

Botany Evolution LLC

510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 8/28/2017Sample: S0194Product Name VSSC BAG#12Lot# VSSC170725BR12Country of Origin NACountry of Processing NAManufacture Date 07/25/17Expiration Date NA**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

5.35%

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

241516

HPLC

K/DHM

2.41

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2828.846			
Methysticin	M	1	2.19	367.974	7.25%	0.40%	6
Dihydromethysticin	DHM	2	3.23	347.373	6.85%	0.56%	5
Kavain	K	3	1	2703.537	53.28%	1.35%	4
Dihydrokavain	DHK	4	4.21	920.009	18.13%	1.94%	2
Desmethoxyyangonin	Y	5	2.74	307.158	6.05%	0.42%	1
Yangonin	DMY	6	3.16	428.352	8.44%	0.68%	3
Kavalactones			Total:	5074.403	100.00%	5.35%	241516

*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.

Mustel Youngs 9/1/17

SAMPLE S0194
 Vial 22

0.75649g/50ml

wavelength 246 nm

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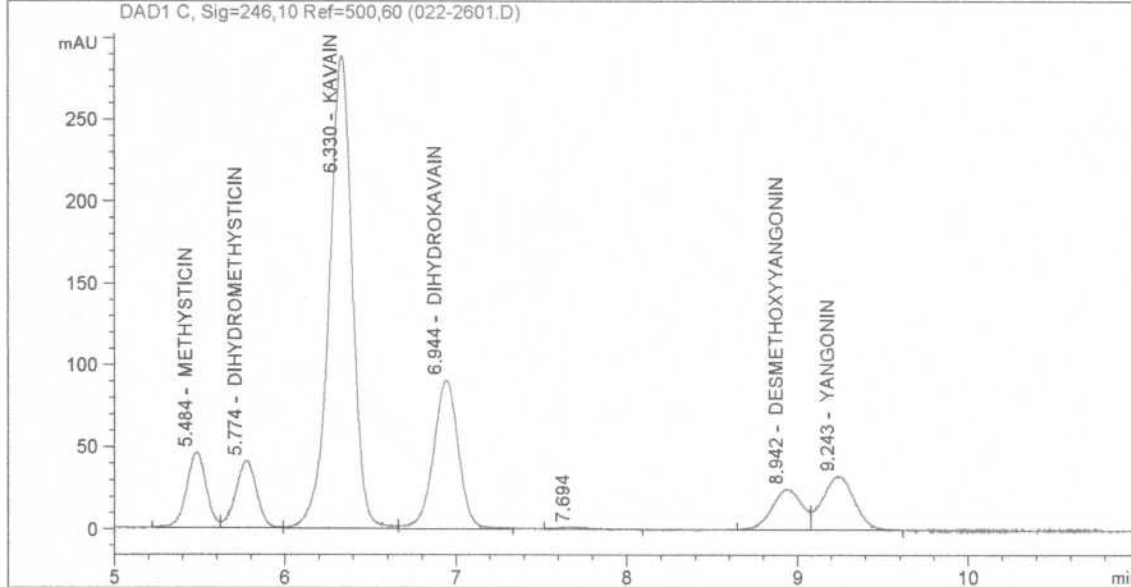
SEQUENCE C:\Chem32\1\DATA\KAVA_8_29_2017_ ->

Injection date 8/30/2017

Injection time 12:05:42 AM

Acq. operator KRISTL

Method C:\Chem32\1\DATA\KAVA_8_29_201->



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
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1		1.035	23.624	0.44	0.000
2		1.405	30.291	0.56	0.000
3		1.705	36.203	0.67	0.000
4		2.123	20.246	0.38	0.000
5		2.271	15.148	0.28	0.000
6		2.417	25.530	0.48	0.000
7		2.820	12.056	0.22	0.000
8		3.107	30.012	0.56	0.000
9		3.212	15.537	0.29	0.000
10		3.398	12.072	0.23	0.000
11		3.530	19.537	0.36	0.000
12		3.898	10.072	0.19	0.000
13		4.003	23.296	0.43	0.000
14	METHYSTICIN	5.484	367.974	6.86	0.000
15	DIHYDROMETHYSTICIN	5.774	347.373	6.47	0.000
16	KAVAIN	6.330	2703.537	50.39	0.000
17	DIHYDROKAVAIN	6.944	920.009	17.15	0.001
18		7.694	17.058	0.32	0.000
19	DESMETHOXYYANGONIN	8.942	307.158	5.73	0.000
20	YANGONIN	9.243	428.352	7.98	0.000