

Botany Evolution LLC

438 Martin Road Suite A

Palm Bay, FL 32909

321-802-4583

Certificate Of Analysis**Sample Identification Information****Date of Analysis** 12/1/2016**Sample:** S0041**Product Name** Black Label**Lot#** N/A**Country of Origin** Vanuatu**Country of Processing** Vanuatu**Manufacture Date** 01-Sep-16**Expiration Date** 02-Sep-19**General Product Specifications****Product Species** Piper Methysticum**Part Used** Root**Common Names** Kava kava, Awa, Yagona**Appearance** Beige powder**Analyzed Characteristics****Specification****Result****Method****Standardization**

2-15% Kavalactones

5.60%

HPLC

Identification

Complies by HPLC

Conform

HPLC

Kavalactone Profile

Noble

Pass

HPLC

Mesh Size

60-30

30

Sieve

Color

Beige to Yellow

Pass

Visual

Odor

Pass

Organoleptic

Taste

Pass

Organoleptic

Chemotype

425631

HPLC

Kavalactones	Chemotype Identifier	Correction Factor	Peaks Ref.	Area *	Area %	Corrected Kavalactones
Methysticin	6	0.663	1	548.252	11.54%	0.36%
Dihydromethysticin	5	1.65	2	597.857	12.59%	0.98%
Kavain	4	1	3	1927.393	40.58%	1.92%
Dihydrokavain	2	1.7	4	1045.264	22.01%	1.77%
Desmethoxyyangonin	1	0.904	5	261.69	5.51%	0.24%
Yangonin	3	0.878	6	369.553	7.78%	0.32%
			Total:	4750.009	100.00%	5.60%

*See data in attachment HPLC1100 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 S0041 reinject
Vial 22

0.75029g

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_12_1_16_15MINMETHOD 2016-12-01 20-08-29\022-1801.D

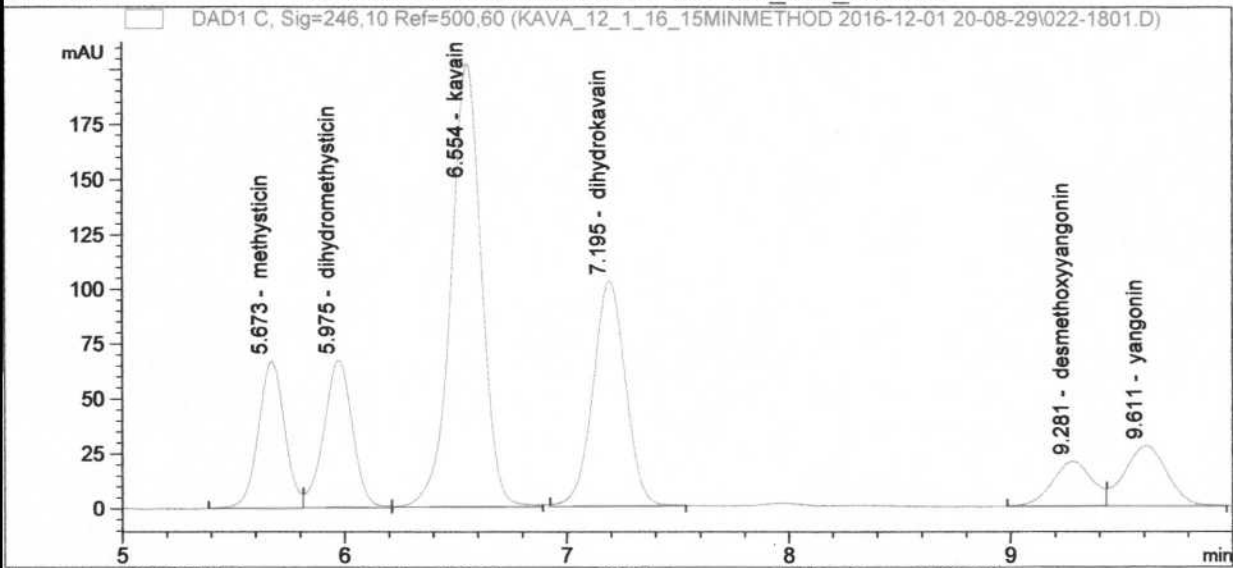
SEQUENCE C:\CHEM32\1\DATA\KAVA_12_1_16_15MINMETHOD->

Injection date 12/2/2016

Injection time 1:31:53 AM

Acq. operator KRISTL

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



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
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1	methysticin	5.673	548.252	11.542	0.04
2	dihydromethysticin	5.975	597.857	12.586	0.06
3	kavain	6.554	1927.393	40.577	0.73
4	dihydrokavain	7.195	1045.264	22.006	0.27
5	desmethoxyyangonin	9.281	261.690	5.509	0.02
6	yangonin	9.611	369.553	7.780	0.03