

Botany Evolution LLC

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Certificate Of Analysis**Sample Identification Information**Date of Analysis 12/1/2016Sample: S0028Product Name Vanuatu Kava ChipsLot# N/ACountry of Origin VanuatuCountry of Processing VanuatuManufacture Date 01-Sep-16Expiration Date 01-Sep-19**General Product Specifications**Product Species Piper MethysticumPart Used RootCommon Names Kava kava, Awa, YagonaAppearance Beige powder**Analyzed Characteristics****Specification****Result****Method**Standardization

2-15% Kavalactones

3.99%

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

423651

HPLC

Kavalactones	Chemotype Identifier	Correction Factor	Peaks Ref.	Area *	Area %	Corrected Kavalactones
Methysticin	6	0.663	1	552.056	8.57%	0.20%
Dihydromethysticin	5	1.65	2	501.505	7.79%	0.45%
Kavain	4	1	3	3303.534	51.31%	1.82%
Dihydrokavain	2	1.7	4	1126.051	17.49%	1.05%
Desmethoxyyangonin	1	0.904	5	375.885	5.84%	0.19%
Yangonin	3	0.878	6	579.433	9.00%	0.28%
			Total:	6438.464	100.00%	3.99%

*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 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 S0028
 Vial 16

0.75383g

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_12_1_16_15MINMETHOD 2016-12-01 20-08-29\016-1201.D

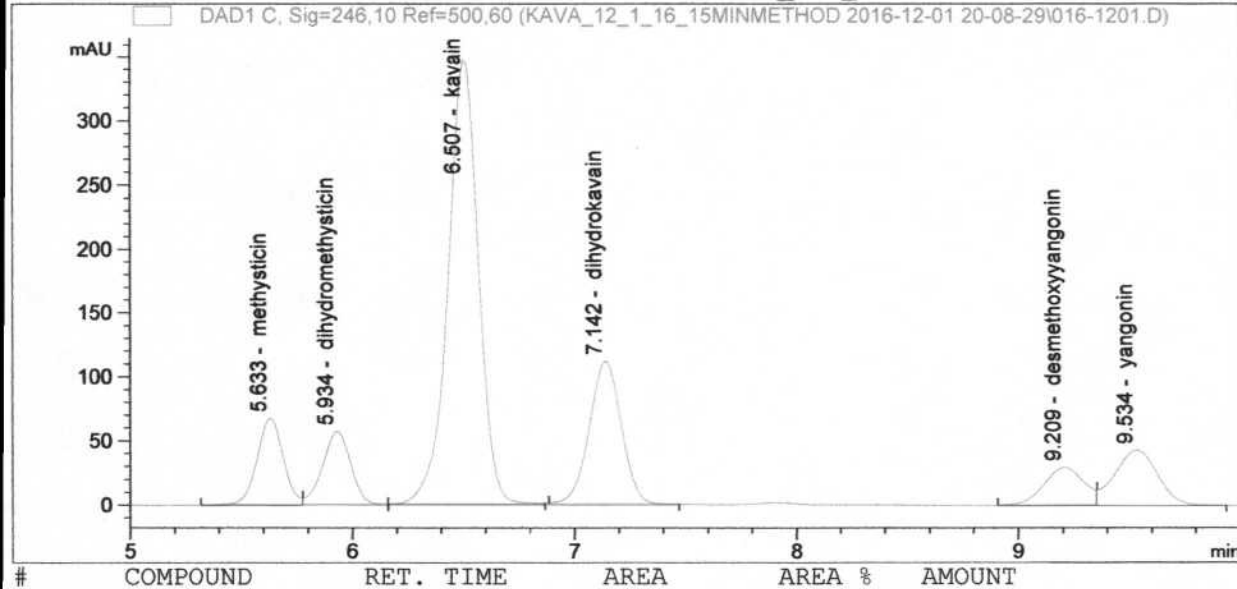
SEQUENCE C:\CHEM32\1\DATA\KAVA_12_1_16_15MINMETHOD->

Injection date 12/1/2016

Injection time 11:55:03 PM

Acq. operator KRISTL

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



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.633	552.056	8.574	0.04
2	dihydromethysticin	5.934	501.505	7.789	0.05
3	kavain	6.507	3303.534	51.309	1.25
4	dihydrokavain	7.142	1126.051	17.489	0.29
5	desmethoxyyangonin	9.209	375.885	5.838	0.03
6	yangonin	9.534	579.433	9.000	0.05