

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 4/25/2017Sample: S0105Product Name BASAL ROOTLot# VFE170316BRCountry of Origin VANUATUCountry of Processing VANUATUManufacture Date 3/16/17Expiration Date 3/16/20**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

8.60%

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

245361

HPLC

K/DHM

1.12

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2729.7			
Methysticin	M	1	2.19	804.1	11.18%	0.90%	6
Dihydromethysticin	DHM	2	3.23	843	11.72%	1.40%	5
Kavain	K	3	1	3053.8	42.45%	1.57%	4
Dihydrokavain	DHK	4	4.21	1451.6	20.18%	3.13%	2
Desmethoxyyangonin	Y	5	2.74	401.4	5.58%	0.56%	1
Yangonin	DMY	6	3.16	640.4	8.90%	1.04%	3
Kavalactones			Total:	7194.300	100.00%	8.60%	245361

*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.

SAMPLE S0105
 Vial 9

wavelength 246 nm

Path: \CHEM32\1\DATA\KAVA_4_25_2017_15MINSTDTESTMETHOD 2017-04-25 17-30-48\009->

SEQUENCE C:\CHEM32\1\DATA\KAVA_4_25_2017_ ->

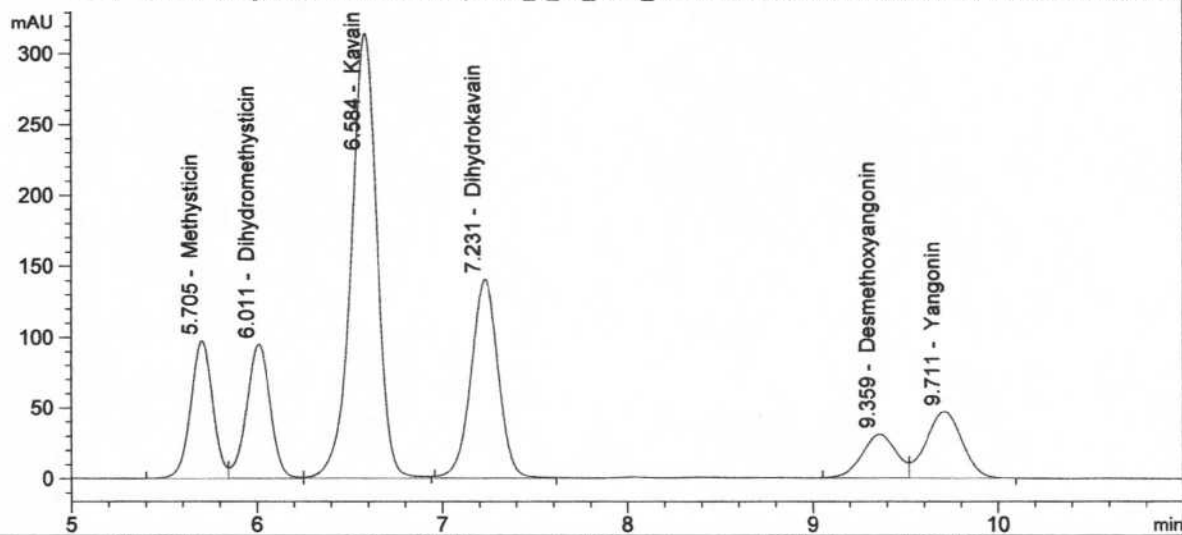
Injection date 4/25/2017

Injection time 7:56:18 PM

Operator KRISTL

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

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_4_25_2017_15MINSTDTESTMETHOD 2017-04-25 17-30-48\009-07)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	Methysticin	5.705	804.123	11.18	0.000
2	Dihydromethysticin	6.011	842.971	11.72	0.000
3	Kavain	6.584	3053.772	42.45	0.000
4	Dihydrokavain	7.231	1451.630	20.18	0.001
5	Desmethoxyangonin	9.359	401.385	5.58	0.000
6	Yangonin	9.711	640.437	8.90	0.000