

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 7/26/2017Sample: S0136Product Name ISA MADANG, LATERAL ROOTSLot# PNGNK170627IMCountry of Origin

PAPUA NEW GUINEA

Country of Processing

PAPUA NEW GUINEA

Manufacture Date

06/27/17

Expiration Date

06/27/20

General Product SpecificationsProduct Species Piper MethysticumCommon Names

Kava kava, Awa, Yagona

Part Used RootAppearance

Beige powder

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

2-15% Kavalactones

7.11%

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

0.72

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2777.361			
Methysticin	M	1	2.19	841.06	14.92%	0.94%	6
Dihydromethysticin	DHM	2	3.23	866.949	15.38%	1.43%	5
Kavain	K	3	1	2014.021	35.72%	1.03%	4
Dihydrokavain	DHK	4	4.21	1257.968	22.31%	2.71%	2
Desmethoxyyangonin	Y	5	2.74	286.876	5.09%	0.40%	1
Yangonin	DMY	6	3.16	370.955	6.58%	0.60%	3
Kavalactones			Total:	5637.829	100.00%	7.11%	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.

Must Youngs 7/27/17

SAMPLE S0136
Vial 22

0.75370g/50ml

wavelength 246 nm

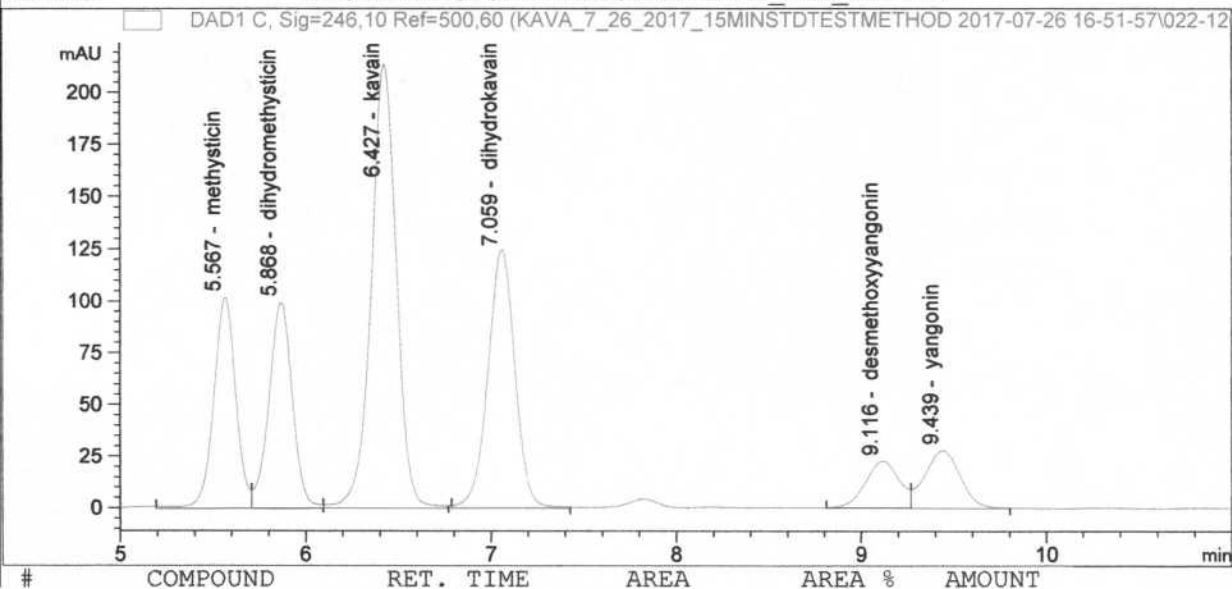
C:\CHEM32\1\DATA\KAVA_7_26_2017_15MINSTDTESTMETHOD 2017-07-26 16-51-57\022->
SEQUENCE C:\CHEM32\1\DATA\KAVA_7_26_2017_ ->

Injection date 7/26/2017

Injection time 8:06:39 PM

Acq. operator KRISTL

Method C:\CHEM32\1\METHODS\KAVA15MIN_STD_TEST.M



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.567	841.060	14.92	0.000
2	dihydromethysticin	5.868	866.949	15.38	0.000
3	kavain	6.427	2014.021	35.72	0.000
4	dihydrokavain	7.059	1257.968	22.31	0.001
5	desmethoxyyangonin	9.116	286.876	5.09	0.000
6	yangonin	9.439	370.955	6.58	0.000

Handwritten signature
7/27/17