

Botany Evolution LLC

510 Kirby Circle NE

Palm Bay, FL 32945

21-802-4583

Certificate Of Analysis

Sample Identification Information

Date of Analysis 11/29/2023
Sample: S2027 A
Product Name KAVA EXTRACT 30%
Batch # CJ2311KE30

Country of Origin VANUATU
Country of Processing CHINA
Manufacture Date 03/02/23
Best By Date 03/01/26

General Product Specifications

Product Species Piper Methysticum
Part Used Root

Common Names Kava kava, Awa, Yagona
Appearance YELLOW POWDER

Analyzed Characteristics

Specification

Result

Test Method

Standardization	20-90% Kavalactones	31.27%	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		243516	HPLC
K/DHM		2.7	Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			13419.945			
Methysticin	M	1	2.21	1651.467	8.60%	2.91%	6
Dihydromethysticin	DHM	2	3.38	1223.265	6.37%	3.18%	5
Kavain	K	3	1	10554.246	54.97%	8.49%	4
Dihydrokavain	DHK	4	3.08	2934.057	15.28%	9.94%	2
Desmethoxyyangonin	DMY	5	2.52	1351.348	7.04%	2.98%	1
Yangonin	Y	6	3.12	1485.541	7.74%	3.78%	3
Kavalactones			Total:	19199.924	100.00%	31.27%	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.

