

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 2/15/2018Sample: S0336Product Name LATERAL ROOTSLot# SIV180203YLRCountry of Origin/Region SOLOMON ISLANDS/ISABELCountry of Processing SOLOMON ISLANDSManufacture Date 02/03/18Expiration Date 02/03/21**General Product Specifications**Product Species Piper MethysticumPart Used RootCommon Names Kava kava, Awa, YagonaAppearance Beige powder**Analyzed Characteristics****Specification****Result****Test Method**Standardization

2-15% Kavalactones

13.88%

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

1.69

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2989.64			
Methysticin	M	1	2.19	1556.866	11.79%	1.60%	6
Dihydromethysticin	DHM	2	3.23	1103.388	8.36%	1.67%	5
Kavain	K	3	1	6027.391	45.65%	2.82%	4
Dihydrokavain	DHK	4	4.21	2623.942	19.87%	5.17%	2
Desmethoxyyangonin	DMY	5	2.74	922.927	6.99%	1.18%	1
Yangonin	Y	6	3.16	969.596	7.34%	1.43%	3
Kavalactones			Total:	13204.110	100.00%	13.88%	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.

Muste Youngs 2/16/18

SAMPLE S0337
 Vial 14

0.76029g/50ml

wavelength 246 nm

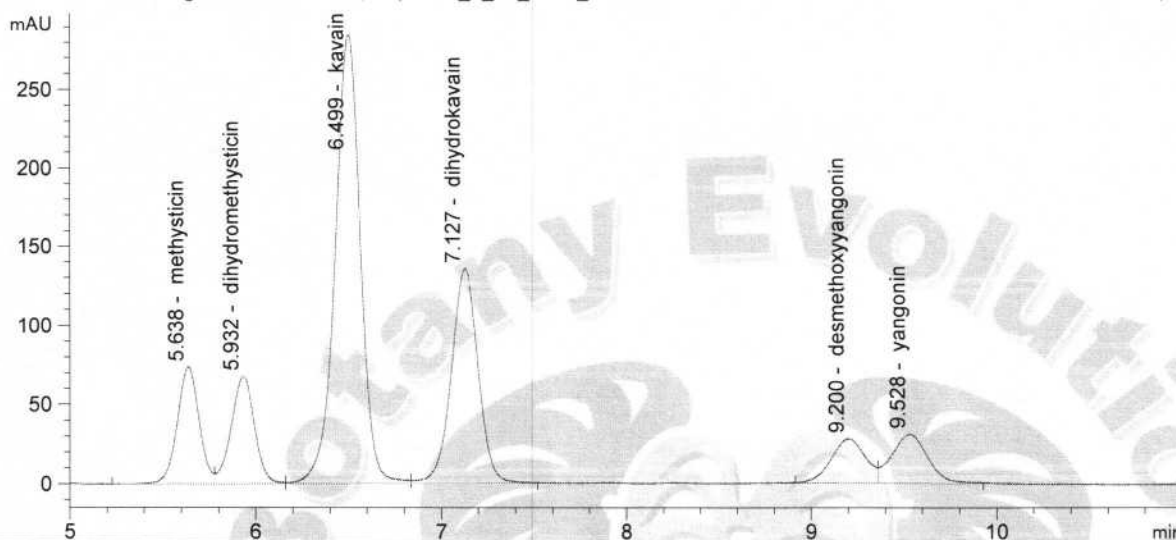
C:\CHEM32\1\DATA\KAVA_2_15_2018_15MINSTDTESTMETHOD 2018-02-15 17-23-22\014->
 SEQUENCE C:\CHEM32\1\DATA\KAVA_2_15_2018_ ->

Injection date 2/15/2018
 Injection time 10:14:38 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\014-1501.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.638	598.607	9.88	0.000
2	dihydromethysticin	5.932	595.360	9.82	0.000
3	kavain	6.499	2704.982	44.63	0.000
4	dihydrokavain	7.127	1377.542	22.73	0.001
5	desmethoxyyangonin	9.200	359.598	5.93	0.000
6	yangonin	9.528	424.197	7.00	0.000

2/16/18
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