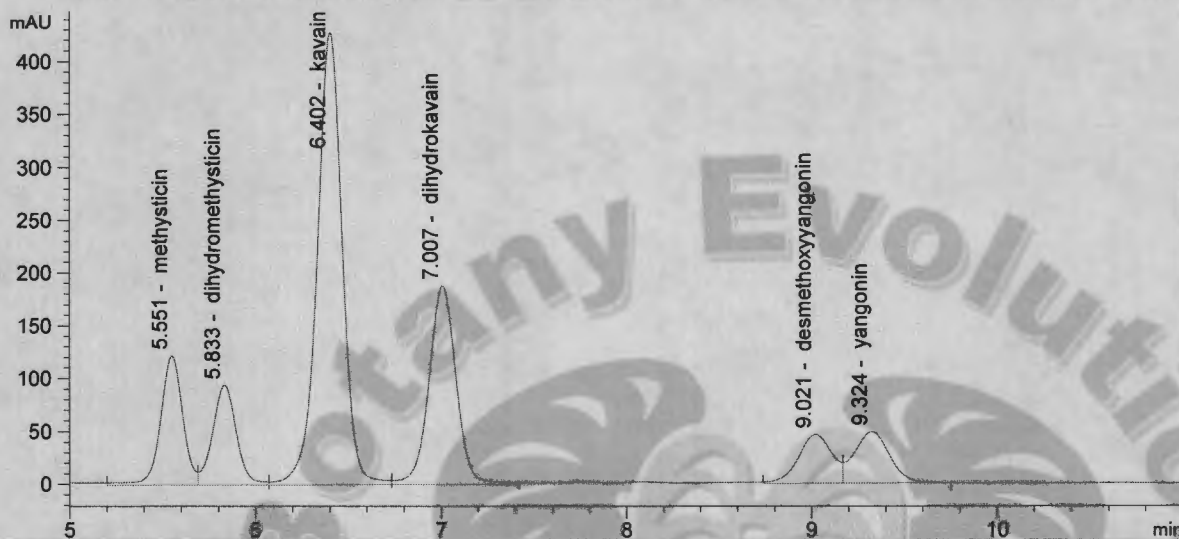
Injection date 4/10/2019

Injection time 8:26:06 PM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA_4_10_201->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_4_10_2019_15MINSTDTESTMETHOD 2019-04-10 14-46-27\018-1801.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.551	1018.321	11.29	0.000
2	dihydromethysticin	5.833	834.998	9.26	0.000
3	kavain	6.402	4010.220	44.48	0.000
4	dihydrokavain	7.007	1913.091	21.22	0.001
5	desmethoxyyangonin	9.021	592.231	6.57	0.000
6	yangonin	9.324	647.095	7.18	0.000

Handwritten signature: HLL/KR
MY