

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information****Date of Analysis** 4/25/2017**Sample:** S0102**Product Name** LATERAL ROOTS**Lot#** PNGNK170313IM**Country of Origin**

PAPUA NEW GUINEA

Country of Processing

PAPUA NEW GUINEA

Manufacture Date

03/13/17

Expiration Date

03/13/20

General Product Specifications**Product Species** Piper Methysticum**Part Used** Root**Common Names**

Kava kava, Awa, Yagona

Appearance

Beige powder

<u>Analyzed Characteristics</u>	<u>Specification</u>	<u>Result</u>	<u>Test Method</u>
<u>Standardization</u>	2-15% Kavalactones	8.22%	HPLC
<u>Identification</u>	Complies by HPLC	Conform	HPLC
<u>Kavalactone Profile</u>	Noble	Tudei	HPLC
<u>Mesh Size</u>	60-30	60	Sieve
<u>Color</u>	Beige to Yellow	Pass	Visual
<u>Odor</u>		Pass	Organoleptic
<u>Taste</u>		Pass	Organoleptic
<u>Chemotype</u>		254631	HPLC
<u>K/DHM</u>		0.56	Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2729.7			
Methysticin	M	1	2.19	818.2	13.45%	0.94%	6
Dihydromethysticin	DHM	2	3.23	1088.1	17.89%	1.83%	5
Kavain	K	3	1	1962	32.26%	1.02%	4
Dihydrokavain	DHK	4	4.21	1526.5	25.10%	3.35%	2
Desmethoxyyangonin	Y	5	2.74	260	4.28%	0.37%	1
Yangonin	DMY	6	3.16	426.9	7.02%	0.70%	3
Kavalactones			Total:	6081.700	100.00%	8.22%	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.

SAMPLE S0102
Vial 6

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_4_25_2017_15MINSTDTESTMETHOD 2017-04-25 17-30-48\006->

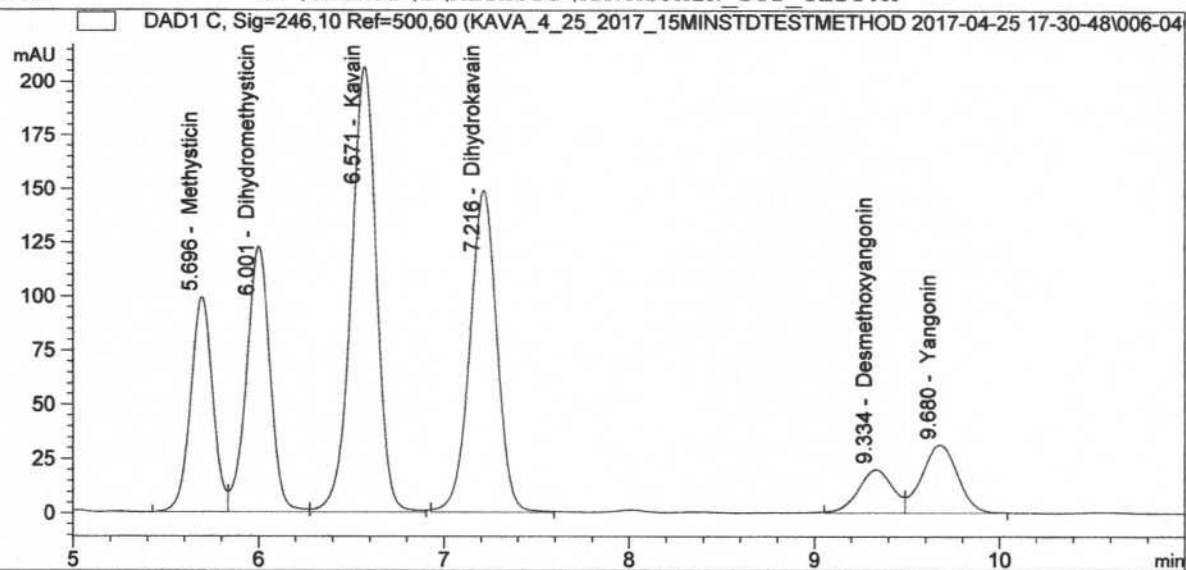
SEQUENCE C:\CHEM32\1\DATA\KAVA_4_25_2017_ ->

Injection date 4/25/2017

Injection time 7:08:06 PM

Acq. operator KRISTL

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



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	Methysticin	5.696	818.222	13.45	0.000
2	Dihydromethysticin	6.001	1088.062	17.89	0.000
3	Kavain	6.571	1961.962	32.26	0.000
4	Dihydrokavain	7.216	1526.457	25.10	0.001
5	Desmethoxyangonin	9.334	259.987	4.27	0.000
6	Yangonin	9.680	426.869	7.02	0.000