

**Botany Evolution LLC**

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**Certificate Of Analysis****Sample Identification Information**Date of Analysis 3/22/2017Sample: S0101Product Name BULA INSTANTLot# FBE16022081Country of Origin FIJICountry of Processing USAManufacture Date Feb-16Expiration Date Feb-19**General Product Specifications**Product Species Piper MethysticumPart Used RootCommon Names Kava kava, Awa, YagonaAppearance Beige powder**Analyzed Characteristics****Specification****Result****Test Method**Standardization

2-15% Kavalactones

5.07%

HPLC

Identification

Complies by HPLC

Conform

HPLC

Kavalactone Profile

Noble

PASS

HPLC

Mesh Size

60-30

60

Sieve

Color

Beige to Yellow

Pass

Visual

Odor

Pass

Organoleptic

Taste

Pass

Organoleptic

Chemotype

243561

HPLC

K/DHM

1.85

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2802.987			
Methysticin	M	1	2.19	397.985	8.63%	0.44%	6
Dihydromethysticin	DHM	2	3.23	376.935	8.17%	0.62%	5
Kavain	K	3	1	2257.157	48.92%	1.14%	4
Dihydrokavain	DHK	4	4.21	771.676	16.73%	1.64%	2
Desmethoxyyangonin	Y	5	2.74	285.108	6.18%	0.39%	1
Yangonin	DMY	6	3.16	525.023	11.38%	0.84%	3
Kavalactones			<b>Total:</b>	<b>4613.884</b>	<b>100.00%</b>	<b>5.07%</b>	<b>243561</b>

\*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 S0101  
Vial 6

wt 0.75505g/50ml

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA\_3\_22\_2017\_STD\_RECAL\_15MINMETHOD 2017-03-22 14-02-25\->

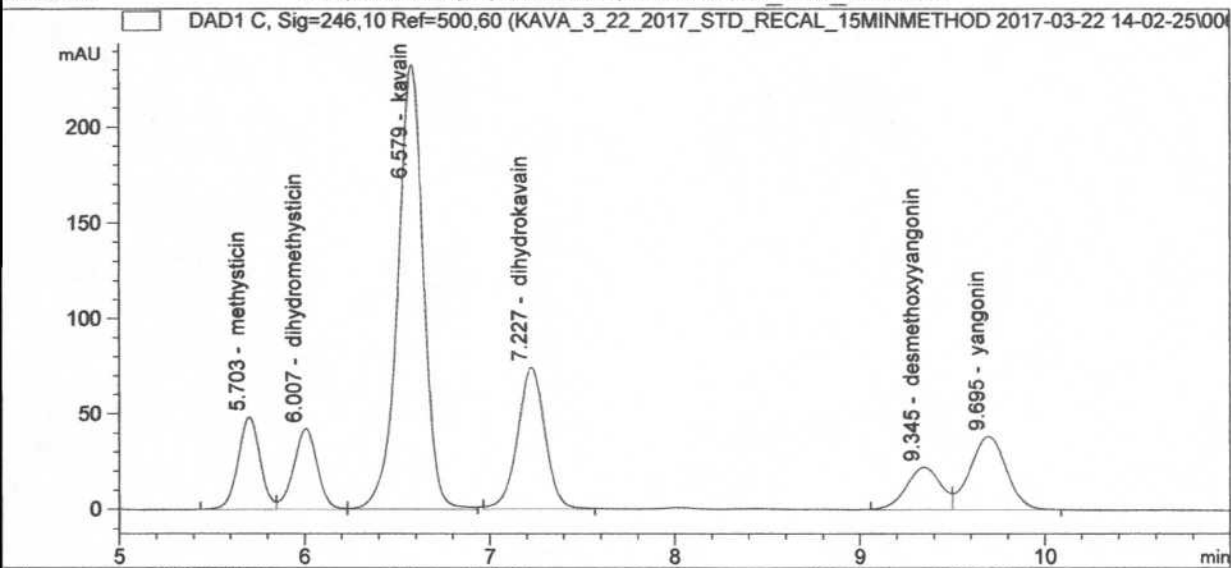
SEQUENCE C:\CHEM32\1\DATA\KAVA\_3\_22\_2017\_STD\_RECAL->

Injection date 3/22/2017

Injection time 6:05:15 PM

Acq. operator KRISTL

Method C:\CHEM32\1\METHODS\KAVA15MIN\_STD\_TEST.M



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.703	397.985	8.63	0.028
2	dihydromethysticin	6.007	376.935	8.17	0.035
3	kavain	6.579	2257.157	48.92	0.851
4	dihydrokavain	7.227	771.676	16.73	0.200
5	desmethoxyyangonin	9.345	285.108	6.18	0.020
6	yangonin	9.695	525.023	11.38	0.044