

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information****Date of Analysis** 4/12/2018**Sample:** S0393**Product Name** 30% KAVALACTONE EXTRACT**Lot#** CHKB180101KE30**Country of Origin** VANUATU**Country of Manufacture** CHINA**Manufacture Date** 01/01/18**Expiration Date** 01/01/21**General Product Specifications****Product Species** Piper Methysticum**Part Used** Root**Common Names** Kava kava, Awa, Yagona**Appearance** Beige powder**Analyzed Characteristics****Specification****Result****Test Method****Standardization**

20-90% Kavalactones

31.66%

HPLC

Identification

Complies by HPLC

Conform

HPLC

Kavalactone Profile

Noble

PASS

HPLC

Mesh Size

60-30

30

Sieve

Color

Beige to Yellow

Pass

Visual

Odor

Pass

Organoleptic

Taste

Pass

Organoleptic

Chemotype

245361

HPLC

K/DHM

1.42

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			3000.195			
Methysticin	M	1	2.19	4472.749	12.26%	3.84%	6
Dihydromethysticin	DHM	2	3.23	3615.252	9.91%	4.58%	5
Kavain	K	3	1	16523.719	45.28%	6.48%	4
Dihydrokavain	DHK	4	4.21	5960.642	16.33%	9.84%	2
Desmethoxyyangonin	DMY	5	2.74	2503.031	6.86%	2.69%	1
Yangonin	Y	6	3.16	3419.238	9.37%	4.24%	3
Kavalactones			Total:	36494.631	100.00%	31.66%	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.

Muste Youngs 4/13/18

SAMPLE S0393
Vial 16

0.36387g/20ml

wavelength 246 nm

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SEQUENCE C:\CHEM32\1\DATA\KAVA_4_12_2018_ ->

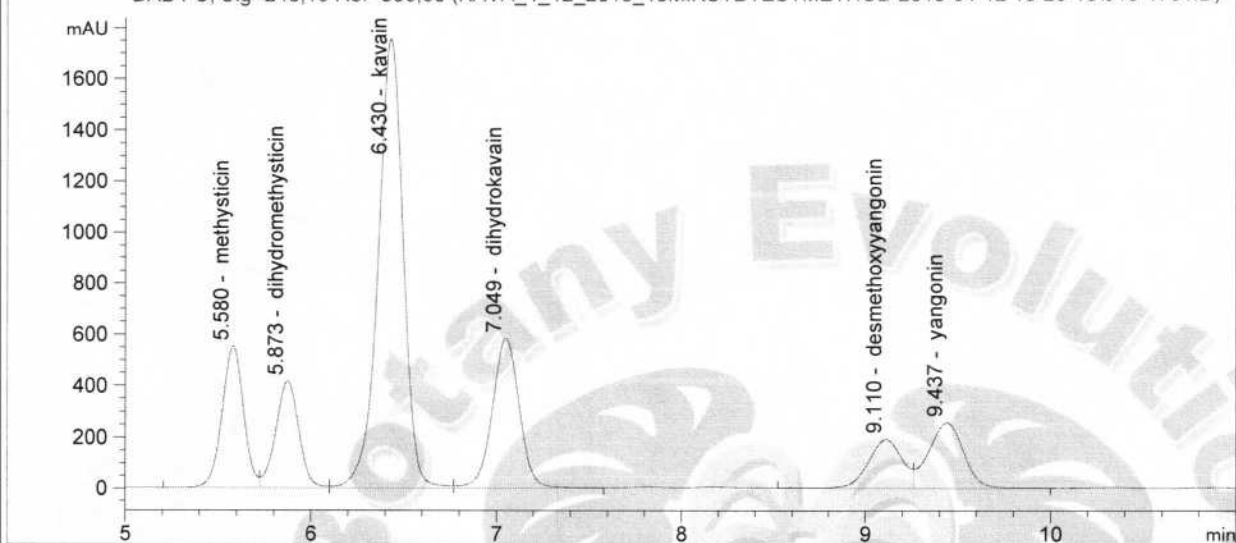
Injection date 4/12/2018

Injection time 9:46:16 PM

Acq. operator KRISTL

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

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_4_12_2018_15MINSTDTESTMETHOD 2018-04-12 16-23-18\016-1701.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.580	4472.749	12.26	0.001
2	dihydromethysticin	5.873	3615.252	9.91	0.001
3	kavain	6.430	16523.719	45.28	0.001
4	dihydrokavain	7.049	5960.642	16.33	0.003
5	desmethoxyyangonin	9.110	2503.031	6.86	0.000
6	yangonin	9.437	3419.238	9.37	0.000

4/13/18
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