

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 9/20/2017Sample: S0205Product Name TABOOLot# VBE170913TCountry of Origin VANUATUCountry of Processing USAManufacture Date 09/13/17Expiration Date 09/13/20**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

9.59%

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

243156

HPLC

K/DHM

3.17

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2866.2			
Methysticin	M	1	2.19	787.6	8.07%	0.86%	6
Dihydromethysticin	DHM	2	3.23	543	5.56%	0.87%	5
Kavain	K	3	1	5553.7	56.89%	2.76%	4
Dihydrokavain	DHK	4	4.21	1396	14.30%	2.92%	2
Desmethoxyyangonin	Y	5	2.74	653.9	6.70%	0.89%	1
Yangonin	DMY	6	3.16	827.7	8.48%	1.30%	3
Kavalactones			Total:	9761.900	100.00%	9.59%	243156

*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.

*Misti Youngs**9/20/17*

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Kavalactone Analysis

SAMPLE S0205
Vial 16

0.75192g/50ml

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_9_20_2017_15MINSTDTESTMETHOD 2017-09-20 14-02-23\016->

SEQUENCE C:\CHEM32\1\DATA\KAVA_9_20_2017_ ->

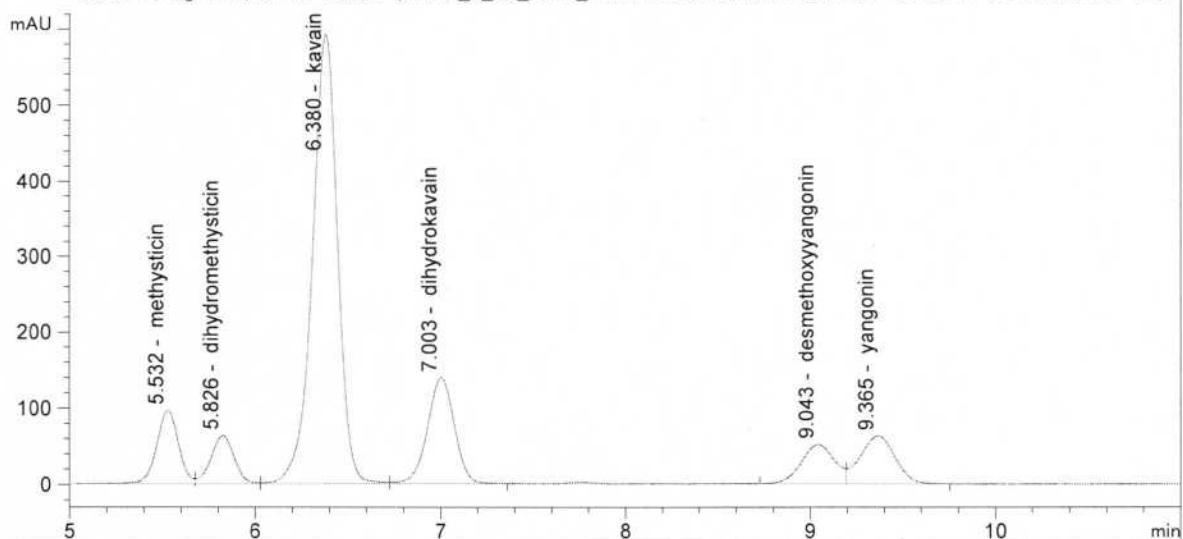
Injection date 9/20/2017

Injection time 5:00:42 PM

Acq. operator KRISTL

Method C:\CHEM32\1\METHODS\KAVA15MIN STD TEST.M

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_9_20_2017_15MINSTDTESTMETHOD 2017-09-20 14-02-23\016-1001.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.532	787.642	8.07	0.000
2	dihydromethysticin	5.826	542.978	5.56	0.000
3	kavain	6.380	5553.675	56.89	0.000
4	dihydrokavain	7.003	1396.021	14.30	0.001
5	desmethoxyyangonin	9.043	653.947	6.70	0.000
6	yangonin	9.365	827.680	8.48	0.000

kr
9/20/17