

Botany Evolution LLC

1510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis

Sample Identification Information

Date of Analysis 2/14/2023

Sample: S1839 A

Product Name 30% KAVA EXTRACT

Lot# CJ230214KE30

Country of Origin VANUATU

Country of Processing CHINA

Manufacture Date 10/27/22

Best By Date 10/26/25

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

36.52%

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

241536

HPLC

K/DHM

2.6

Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2285.996			
Methysticin	M	1	2.21	1371.948	5.61%	1.835%	6
Dihydromethysticin	DHM	2	3.38	1256.078	5.14%	2.48%	5
Kavain	K	3	1	10706.365	43.79%	6.54%	4
Dihydrokavain	DHK	4	3.08	7588.742	31.04%	19.51%	2
Desmethoxyyangonin	DMY	5	2.52	2577.292	10.54%	4.31%	1
Yangonin	Y	6	3.12	951.547	3.89%	1.837%	3
Kavalactones			Total:	24451.972	100.00%	36.52%	241536

*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

Mustil Youngs

Date

2/15/23

SAMPLE S1839 A
Vial 11

.35667g/25mL

wavelength 246 nm

Path: \CHEM32\1\DATA\KAVA_02_14_2023_15MINSTDTESTMETHOD 2023-02-14 16-07-47\01->

SEQUENCE C:\CHEM32\1\DATA\KAVA_02_14_2023_ ->

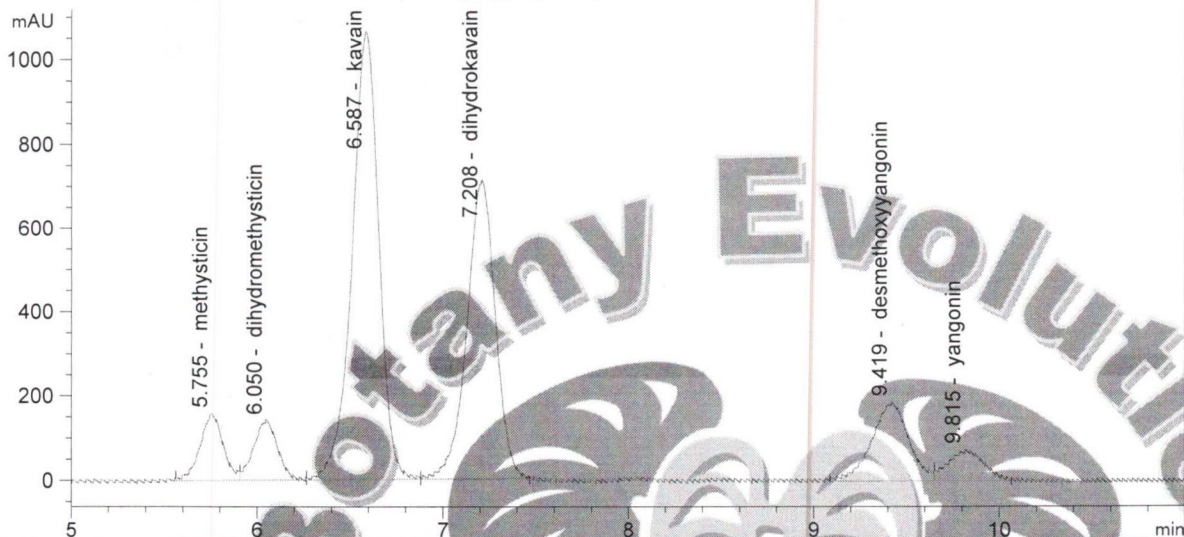
Injection date 2/14/2023

Injection time 7:54:30 PM

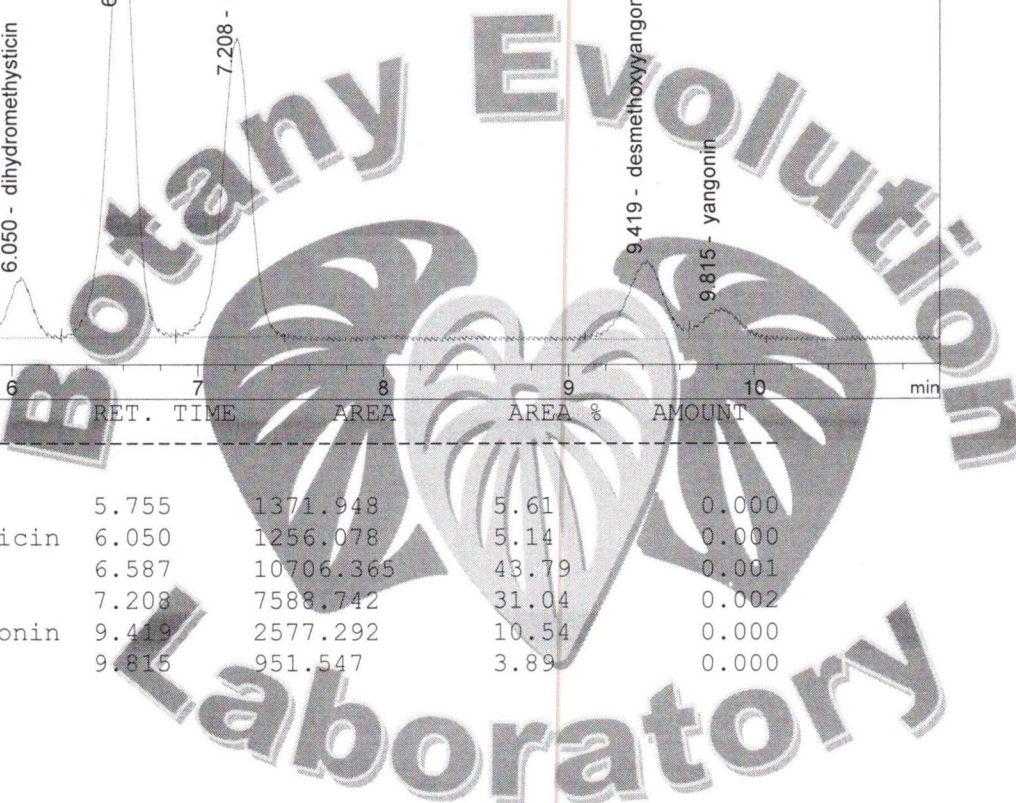
Operator KRISTL

