

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 8/28/2017Sample: S0188Product Name BASAL ROOTLot# SIV170731BRCountry of Origin

SOLOMON ISLANDS

Country of Processing

SOLOMON ISLANDS

Manufacture Date

07/31/17

Expiration Date

07/31/20

General Product SpecificationsProduct Species Piper MethysticumCommon Names

Kava kava, Awa, Yagona

Part Used RootAppearance

Beige powder

Analyzed Characteristics**Specification****Result****Test Method**Standardization

2-15% Kavalactones

13.40%

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

243165

HPLC

K/DHM

4.82

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2828.846			
Methysticin	M	1	2.19	810.949	5.77%	0.8859%	6
Dihydromethysticin	DHM	2	3.23	549.634	3.91%	0.8856%	5
Kavain	K	3	1	8561.1	60.96%	4.27%	4
Dihydrokavain	DHK	4	4.21	2044.35	14.56%	4.29%	2
Desmethoxyyangonin	Y	5	2.74	986.943	7.03%	1.35%	1
Yangonin	DMY	6	3.16	1090.537	7.77%	1.72%	3
Kavalactones			Total:	14043.513	100.00%	13.40%	243165

*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.

Mistie Youngs 9/11/17

SAMPLE S0188
 Vial 16

0.75825g/50ml

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_8_29_2017_15MINSTDTESTMETHOD 2017-08-29 16-49-02\016->

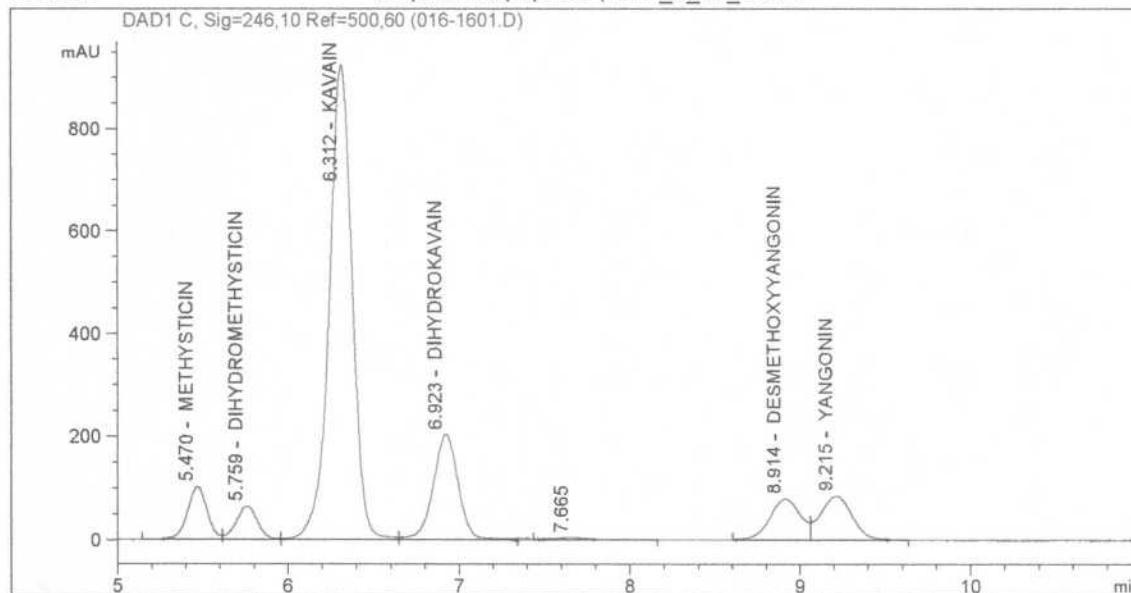
SEQUENCE C:\Chem32\1\DATA\KAVA_8_29_2017_ ->

Injection date 8/29/2017

Injection time 9:24:06 PM

Acq. operator KRISTL

Method C:\Chem32\1\DATA\KAVA_8_29_201->



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1		0.790	14.135	0.10	0.000
2		1.023	36.760	0.25	0.000
3		1.246	27.023	0.19	0.000
4		1.402	19.161	0.13	0.000
5		1.698	36.884	0.25	0.000
6		1.871	13.815	0.10	0.000
7		1.984	11.141	0.08	0.000
8		2.099	26.028	0.18	0.000
9		2.245	20.864	0.14	0.000
10		2.417	22.847	0.16	0.000
11		2.817	20.635	0.14	0.000
12		3.105	35.551	0.24	0.000
13		3.206	67.510	0.46	0.000
14		3.502	29.629	0.20	0.000
15		3.881	31.504	0.22	0.000
16		4.001	30.574	0.21	0.000
17	METHYSTICIN	5.470	810.949	5.58	0.000
18	DIHYDROMETHYSTICIN	5.759	549.634	3.78	0.000
19	KAVAIN	6.312	8561.100	58.90	0.000
20	DIHYDROKAVAIN	6.923	2044.350	14.06	0.002
21		7.665	47.776	0.33	0.000
22	DESMETHOXYANGONIN	8.914	986.943	6.79	0.000
23	YANGONIN	9.215	1090.537	7.50	0.000