

**Botany Evolution LLC**

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

**Certificate Of Analysis****Sample Identification Information**Date of Analysis 10/15/2018Sample: S0561Product Name TRADITIONALLot# VSSC180927TCountry of Origin VANUATUCountry of Processing USAManufacture Date 09/27/18Expiration Date 09/27/21**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

6.96%

HPLC

Identification

Complies by HPLC

Conform

HPLC

Kavalactone Profile

Noble

NOBLE

HPLC

Mesh Size

60-30

60

Sieve

Color

Beige to Yellow

Pass

Visual

Odor

Pass

Organoleptic

Taste

Pass

Organoleptic

Chemotype

243561

HPLC

K/DHM

2.20

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2408.839			
Methysticin	M	1	2.21	535.646	9.00%	0.66%	6
Dihydromethysticin	DHM	2	3.38	440.443	7.40%	0.80%	5
Kavain	K	3	1	3136.366	52.70%	1.76%	4
Dihydrokavain	DHK	4	3.08	954.004	16.03%	2.26%	2
Desmethoxyyangonin	DMY	5	2.52	374.041	6.28%	0.58%	1
Yangonin	Y	6	3.12	511.389	8.59%	0.91%	3
Kavalactones			<b>Total:</b>	<b>5951.889</b>	<b>100.00%</b>	<b>6.96%</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

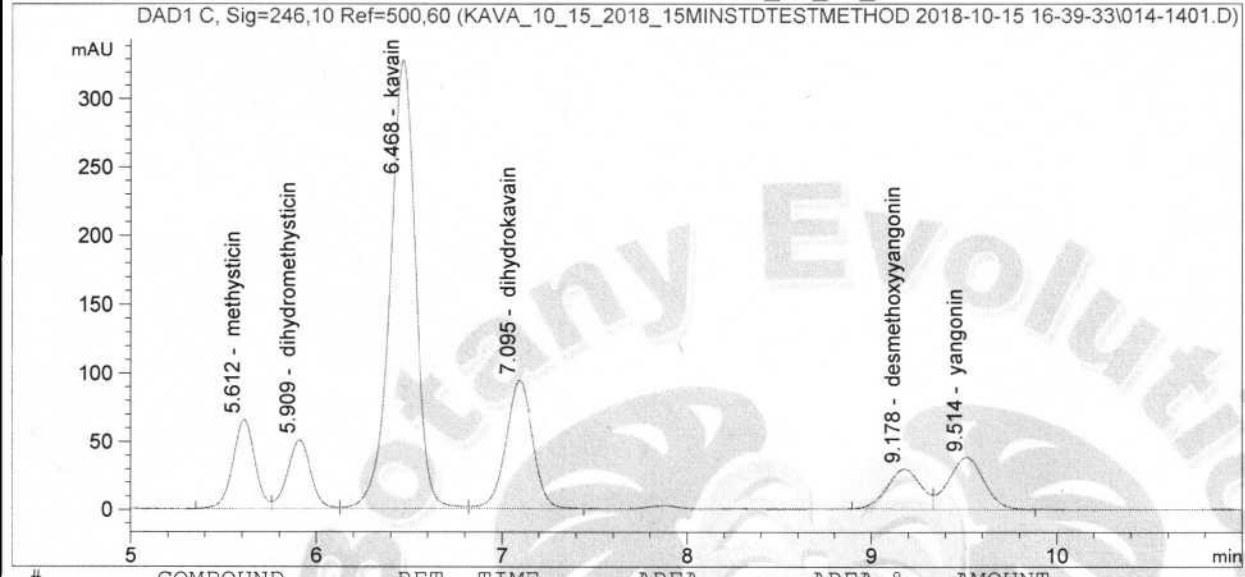
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*Missil Youngs 10/16/18*

SAMPLE S0561  
Vial 14

0.75242g/50ml

wavelength 246 nm  
C:\CHEM32\1\DATA\KAVA\_10\_15\_2018\_15MINSTDTESTMETHOD 2018-10-15 16-39-33\01->  
SEQUENCE C:\CHEM32\1\DATA\KAVA\_10\_15\_2018\_ ->  
Injection date 10/15/2018  
Injection time 9:14:38 PM  
Acq. operator KRISTL  
Method C:\CHEM32\1\DATA\KAVA\_10\_15\_201->



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.612	535.646	9.00	0.000
2	dihydromethysticin	5.909	440.443	7.40	0.000
3	kavain	6.468	3136.366	52.70	0.000
4	dihydrokavain	7.095	954.004	16.03	0.000
5	desmethoxyyangonin	9.178	374.041	6.28	0.000
6	yangonin	9.514	511.389	8.59	0.000

*10/16/18*  
*157*