

# Botany Evolution LLC

1510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

## Certificate Of Analysis

### Sample Identification Information

Date of Analysis 7/10/2023

Sample: S1924

Product Name 30% KAVA EXTRACT

Lot# CJ2306KE30

Country of Origin VANUATU

Country of Processing CHINA

Manufacture Date Feb-23

Best By Date Feb-26

### General Product Specifications

Product Species Piper Methysticum

Part Used Root

Common Names Kava kava, Awa, Yagona

Appearance Yellow, Brown, beige powder

### Analyzed Characteristics

#### Specification

#### Result

#### Test Method

Standardization

2-17% Kavalactones

33.70%

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

245361

HPLC

K/DHM

2.1

Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2334.351			
Methysticin	M	1	2.21	1612.311	9.61%	3.34%	6
Dihydromethysticin	DHM	2	3.38	1269.784	7.57%	3.88%	5
Kavain	K	3	1	8547.026	50.94%	8.08%	4
Dihydrokavain	DHK	4	3.08	2901.79	17.29%	11.55%	2
Desmethoxyyangonin	DMY	5	2.52	1191.74	7.10%	3.09%	1
Yangonin	Y	6	3.12	1255.695	7.48%	3.75%	3
Kavalactones			<b>Total:</b>	<b>16778.346</b>	<b>100.00%</b>	<b>33.70%</b>	<b>245361</b>

\*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

*Mustel Youngs*

Date

*7/24/23*

SAMPLE S1924  
Vial 11

.45110g/50mL

wavelength 246 nm

:\CHEM32\1\DATA\KAVA\_07\_10\_2023\_15MINSTDTESTMETHODTEST 2023-07-10 15-35-0->

SEQUENCE C:\CHEM32\1\DATA\KAVA\_07\_10\_2023\_ ->

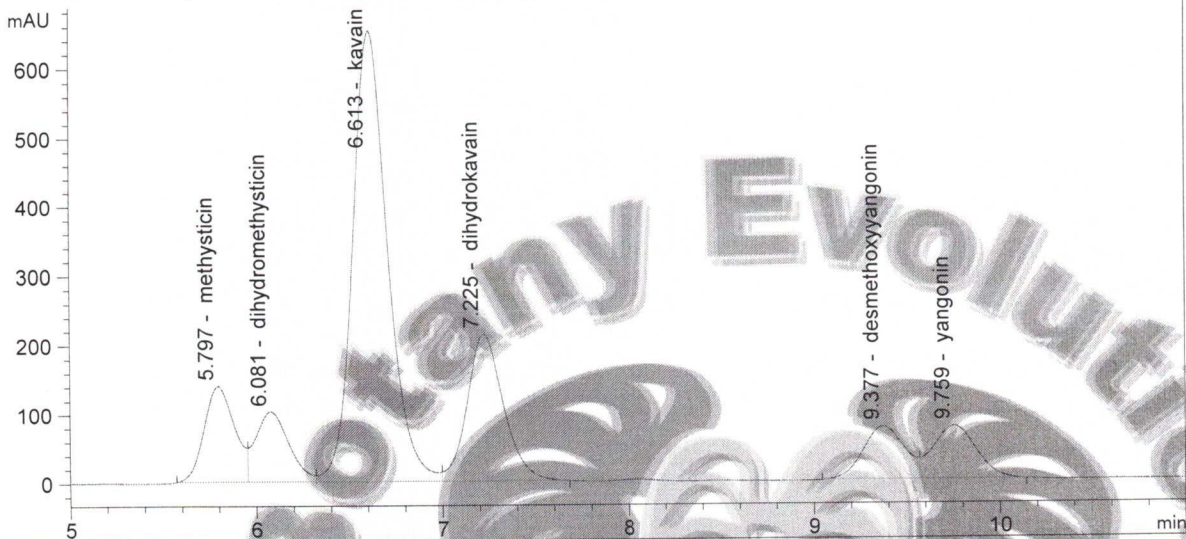
Injection date 7/10/2023

Injection time 7:37:44 PM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA\_07\_10\_202->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA\_07\_10\_2023\_15MINSTDTESTMETHODTEST 2023-07-10 15-35-011011-12)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
	methysticin	5.797	1612.311	9.61	0.000
	dihydromethysticin	6.081	1269.784	7.57	0.000
	kavain	6.613	8547.026	50.94	0.001
	dihydrokavain	7.225	2901.790	17.29	0.001
	desmethoxyyangonin	9.377	1191.740	7.10	0.000
	yangonin	9.759	1255.695	7.48	0.000

7/13/21  
8

# Botany Evolution LLC

2510 Kirby Circle NE  
Palm Bay, FL 32945  
321-802-4583

## Microbiological and Heavy Metal Certificate Of Analysis

### Sample Identification Information

Date of Analysis 2/16/2023

Sample: S1924

Product Name 30% KAVA EXTRACT

Lot# CJ2306KE30

Country of Origin VANUATU

Country of Processing CHINA

Manufacture Date 02/09/23

Expiration Date 02/29/26

### General Product Specifications

Product Species Piper Methycticum

Part Used Root

Common Names Kava kava, Awa, Yagona

Appearance yellow powder

### Analyzed Characteristics

<u>ANALYZED CHARACTERISTICS</u>	<u>USP SPECIFICATION</u>	<u>RESULT</u>	<u>TEST METHOD</u>
<u>TOTAL AEROBIC PLATE COUNT</u>	NMT 10,000 (cfu/g)	10	USP <2021>
<u>TOTAL YEAST AND MOLD</u>	NMT 1,000 (cfu/g)	10	USP <2021>
<u>E. COLI</u>	ABSENT (cfu/10g)	COMPLIES	USP <2022>
<u>SALMONELLA SPECIES</u>	ABSENT (cfu/10g)	COMPLIES	USP <2022>
<u>STAPHYLOCOCCUS AUREUS</u>	ABSENT (cfu/10g)	COMPLIES	USP <2022>

### Heavy Metals

<u>HEAVY METALS</u>	<u>USP SPECIFICATION (PPM)</u>	<u>RESULT PPM (ug/g)</u>	<u>TEST METHOD</u>
<u>LEAD</u>	NMT 5.0	0.0235	ICP-MS\\USP<730>
<u>ARSENIC</u>	NMT 2.0	0.0078	ICP-MS\\USP<730>
<u>CADMIUM</u>	NMT 0.5	0.0002	ICP-MS\\USP<730>
<u>MERCURY</u>	NMT 0.1	0.0025	ICP-MS\\USP<730>

MT= NO MORE THAN PPM= PARTS PER MILLION cfu/g = colony forming units per gram

analysis performed by a third party laboratory.

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CHEMIST/DATE

Muste Youngs 7/24/23