Method C:\CHEM32\1\DATA\KAVA_02_14_2023->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_02_14_2023_15MINSTDTESTMETHOD 2023-02-14 16-07-47\011-1101.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.755	1371.948	5.61	0.000
2	dihydromethysticin	6.050	1256.078	5.14	0.000
3	kavain	6.587	10706.365	43.79	0.001
4	dihydrokavain	7.208	7588.742	31.04	0.002
5	desmethoxyyangonin	9.419	2577.292	10.54	0.000
6	yangonin	9.815	951.547	3.89	0.000



2/15/23
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Botany Evolution LLC

510 Kirby Circle NE
 Palm Bay, FL 32945
 21-802-4583

Microbiological and Heavy Metal Certificate Of Analysis

Sample Identification Information

Date of Analysis 11/3/2022
Sample: S1839
Product Name 30% KAVA EXTRACT
Lot# CJ230214KE30

Country of Origin VANUATU
Country of Processing CHINA
Manufacture Date 10/27/22
Expiration Date 10/26/25

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>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>SPECIFICATION (PPM)</u>	<u>RESULT PPM (ug/g)</u>	<u>TEST METHOD</u>
<u>LEAD</u>	NMT 2.0	0.0397	ICP-MS\\USP<730>
<u>ARSENIC</u>	NMT 2.0	0.0772	ICP-MS\\USP<730>
<u>CADMIUM</u>	NMT 1.0	0.0102	ICP-MS\\USP<730>
<u>MERCURY</u>	NMT 1.0	0.0578	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

Misti Youngs

2/16/23