

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> 11/9/2017	<u>Country of Origin</u> SOLOMON ISLANDS
<u>Sample:</u> S0246	<u>Country of Processing</u> SOLOMON ISLANDS
<u>Product Name</u> BASAL ROOT	<u>Manufacture Date</u> 10/04/17
<u>Lot#</u> SIV171004BR	<u>Expiration Date</u> 10/04/20

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> Beige powder

<u>Analyzed Characteristics</u>	<u>Specification</u>	<u>Result</u>	<u>Test Method</u>
<u>Standardization</u>	2-15% Kavalactones	6.95%	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>		1.22	Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2901.86			
Methysticin	M	1	2.19	648.019	10.81%	0.70%	6
Dihydromethysticin	DHM	2	3.23	647.754	10.81%	1.03%	5
Kavain	K	3	1	2561.285	42.74%	1.26%	4
Dihydrokavain	DHK	4	4.21	1398.817	23.34%	2.89%	2
Desmethoxyyangonin	Y	5	2.74	355.146	5.93%	0.48%	1
Yangonin	DMY	6	3.16	381.802	6.37%	0.59%	3
Kavalactones			Total:	5992.823	100.00%	6.95%	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.

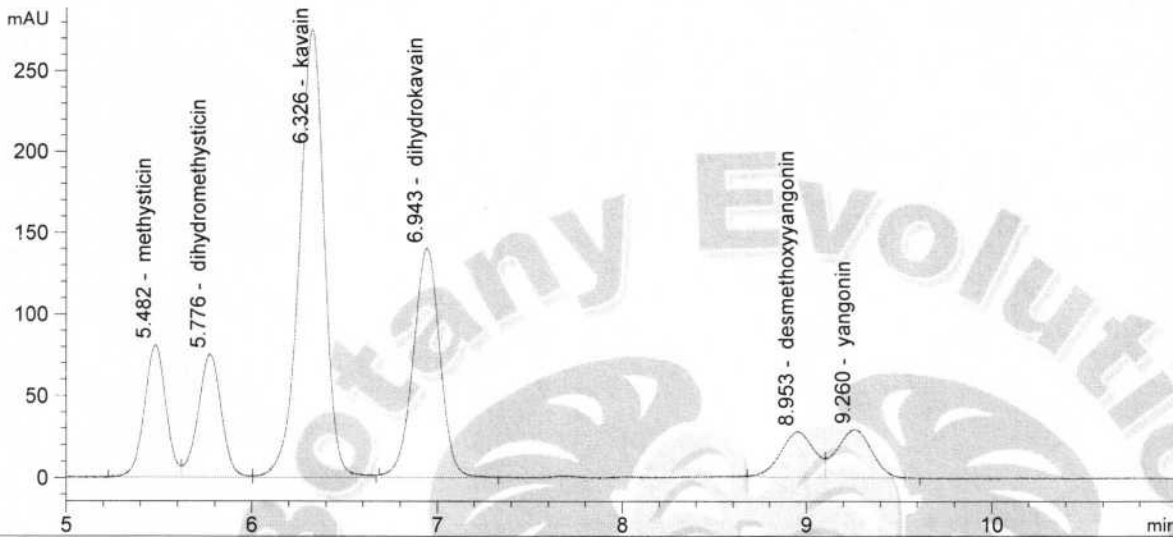
Mustl Youngs 11/10/17

SAMPLE S0246
Vial 17

0.75069g/50ml

wavelength 246 nm
C:\CHEM32\1\DATA\KAVA_11_9_2017_15MINSTDTESTMETHOD 2017-11-09 17-29-07\017->
SEQUENCE C:\CHEM32\1\DATA\KAVA_11_9_2017_ ->
Injection date 11/9/2017
Injection time 10:20:12 PM
Acq. operator KRISTL
Method C:\CHEM32\1\DATA\KAVA_11_9_201->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_11_9_2017_15MINSTDTESTMETHOD 2017-11-09 17-29-07\017-1701.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.482	648.019	10.81	0.000
2	dihydromethysticin	5.776	647.754	10.81	0.000
3	kavain	6.326	2561.285	42.74	0.000
4	dihydrokavain	6.943	1398.817	23.34	0.001
5	desmethoxyyangonin	8.953	355.146	5.93	0.000
6	yangonin	9.260	381.802	6.37	0.000

11/10/17