

Botany Evolution LLC

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

Certificate Of Analysis

Sample Identification Information

Date of Analysis 3/15/2019
Sample: S0623
Product Name GOLD LATERAL ROOTS
Lot# SIV190212YLR

Country of Origin SOLOMON ISLANDS
Country of Processing SOLOMON ISLANDS
Manufacture Date 02/12/19
Best By Date 02/12/21

General Product Specifications

Product Species Piper Methysticum
Part Used Root

Common Names Kava kava, Awa, Yagona
Appearance Beige powder

Analyzed Characteristics	Specification	Result	Test Method
<u>Standardization</u>	2-17% Kavalactones	14.77%	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>		245631	HPLC
<u>K/DHM</u>		1.66	Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2573.666			
Methysticin	M	1	2.21	1486.429	11.88%	1.71%	6
Dihydromethysticin	DHM	2	3.38	1065.342	8.52%	1.81%	5
Kavain	K	3	1	5707.871	45.64%	3.00%	4
Dihydrokavain	DHK	4	3.08	2473.159	19.77%	5.48%	2
Desmethoxyyangonin	DMY	5	2.52	848.338	6.78%	1.22%	1
Yangonin	Y	6	3.12	925.928	7.40%	1.54%	3
Kavalactones			Total:	12507.067	100.00%	14.77%	245631

*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 Michelle Younger Date 3/18/19

SAMPLE S0623
Vial 15

0.75171g/50ml

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_3_15_2019_15MINSTDTESTMETHOD 2019-03-15 16-50-34\015->

SEQUENCE C:\CHEM32\1\DATA\KAVA_3_15_2019_ ->

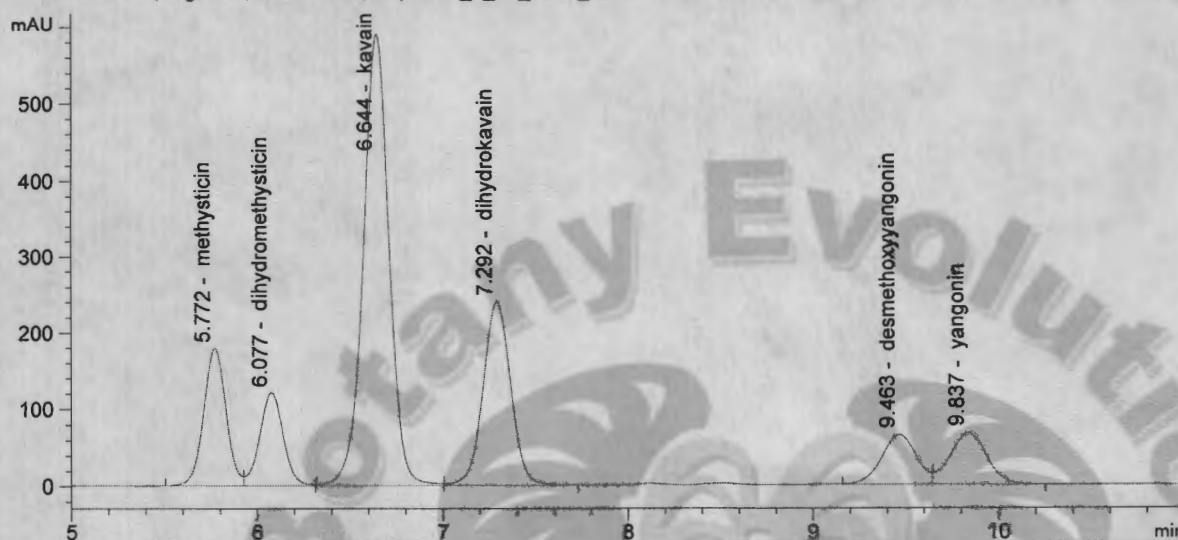
Injection date 3/15/2019

Injection time 10:30:04 PM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA_3_15_201->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_3_15_2019_15MINSTDTESTMETHOD 2019-03-15 16-50-34\015-1701.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.772	1486.429	11.88	0.000
2	dihydromethysticin	6.077	1065.342	8.52	0.000
3	kavain	6.644	5707.871	45.64	0.000
4	dihydrokavain	7.292	2473.159	19.77	0.001
5	desmethoxyyangonin	9.463	848.338	6.78	0.000
6	yangonin	9.837	925.928	7.40	0.000

3/18/19
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