

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> 11/2/2020	<u>Country of Origin</u> SOLOMON ISLANDS
<u>Sample:</u> S0980	<u>Country of Processing</u> SOLOMON ISLANDS
<u>Product Name</u> GOLD	<u>Manufacture Date</u> 09/21/20
<u>Lot#</u> SIK200921G	<u>Best By Date</u> 09/21/23

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	13.19%	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>		2.4	Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2359.087			
Methysticin	M	1	2.21	910.12	8.28%	1.12%	6
Dihydromethysticin	DHM	2	3.38	731.223	6.65%	1.32%	5
Kavain	K	3	1	5662.484	51.51%	3.17%	4
Dihydrokavain	DHK	4	3.08	2067.864	18.81%	4.88%	2
Desmethoxyyangonin	DMY	5	2.52	708.541	6.45%	1.09%	1
Yangonin	Y	6	3.12	912.472	8.30%	1.62%	3
Kavalactones			Total:	10992.704	100.00%	13.19%	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 Justin Youngs Date 11/3/20

SAMPLE S0980
Vial 12

0.75354g/50mL

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_11_02_2020_15MINSTDTESTMETHOD 2020-11-02 15-07-37\01->

SEQUENCE C:\CHEM32\1\DATA\KAVA_11_02_2020_ ->

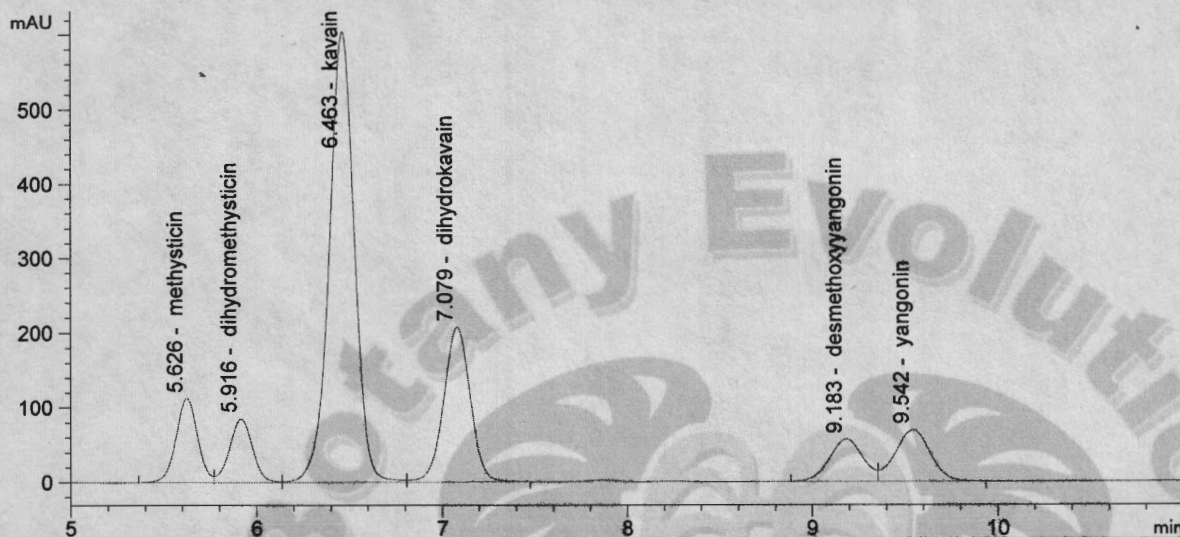
Injection date 11/2/2020

Injection time 7:10:25 PM

Acq. operator KRISTL

Method C:\CHEM32\1\METHODS\KAVA15MIN_STD_TEST.M

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_11_02_2020_15MINSTDTESTMETHOD 2020-11-02 15-07-37\012-1201.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.626	910.120	8.28	0.000
2	dihydromethysticin	5.916	731.223	6.65	0.000
3	kavain	6.463	5662.484	51.51	0.000
4	dihydrokavain	7.079	2067.864	18.81	0.001
5	desmethoxyyangonin	9.183	708.541	6.45	0.000
6	yangonin	9.542	912.472	8.30	0.000

11/3/20
K