

# Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

## Certificate Of Analysis

### Sample Identification Information

Date of Analysis 2/18/2022

Sample: S1454

Product Name BLACK LABEL

Lot# VPS220117BL

Country of Origin

VANUATU

Country of Processing

USA

Manufacture Date

01/17/22

Best By Date

01/17/25

### General Product Specifications

Product Species Piper Methysticum

Part Used Root

Common Names

Kava kava, Awa, Yagona

Appearance

Yellow, beige powder

### Analyzed Characteristics

#### Specification

#### Result

#### Test Method

Standardization

2-17% Kavalactones

10.70%

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

3.9

Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2402.604			
Methysticin	M	1	2.21	647.36	6.55%	0.78%	6
Dihydromethysticin	DHM	2	3.38	463.347	4.69%	0.82%	5
Kavain	K	3	1	5777.631	58.43%	3.18%	4
Dihydrokavain	DHK	4	3.08	1504.996	15.22%	3.49%	2
Desmethoxyyangonin	DMY	5	2.52	735.258	7.44%	1.11%	1
Yangonin	Y	6	3.12	759.541	7.68%	1.32%	3
Kavalactones			Total:	9888.133	100.00%	10.70%	243156

See data in attachment HPLC1100 Agilent Certificate with Chromatogram graph.

This result is 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

*Misti Youngs*

Date

*2/21/22*

SAMPLE S1454  
Vial 11

0.75350g/50mL

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA\_2\_18\_2022\_15MINSTDTESTMETHOD 2022-02-18 17-57-53\011->  
SEQUENCE C:\CHEM32\1\DATA\KAVA\_2\_18\_2022\_ ->

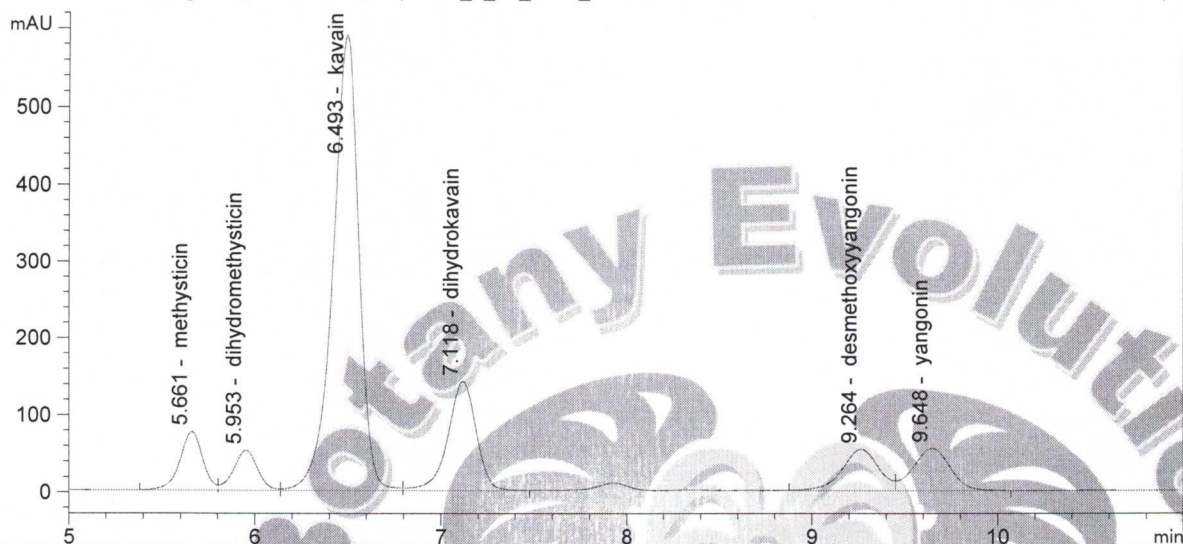
Injection date 2/18/2022

Injection time 9:58:38 PM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA\_2\_18\_202->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA\_2\_18\_2022\_15MINSTDTESTMETHOD 2022-02-18 17-57-53\011-1101.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
	methysticin	5.661	647.360	6.55	0.000
	dihydromethysticin	5.953	463.347	4.69	0.000
	kavain	6.493	5777.631	58.43	0.000
	dihydrokavain	7.118	1504.996	15.22	0.000
	desmethoxyyangonin	9.264	735.258	7.44	0.000
	yangonin	9.648	759.541	7.68	0.000

2/21/22  
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