

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: S0011
Product Name 50/50 Instant
Lot# N/A

Country of Origin Vanuatu
Country of Processing Vanuatu
Manufacture Date 01-Sep-16
Expiration Date 02-Sep-18

General Product Specifications

Product Species Piper Methysticum
Part Used Root

Common Names Kava kava, Awa, Yagona
Appearance Beige powder

Analyzed Characteristics**Specification****Result****Method**

<u>Standardization</u>	2-15% Kavalactones	4.91%	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>		423165	HPLC

Kavalactones	Chemotype Identifier	Correction Factor	Peaks Ref.	Area *	Area %	Corrected Kavalactones
Methysticin	6	0.663	1	561.944	7.10%	0.22%
Dihydromethysticin	5	1.65	2	327.386	4.14%	0.32%
Kavain	4	1	3	4741.643	59.95%	2.77%
Dihydrokavain	2	1.7	4	874.127	11.05%	0.87%
Desmethoxyyangonin	1	0.904	5	562.567	7.11%	0.30%
Yangonin	3	0.878	6	842.286	10.65%	0.43%
			Total:	7909.953	100.00%	4.91%

*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 S0011
Vial 15

0.35425g

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_12_1_16_15MINMETHOD 2016-12-01 20-08-29\015-1101.D

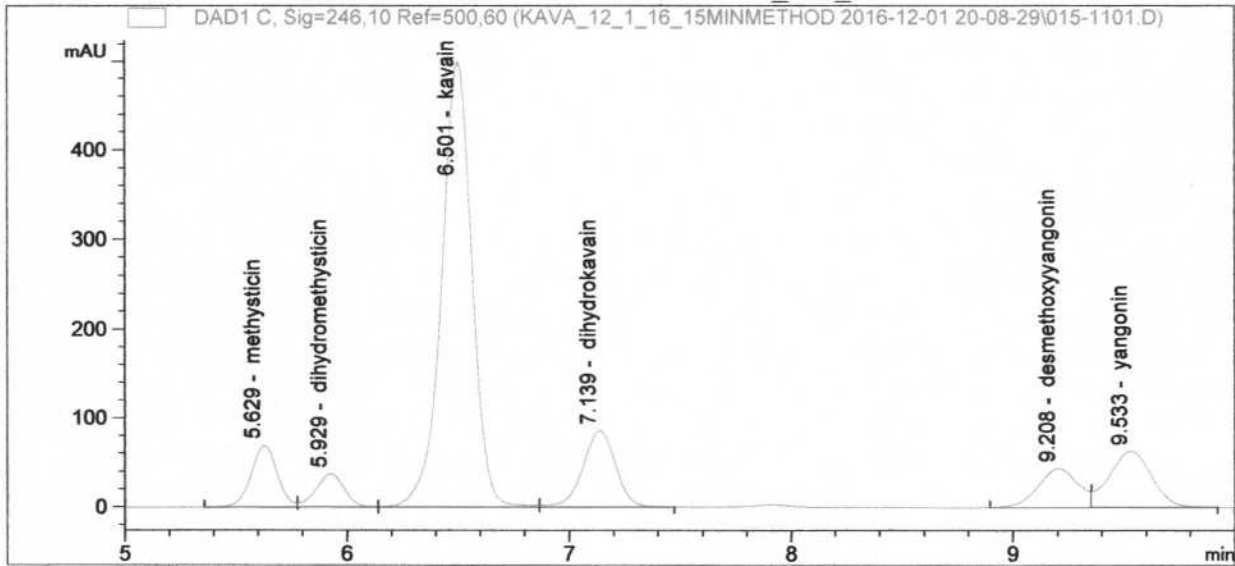
SEQUENCE C:\CHEM32\1\DATA\KAVA_12_1_16_15MINMETHOD->

Injection date 12/1/2016

Injection time 11:38:55 PM

Acq. operator KRISTL

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



COMPOUND RET. TIME AREA AREA % AMOUNT

#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.629	561.944	7.104	0.04
2	dihydromethysticin	5.929	327.386	4.139	0.03
3	kavain	6.501	4741.643	59.945	1.79
4	dihydrokavain	7.139	874.127	11.051	0.23
5	desmethoxyyangonin	9.208	562.567	7.112	0.04
6	yangonin	9.533	842.286	10.648	0.07