

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 7/15/2019Sample: S0701Product Name KAVA EXTRACT 30%Lot# CJ190703KE30Country of Origin CHINACountry of Processing CHINAManufacture Date 07/03/19Best By Date 07/03/22**General Product Specifications**Product Species Piper MethysticumPart Used RootCommon Names Kava kava, Awa, YagonaAppearance Yellow powder**Analyzed Characteristics****Specification****Result****Test Method**Standardization

20-90% Kavalactones

36.80%

HPLC

Identification

Complies by HPLC

Conform

HPLC

Kavalactone Profile

Noble

HPLC

Mesh Size

60-30

30

Sieve

Color

Beige to Yellow

Pass

Visual

Odor

Pass

Organoleptic

Taste

Pass

Organoleptic

Chemotype

245361

HPLC

K/DHM

1.76

Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2344.276			
Methysticin	M	1	2.21	3098.211	10.92%	4.05%	6
Dihydromethysticin	DHM	2	3.38	2401.75	8.46%	4.63%	5
Kavain	K	3	1	13638.489	48.06%	8.13%	4
Dihydrokavain	DHK	4	3.08	4957.329	17.47%	12.44%	2
Desmethoxyyangonin	DMY	5	2.52	2015.961	7.10%	3.29%	1
Yangonin	Y	6	3.12	2263.43	7.98%	4.26%	3
Kavalactones			Total:	28375.170	100.00%	36.80%	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.

Chemist

Mustel Young

Date

7/16/19

SAMPLE S0701
Vial 17

0.35629g/25mL

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_7_15_2019_15MINSTDTESTMETHOD 2019-07-15 17-25-22\017->

SEQUENCE C:\CHEM32\1\DATA\KAVA_7_15_2019_ ->

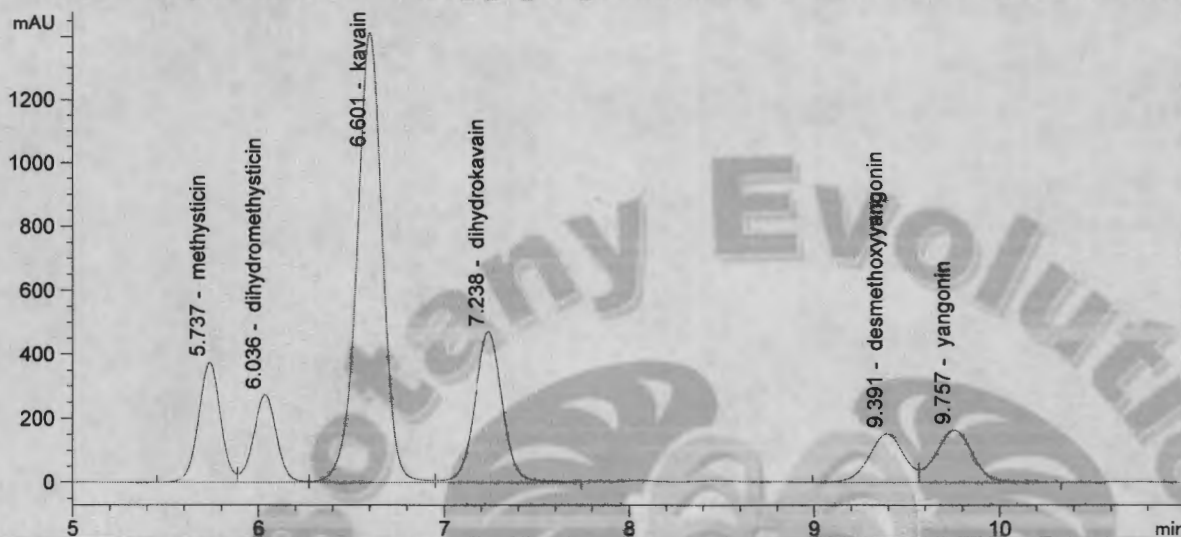
Injection date 7/15/2019

Injection time 10:48:57 PM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA_7_15_201->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_7_15_2019_15MINSTDTESTMETHOD 2019-07-15 17-25-22\017-1701.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.737	3098.211	10.92	0.001
2	dihydromethysticin	6.036	2401.750	8.46	0.001
3	kavain	6.601	13638.489	48.06	0.001
4	dihydrokavain	7.238	4957.329	17.47	0.001
5	desmethoxyyangonin	9.391	2015.961	7.10	0.000
6	yangonin	9.757	2263.430	7.98	0.001

Handwritten signature: H10/19