

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 8/8/2017Sample: S0144Product Name TABOOLot# VBE170801TCountry of Origin VANUATUCountry of Processing USAManufacture Date 08/01/17Expiration Date 08/01/20**General Product Specifications**Product Species Piper MethysticumCommon Names Kava kava, Awa, YagonaPart Used RootAppearance Beige powder**Analyzed Characteristics****Specification****Result****Test Method**Standardization

2-15% Kavalactones

10.40%

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

3.36

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2784.394			
Methysticin	M	1	2.19	783.485	7.42%	0.87%	6
Dihydromethysticin	DHM	2	3.23	571.231	5.41%	0.93%	5
Kavain	K	3	1	6208.868	58.84%	3.14%	4
Dihydrokavain	DHK	4	4.21	1543.274	14.62%	3.29%	2
Desmethoxyyangonin	Y	5	2.74	689.627	6.54%	0.96%	1
Yangonin	DMY	6	3.16	755.926	7.16%	1.21%	3
Kavalactones			Total:	10552.411	100.00%	10.40%	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.

Muste Youngs 8/10/17

SAMPLE S0144
 Vial 13

0.75940g/50ml

wavelength 246 nm

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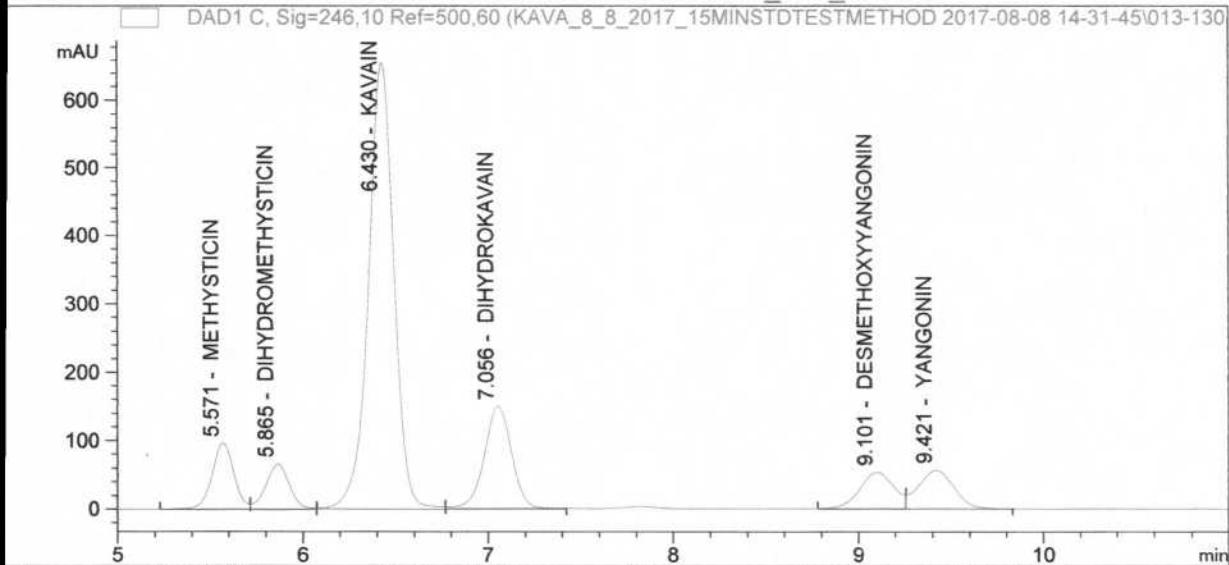
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Injection date 8/8/2017

Injection time 6:18:21 PM

Acq. operator KRISTL

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



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	METHYSTICIN	5.571	783.485	7.42	0.000
2	DIHYDROMETHYSTICIN	5.865	571.231	5.41	0.000
3	KAVAIN	6.430	6208.868	58.84	0.000
4	DIHYDROKAVAIN	7.056	1543.274	14.62	0.001
5	DESMETHOXYANGONIN	9.101	689.627	6.54	0.000
6	YANGONIN	9.421	755.926	7.16	0.000

Handwritten signature and date: 8/10/17