

Botany Evolution LLC

438 Martin Road Suite A

Palm Bay, FL 32909

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 1/17/2017Sample: S0080Product Name 30%Lot# ROH161105KK30ECountry of Origin VanuatuCountry of Processing ChinaManufacture Date Nov-16Expiration Date Nov-19**General Product Specifications**Product Species Piper MethysticumPart Used RootCommon Names Kava kava, Awa, YagonaAppearance Yellow powder

<u>Analyzed Characteristics</u>	<u>Specification</u>	<u>Result</u>	<u>Test Method</u>
<u>Standardization</u>	20-50% Kavalactones	27.98%	HPLC
<u>Identification</u>	Complies by HPLC	Conform	HPLC
<u>Kavalactone Profile</u>	Noble	Pass	HPLC
<u>Mesh Size</u>	60-30	N/A	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>		1.21	Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2685.484			
Methysticin	M	1	2.28	2946.411	11.78%	3.74%	6
Dihydromethysticin	DHM	2	2.99	2929.118	11.71%	4.87%	5
Kavain	K	3	1	10633.989	42.52%	5.92%	4
Dihydrokavain	DHK	4	3.15	4615.893	18.46%	8.09%	2
Desmethoxyyangonin	Y	5	2.26	1582.315	6.33%	1.99%	1
Yangonin	DMY	6	2.63	2303.239	9.21%	3.37%	3
Kavalactones			Total:	25010.965	100.00%	27.98%	

*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.

SAMPLE S0080
Vial 38

0.35805g

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_1_17_17_15MINMETHOD 2017-01-17 17-50-25\038-1501.D

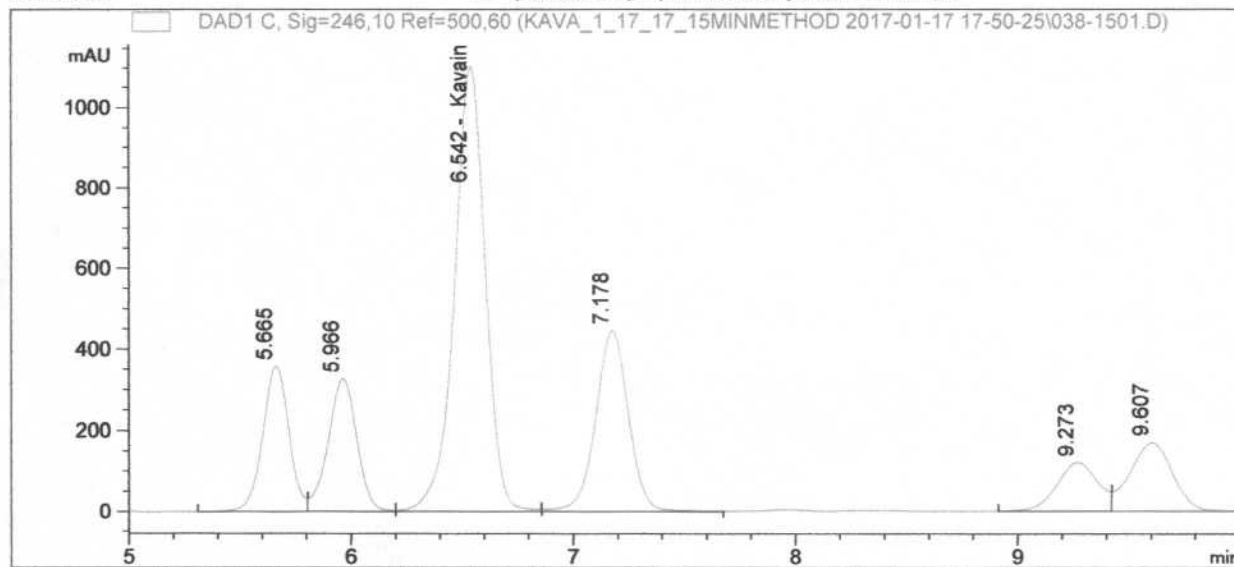
SEQUENCE C:\CHEM32\1\DATA\KAVA_1_17_17_15MINMETHOD->

Injection date 1/17/2017

Injection time 10:25:42 PM

Acq. operator KRISTL

Method C:\Chem32\1\METHODS\SLOWFLOW.M



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1		5.665	2946.411	11.78	0.000
2		5.966	2929.118	11.71	0.000
3	Kavain	6.542	10633.989	42.52	0.042
4		7.178	4615.893	18.46	0.000
5		9.273	1582.315	6.33	0.000
6		9.607	2303.239	9.21	0.000