

**Botany Evolution LLC**

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

**Certificate Of Analysis**

**Sample Identification Information**

Date of Analysis 1/9/2024

Sample: S2061

Product Name KAVA EXTRACT

Batch # CJ2312KE70L

Country of Origin VANUATU

Country of Processing CHINA

Manufacture Date 10/21/23

Best By Date 10/20/24

**General Product Specifications**

Product Species Piper Methysticum

Part Used Root

Common Names Kava kava, Awa, Yagona

Appearance brownish yellow liquid

**Analyzed Characteristics**

**Specification**

**Result**

**Test Method**

Standardization

20-90% Kavalactones

70.60%

HPLC

Identification

Complies by HPLC

Conform

HPLC

Kavalactone Profile

Noble

PASS

HPLC

Mesh Size

60-30

30

Sieve

Color

Beige to Yellow

Pass

Visual

Odor

Pass

Organoleptic

Taste

Pass

Organoleptic

Chemotype

423156

HPLC

K/DHM

3.4

Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			24923.795			
Methysticin	M	1	2.21	3328.376	6.91%	5.88%	<b>6</b>
Dihydromethysticin	DHM	2	3.38	2438.366	5.06%	6.59%	<b>5</b>
Kavain	K	3	1	28415.531	58.98%	22.73%	<b>4</b>
Dihydrokavain	DHK	4	3.48	7277.447	15.10%	20.26%	<b>2</b>
Desmethoxyyangonin	DMY	5	2.52	3410.113	7.08%	6.87%	<b>1</b>
Yangonin	Y	6	3.12	3310.22	6.87%	8.26%	<b>3</b>
<b>Kavalactones</b>			<b>Total:</b>	<b>48180.053</b>	<b>100.00%</b>	<b>70.60%</b>	<b>423156</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 Mustie Youngs

Date 1/10/24

SAMPLE S2061 B  
Vial 17

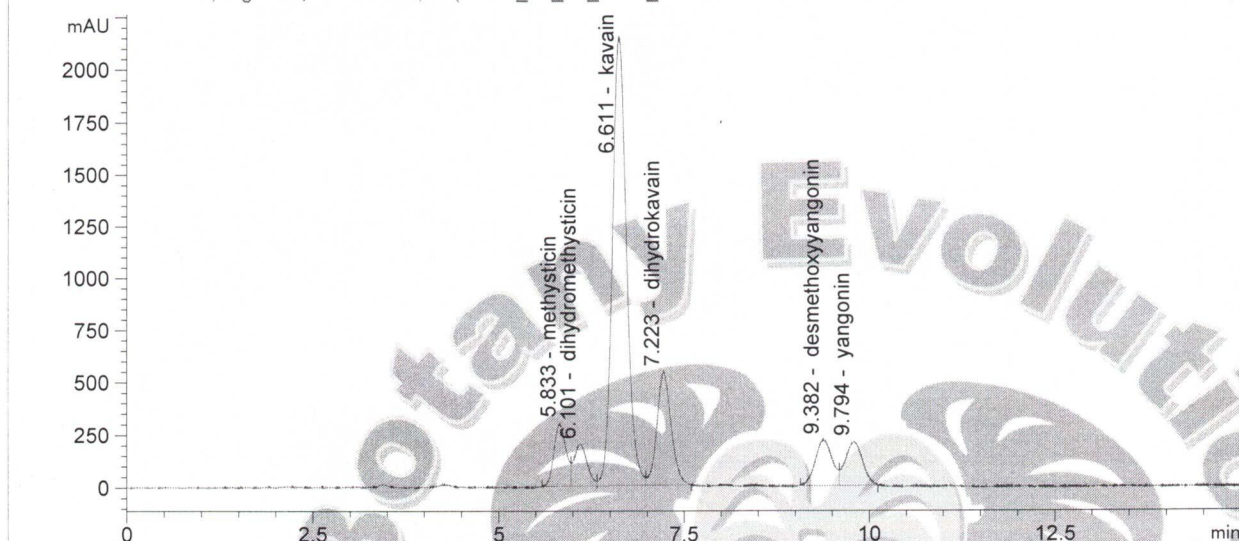
0.50287g/50 mL

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA\_01\_09\_2024\_15MINSTDTESTMETHOD 2024-01-09 16-09-45\01->  
SEQUENCE C:\CHEM32\1\DATA\KAVA\_01\_09\_2024\_ ->

Injection date 1/9/2024  
Injection time 9:34:36 PM  
Acq. operator KRISTL  
Method C:\CHEM32\1\DATA\KAVA\_01\_09\_202->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA\_01\_09\_2024\_15MINSTDTESTMETHOD 2024-01-09 16-09-45\017-1701.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.833	3328.376	6.91	0.000
2	dihydromethysticin	6.101	2438.366	5.06	0.000
3	kavain	6.611	28415.531	58.98	0.002
4	dihydrokavain	7.223	7277.447	15.10	0.001
5	desmethoxyyangonin	9.382	3410.113	7.08	0.001
6	yangonin	9.794	3310.220	6.87	0.001

1/10/24  
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# 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 10/28/2023

Sample: S2061

Product Name KAVA EXTRACT 70%

Lot# CJ2312KE70L

Country of Origin VANUATU

Country of Processing CHINA

Manufacture Date 10/21/23

Expiration Date 10/20/26

### General Product Specifications

Product Species Piper Methysticum

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)	700	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	0.0241	ICP-MS\\USP<730>
<u>ARSENIC</u>	NMT 2.0	0.2909	ICP-MS\\USP<730>
<u>CADMIUM</u>	NMT 0.5	0.0007	ICP-MS\\USP<730>
<u>MERCURY</u>	NMT 0.1	0.0094	ICP-MS\\USP<730>

NMT= 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       Nusil Youngs             1/10/24