

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 10/17/2017Sample: S0218Product Name BLACK LABELLot# VFE171008BLCountry of Origin VANUATUCountry of Processing VANUATUManufacture Date 10/08/17Expiration Date 10/08/20**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

8.13%

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

243516

HPLC

K/DHM

3.01

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2876.599			
Methysticin	M	1	2.19	697.09	8.24%	0.73%	6
Dihydromethysticin	DHM	2	3.23	488.958	5.78%	0.76%	5
Kavain	K	3	1	4748.034	56.10%	2.28%	4
Dihydrokavain	DHK	4	4.21	1264.953	14.95%	2.55%	2
Desmethoxyyangonin	Y	5	2.74	569.297	6.73%	0.75%	1
Yangonin	DMY	6	3.16	695.233	8.21%	1.05%	3
Kavalactones			Total:	8463.565	100.00%	8.13%	243516

*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.

Musta Youngs 10/18/17

SAMPLE S0218
Vial 21

0.77534g/50ml

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_10_17_2017_15MINSTDTESTMETHOD 2017-10-17 17-31-34\02->

SEQUENCE C:\CHEM32\1\DATA\KAVA_10_17_2017_ ->

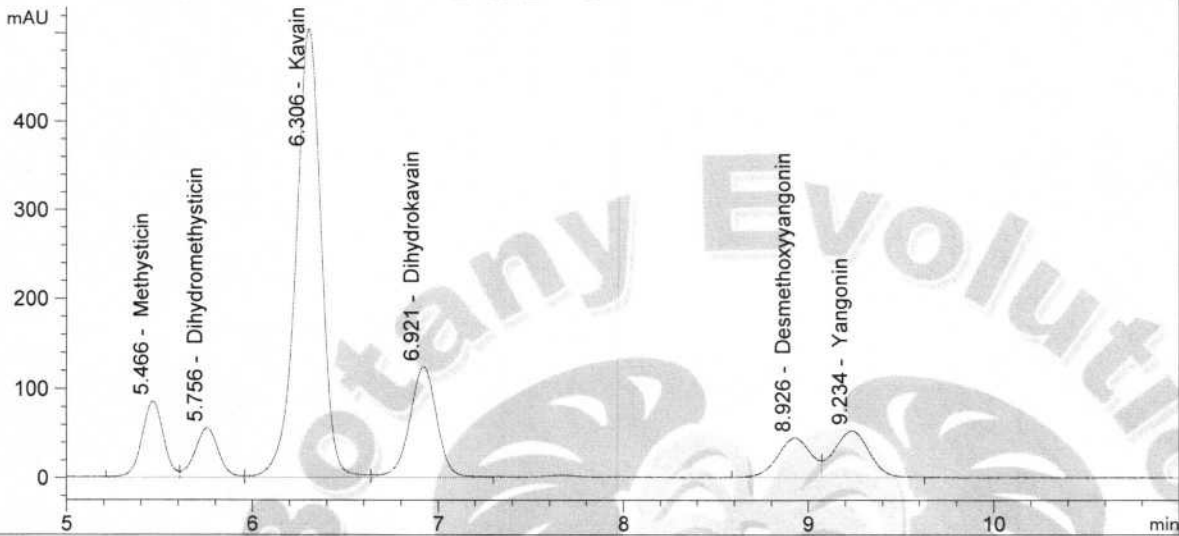
Injection date 10/17/2017

Injection time 9:34:02 PM

Acq. operator KRISTL

Method C:\CHEM32\1\METHODS\KAVA15MIN STD TEST.M

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_10_17_2017_15MINSTDTESTMETHOD 2017-10-17 17-31-34\021-1401.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	Methysticin	5.466	697.090	8.24	0.000
2	Dihydromethysticin	5.756	488.958	5.78	0.000
3	Kavain	6.306	4748.034	56.10	0.000
4	Dihydrokavain	6.921	1264.953	14.95	0.001
5	Desmethoxyyangonin	8.926	569.297	6.73	0.000
6	Yangonin	9.234	695.233	8.21	0.000

Handwritten signature and date:
10/18/17