

Botany Evolution LLC

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

Certificate Of Analysis

Sample Identification Information

Date of Analysis 8/8/2023
Sample: S1941
Product Name CEREMONIAL
Lot# VPS2304-C8

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

General Product Specifications

Product Species Piper Methycticum
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	10.67%	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>		243156	HPLC
<u>K/DHM</u>		5.0	Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2350.67			
Methysticin	M	1	2.21	469.68	4.83%	0.58%	6
Dihydromethysticin	DHM	2	3.38	371.98	3.82%	0.68%	5
Kavain	K	3	1	5973.946	61.39%	3.37%	4
Dihydrokavain	DHK	4	3.08	1675.129	17.22%	3.98%	2
Desmethoxyyangonin	DMY	5	2.52	600.703	6.17%	0.93%	1
Yangonin	Y	6	3.12	638.989	6.57%	1.14%	3
Kavalactones			Total:	9730.427	100.00%	10.67%	243156

*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 Justin Youngs Date 8/10/23

SAMPLE S1941
Vial 16

0.75142g/50mL

wavelength 246 nm

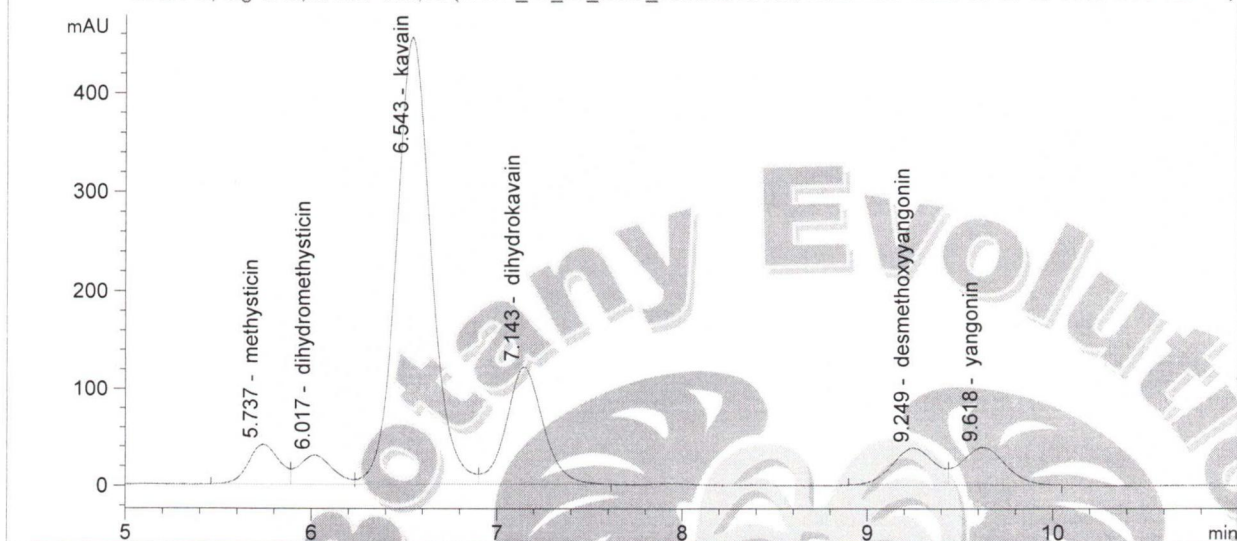
C:\CHEM32\1\DATA\KAVA_08_08_2023_15MINSTDTESTMETHOD 2023-08-08 15-43-27\01->
SEQUENCE C:\CHEM32\1\DATA\KAVA_08_08_2023_ ->

Injection date 8/8/2023
Injection time 8:50:55 PM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA_08_08_202->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_08_08_2023_15MINSTDTESTMETHOD 2023-08-08 15-43-27\016-1601.D)



COMPOUND RET. TIME AREA AREA % AMOUNT

#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.737	469.680	4.83	0.000
2	dihydromethysticin	6.017	371.980	3.82	0.000
3	kavain	6.543	5973.946	61.39	0.000
4	dihydrokavain	7.143	1675.129	17.22	0.000
5	desmethoxyyangonin	9.249	600.703	6.17	0.000
6	yangonin	9.618	638.989	6.57	0.000

8/9/23
8