

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 12/10/2020Sample: S1047Product Name LATERAL ROOTSLot# PNGNK201010LRCountry of Origin

PAPUA NEW GUINEA

Country of Processing

USA

Manufacture Date

10/10/20

Best By Date

10/10/23

General Product SpecificationsProduct Species Piper MethysticumCommon Names

Kava kava, Awa, Yagona

Part Used RootAppearance

Yellow, beige powder

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

2-17% Kavalactones

7.07%

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

256431

HPLC

K/DHM

0.8

Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2389.532			
Methysticin	M	1	2.21	1124.626	20.12%	1.36%	6
Dihydromethysticin	DHM	2	3.38	804.351	14.39%	1.44%	5
Kavain	K	3	1	2145.5	38.39%	1.19%	4
Dihydrokavain	DHK	4	3.08	831.682	14.88%	1.94%	2
Desmethoxyyangonin	DMY	5	2.52	233.134	4.17%	0.35%	1
Yangonin	Y	6	3.12	449.574	8.04%	0.79%	3
Kavalactones			Total:	5588.867	100.00%	7.07%	256431

*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.

Chemist

Mustel Younger

Date

12/17/20

SAMPLE S1047
 Vial 38

0.75281g/50mL

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_12_10_2020_15MINSTDTESTMETHOD 2020-12-10 19-17-01\03->

SEQUENCE C:\CHEM32\1\DATA\KAVA_12_10_2020_ ->

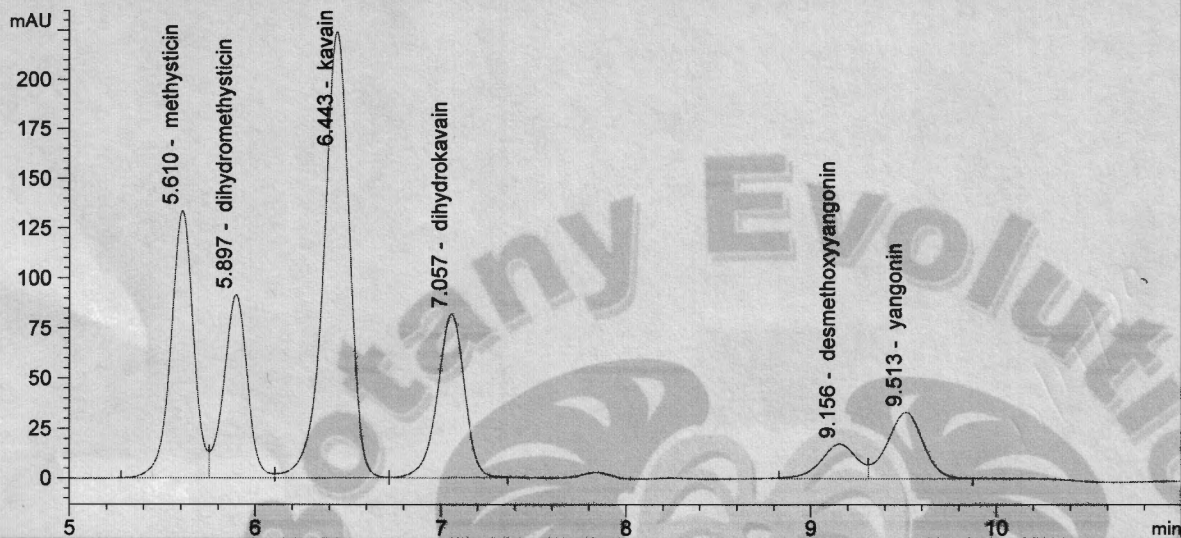
Injection date 12/11/2020

Injection time 7:07:04 AM

Acq. operator KRISTL

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

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_12_10_2020_15MINSTDTESTMETHOD 2020-12-10 19-17-01\038-4101.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.610	1124.626	20.12	0.000
2	dihydromethysticin	5.897	804.351	14.39	0.000
3	kavain	6.443	2145.500	38.39	0.004
4	dihydrokavain	7.057	831.682	14.88	0.000
5	desmethoxyyangonin	9.156	233.134	4.17	0.000
6	yangonin	9.513	449.574	8.04	0.000

Handwritten signature: 12/17/20
 [Signature]