

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 12/12/2018Sample: S0586Product Name LATERAL ROOTSLot# PNGNK181212LRCountry of Origin

PAPUA NEW GUINEA

Country of Processing

PAPUA NEW GUINEA

Manufacture Date

12/12/18

Expiration Date

12/12/21

General Product SpecificationsProduct Species Piper MethysticumCommon Names

Kava kava, Awa, Yagona

Part Used RootAppearance

Beige powder

Analyzed Characteristics**Specification****Result****Test Method**Standardization

2-17% Kavalactones

6.66%

HPLC

Identification

Complies by HPLC

Conform

HPLC

Kavalactone Profile

Noble

TUDEI

HPLC

Mesh Size

60-30

60

Sieve

Color

Beige to Yellow

Pass

Visual

Odor

Pass

Organoleptic

Taste

Pass

Organoleptic

Chemotype

254631

HPLC

K/DHM

0.90

Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2483.119			
Methysticin	M	1	2.21	782.69	14.69%	0.92%	6
Dihydromethysticin	DHM	2	3.38	738.733	13.86%	1.28%	5
Kavain	K	3	1	2136.081	40.09%	1.15%	4
Dihydrokavain	DHK	4	3.08	929.488	17.44%	2.10%	2
Desmethoxyyangonin	DMY	5	2.52	273.346	5.13%	0.40%	1
Yangonin	Y	6	3.12	467.813	8.78%	0.79%	3
Kavalactones			Total:	5328.151	100.00%	6.66%	254631

*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.

Mustle Youngs 12/13/18

SAMPLE S0586
Vial 16

0.76233g/50ml

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_12_12_2018_15MINSTDTESTMETHOD 2018-12-12 16-00-03\01->

SEQUENCE C:\CHEM32\1\DATA\KAVA_12_12_2018_ ->

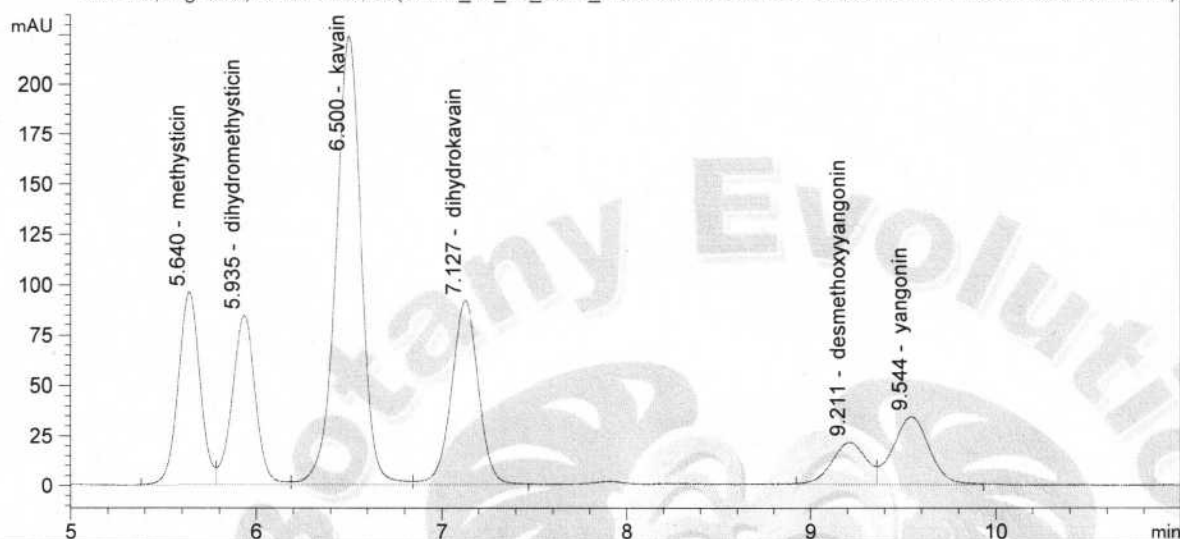
Injection date 12/12/2018

Injection time 9:24:08 PM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA_12_12_201->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_12_12_2018_15MINSTDTESTMETHOD 2018-12-12 16-00-03\016-1701.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.640	782.690	14.69	0.000
2	dihydromethysticin	5.935	738.733	13.86	0.000
3	kavain	6.500	2136.081	40.09	0.000
4	dihydrokavain	7.127	929.488	17.44	0.000
5	desmethoxyyangonin	9.211	273.346	5.13	0.000
6	yangonin	9.544	467.813	8.78	0.000

12/13/18
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