Chemist

Amel Youngs

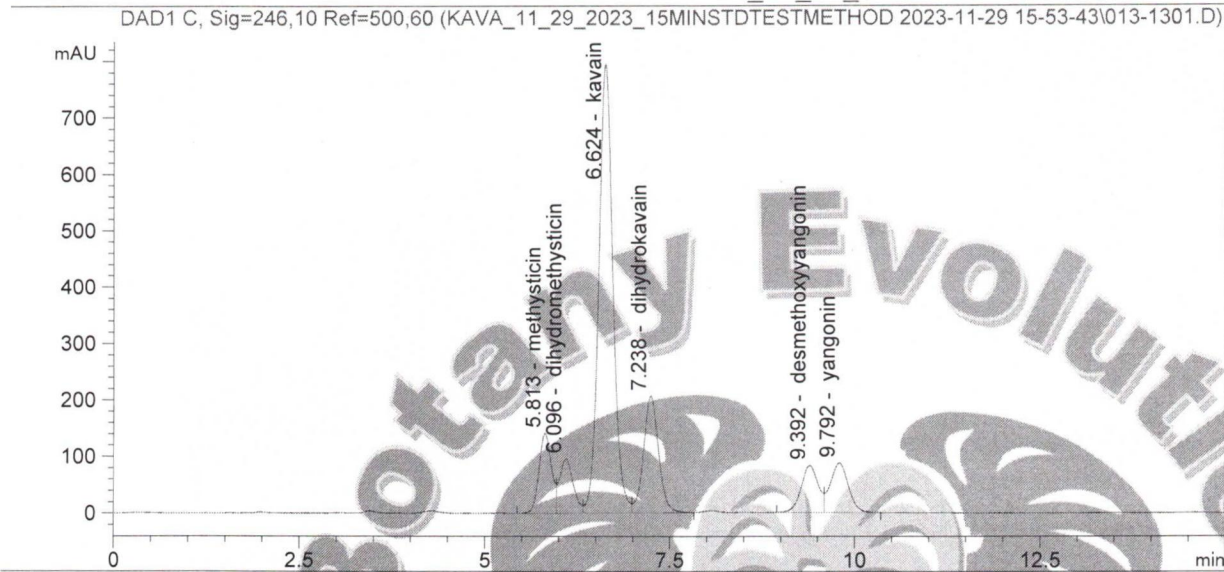
Date

12/4/23

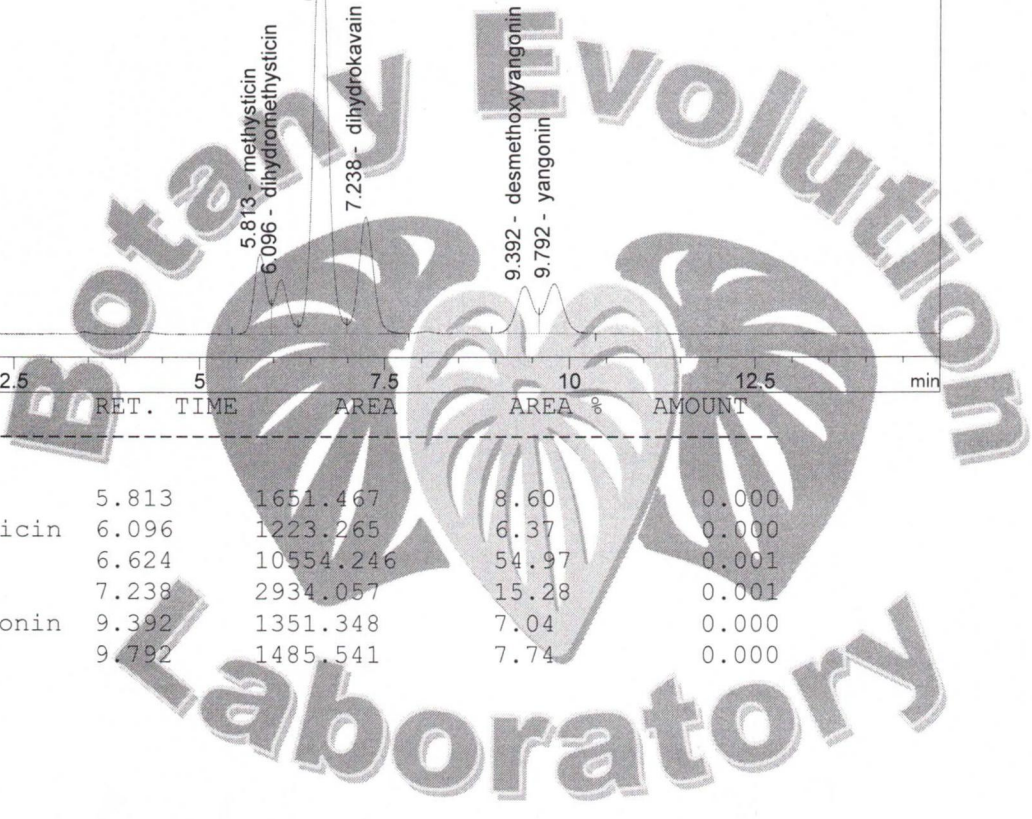
SAMPLE S2027 A
Vial 13

.45354g/50mL

wavelength 246 nm
:\CHEM32\1\DATA\KAVA_11_29_2023_15MINSTDTESTMETHOD 2023-11-29 15-53-43\01->
SEQUENCE C:\CHEM32\1\DATA\KAVA_11_29_2023_ ->
Injection date 11/29/2023
Injection time 8:13:07 PM
Acq. operator KRISTL
Method C:\CHEM32\1\DATA\KAVA_11_29_202->



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.813	1651.467	8.60	0.000
2	dihydromethysticin	6.096	1223.265	6.37	0.000
3	kavain	6.624	10554.246	54.97	0.001
4	dihydrokavain	7.238	2934.057	15.28	0.001
5	desmethoxyyangonin	9.392	1351.348	7.04	0.000
6	yangonin	9.792	1485.541	7.74	0.000



12/4/23
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Botany Evolution LLC

1510 Kirby Circle NE
Palm Bay, FL 32945
321-802-4583

Microbiological and Heavy Metal Certificate Of Analysis

Sample Identification Information

<u>Date of Analysis</u> 3/9/2023	<u>Country of Origin</u> VANUATU
<u>Sample:</u> S2027	<u>Country of Processing</u> CHINA
<u>Product Name</u> 30% KAVA EXTRACT	<u>Manufacture Date</u> 03/02/23
<u>Lot#</u> CJ2311KE30	<u>Expiration Date</u> 03/01/26

General Product Specifications

<u>Product Species</u> Piper Methysticum	<u>Common Names</u> Kava kava, Awa, Yagona
<u>Part Used</u> Root	<u>Appearance</u> yellow powder

Analyzed Characteristics

USP SPECIFICATION

RESULT

TEST METHOD

<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

USP SPECIFICATION (PPM)

RESULT PPM (ug/g)

TEST METHOD

<u>LEAD</u>	NMT 5.0	0.2497	ICP-MS\\USP<730>
<u>ARSENIC</u>	NMT 2.0	0.0330	ICP-MS\\USP<730>
<u>CADMIUM</u>	NMT 0.5	0.0079	ICP-MS\\USP<730>
<u>MERCURY</u>	NMT 0.1	0.0434	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

Mustel Youngs

12/5/23