

Botany Evolution LLC

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

Certificate Of Analysis

Sample Identification Information

Date of Analysis 11/6/2023
Sample: S2021
Product Name LATERAL ROOTS
Lot# VSSC2304-LR11

Country of Origin VANUATU
Country of Processing USA
Manufacture Date Apr-23
Best By Date Apr-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

<u>Standardization</u>	2-17% Kavalactones	12.23%	HPLC
<u>Identification</u>	Complies by HPLC	Conform	HPLC
<u>Kavalactone Profile</u>	Noble	PASS	HPLC
<u>Mesh Size</u>	60-30	60	Sieve
<u>Color</u>	Beige to Yellow	Pass	Visual
<u>Odor</u>		Pass	Organoleptic
<u>Taste</u>		Pass	Organoleptic
<u>Chemotype</u>		245361	HPLC
<u>K/DHM</u>		1.5	Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2339.488			
Methysticin	M	1	2.21	1245.565	12.63%	1.54%	6
Dihydromethysticin	DHM	2	3.38	955.023	9.68%	1.74%	5
Kavain	K	3	1	4526.299	45.90%	2.56%	4
Dihydrokavain	DHK	4	3.08	1582.583	16.05%	3.77%	2
Desmethoxyyangonin	DMY	5	2.52	655.746	6.65%	1.02%	1
Yangonin	Y	6	3.12	896.933	9.09%	1.60%	3
Kavalactones			Total:	9862.149	100.00%	12.23%	245361

*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 Musol Youngs Date 11/7/23

SAMPLE S2021
Vial 13

0.75297g/50mL

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_11_06_2023_15MINSTDTESTMETHOD 2023-11-06 17-13-11\01->
SEQUENCE C:\CHEM32\1\DATA\KAVA_11_06_2023_ ->

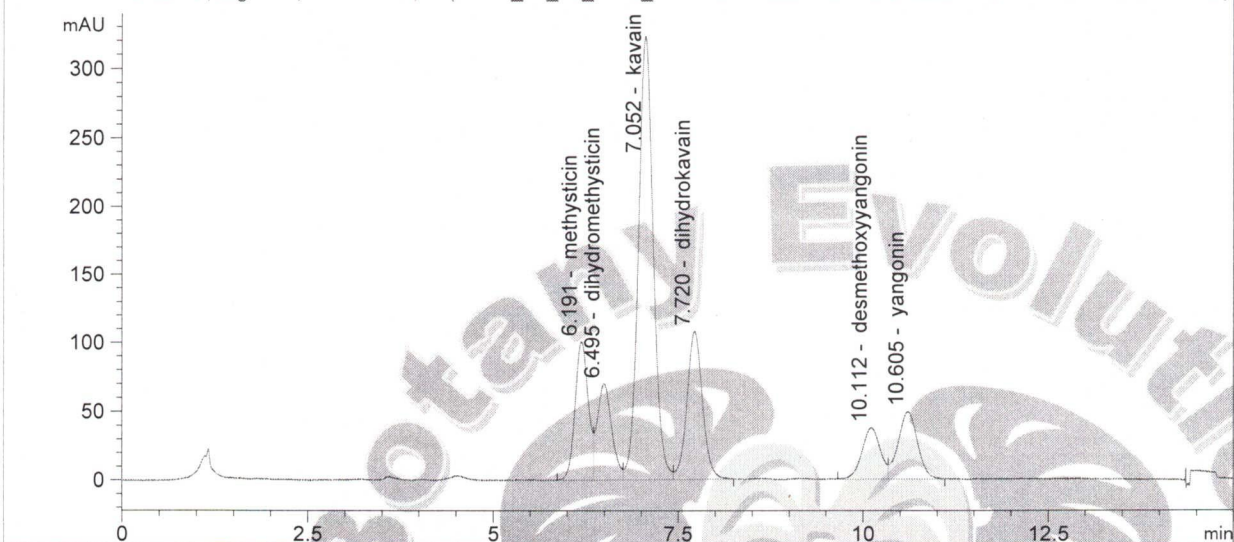
Injection date 11/6/2023

Injection time 9:32:29 PM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA_11_06_202->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_11_06_2023_15MINSTDTESTMETHOD 2023-11-06 17-13-11\013-1301.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	6.191	1245.565	12.63	0.000
2	dihydromethysticin	6.495	955.023	9.68	0.000
3	kavain	7.052	4526.299	45.90	0.000
4	dihydrokavain	7.720	1582.583	16.05	0.000
5	desmethoxyyangonin	10.112	655.746	6.65	0.000
6	yangonin	10.605	896.933	9.09	0.000

11/7/23
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