

Botany Evolution LLC
 2510 Kirby Circle NE
 Palm Bay, FL 32945
 321-802-4583

Certificate Of Analysis

Sample Identification Information

Date of Analysis 9/24/2020
Sample: S0952
Product Name CHIEF LATERAL ROOTS
Lot# SIK200902CLR

Country of Origin SOLOMON ISLANDS
Country of Processing SOLOMON ISLANDS
Manufacture Date 09/02/20
Best By Date 09/02/23

General Product Specifications

Product Species Piper Methysticum
Part Used Root

Common Names Kava kava, Awa, Yagona
Appearance Yellow, beige powder

Analyzed Characteristics

Specification

Result

Test Method

<u>Standardization</u>	2-17% Kavalactones	16.65%	HPLC
<u>Identification</u>	Complies by HPLC	Conform	HPLC
<u>Kavalactone Profile</u>	Noble	PASS	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>		243165	HPLC
<u>K/DHM</u>		4.4	Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2351.877			
Methysticin	M	1	2.21	962.534	6.33%	1.18%	6
Dihydromethysticin	DHM	2	3.38	628.348	4.13%	1.13%	5
Kavain	K	3	1	9016.245	59.32%	5.04%	4
Dihydrokavain	DHK	4	3.08	2431.611	16.00%	5.72%	2
Desmethoxyyangonin	DMY	5	2.52	1063.567	7.00%	1.63%	1
Yangonin	Y	6	3.12	1097.966	7.22%	1.94%	3
Kavalactones			Total:	15200.271	100.00%	16.65%	243165

*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 Youngs Date 9/25/20

SAMPLE S0952
Vial 12

0.75729g/50mL

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_9_24_2020_15MINSTDTESTMETHOD 2020-09-24 16-11-24\012->

SEQUENCE C:\CHEM32\1\DATA\KAVA_9_24_2020_ ->

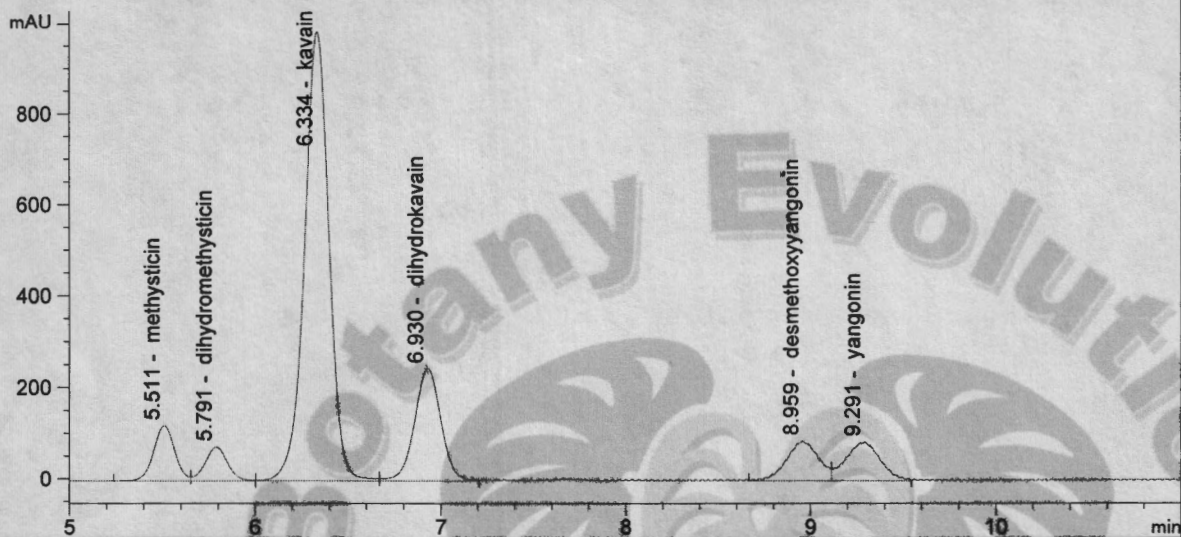
Injection date 9/24/2020

Injection time 8:14:02 PM

Acq. operator KRISTL

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

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_9_24_2020_15MINSTDTESTMETHOD 2020-09-24 16-11-24\012-1201.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.511	962.534	6.33	0.000
2	dihydromethysticin	5.791	628.348	4.13	0.000
3	kavain	6.334	9016.245	59.32	0.001
4	dihydrokavain	6.930	2431.611	16.00	0.001
5	desmethoxyyangonin	8.959	1063.567	7.00	0.000
6	yangonin	9.291	1097.966	7.22	0.000

9/25/20
V8