

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

Certificate Of Analysis

Sample Identification Information

<u>Date of Analysis</u> 12/10/2020	<u>Country of Origin</u> SOLOMON ISLANDS
<u>Sample:</u> S1020	<u>Country of Processing</u> USA
<u>Product Name</u> CHIEF LATERAL ROOTS	<u>Manufacture Date</u> 10/14/20
<u>Lot#</u> SIK201014CLR	<u>Best By Date</u> 10/14/23

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, beige powder

<u>Analyzed Characteristics</u>	<u>Specification</u>	<u>Result</u>	<u>Test Method</u>
<u>Standardization</u>	2-17% Kavalactones	16.94%	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>		243561	HPLC
<u>K/DHM</u>		2.0	Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2389.532			
Methysticin	M	1	2.21	1374.684	9.99%	1.67%	6
Dihydromethysticin	DHM	2	3.38	997.729	7.25%	1.79%	5
Kavain	K	3	1	6548.927	47.61%	3.63%	4
Dihydrokavain	DHK	4	3.08	2762.669	20.08%	6.45%	2
Desmethoxyyangonin	DMY	5	2.52	1020.672	7.42%	1.55%	1
Yangonin	Y	6	3.12	1051.545	7.64%	1.84%	3
Kavalactones			Total:	13756.226	100.00%	16.94%	243561

*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 Mustel Youngs Date 12/11/20

SAMPLE S1020
 Vial 11

0.75114g/50mL

wavelength 246 nm

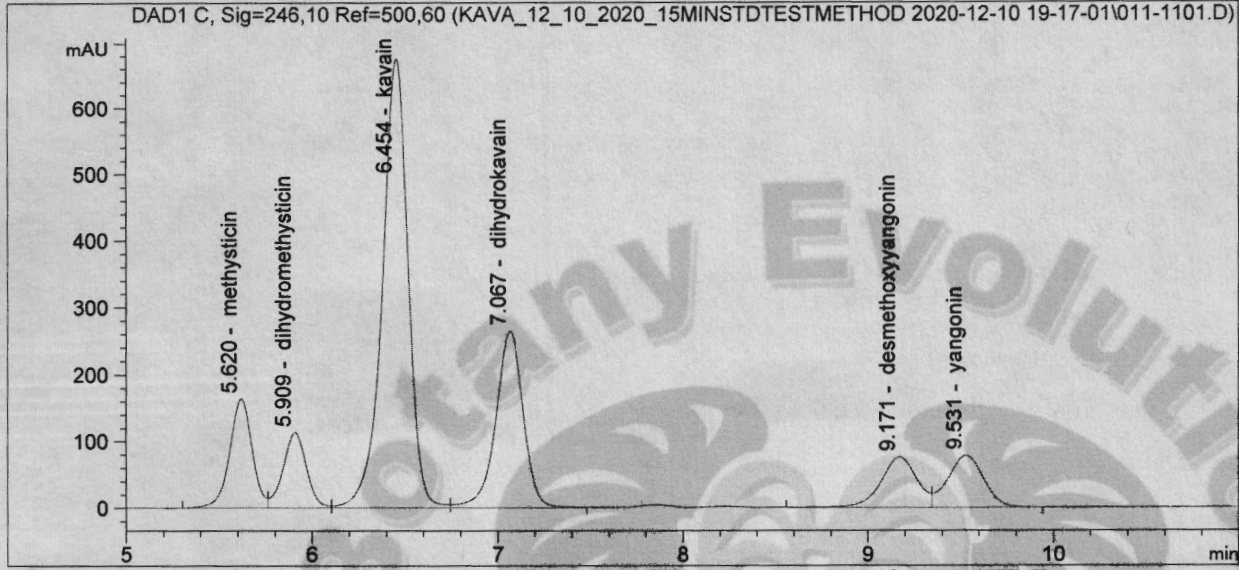
C:\CHEM32\1\DATA\KAVA_12_10_2020_15MINSTDTESTMETHOD 2020-12-10 19-17-01\01->
 SEQUENCE C:\CHEM32\1\DATA\KAVA_12_10_2020_ ->

Injection date 12/10/2020

Injection time 11:03:24 PM

Acq. operator KRISTL

Method C:\CHEM32\1\METHODS\KAVA15MIN STD TEST.M



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.620	1374.684	9.99	0.000
2	dihydromethysticin	5.909	997.729	7.25	0.000
3	kavain	6.454	6548.927	47.61	0.013
4	dihydrokavain	7.067	2762.669	20.08	0.001
5	desmethoxyyangonin	9.171	1020.672	7.42	0.000
6	yangonin	9.531	1051.545	7.64	0.000

12/11/20
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