

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 8/28/2017Sample: S0193Product Name BAG 26Lot# VSSC170725BR26Country of Origin NACountry of Processing NAManufacture Date 07/25/17Expiration Date NA**General Product Specifications**Product Species Piper MethysticumPart Used RootCommon Names Kava kava, Awa, YagonaAppearance Beige powder

<u>Analyzed Characteristics</u>	<u>Specification</u>	<u>Result</u>	<u>Test Method</u>
<u>Standardization</u>	2-15% Kavalactones	4.40%	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>		243516	HPLC
<u>K/DHM</u>		2.56	Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2828.846			
Methysticin	M	1	2.19	264.319	6.51%	0.29%	6
Dihydromethysticin	DHM	2	3.23	257.214	6.34%	0.42%	5
Kavain	K	3	1	2127.905	52.43%	1.07%	4
Dihydrokavain	DHK	4	4.21	788.185	19.42%	1.68%	2
Desmethoxyyangonin	Y	5	2.74	254.6	6.27%	0.35%	1
Yangonin	DMY	6	3.16	366.526	9.03%	0.58%	3
Kavalactones			Total:	4058.749	100.00%	4.40%	243516

*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 9/11/17

SAMPLE S0193
 Vial 21

0.74908g/50ml

wavelength 246 nm

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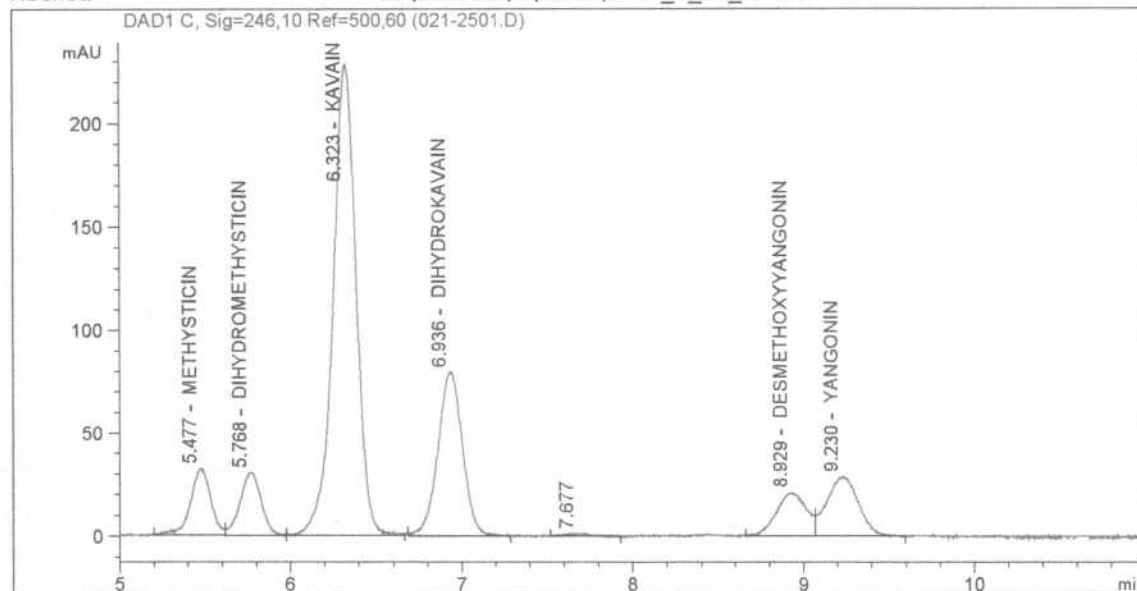
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Injection date 8/29/2017

Injection time 11:49:37 PM

Acq. operator KRISTL

Method C:\Chem32\1\DATA\KAVA_8_29_201->



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1		0.794	20.195	0.45	0.000
2		1.029	26.947	0.61	0.000
3		1.250	10.788	0.24	0.000
4		1.316	10.821	0.24	0.000
5		1.410	10.982	0.25	0.000
6		1.467	10.834	0.24	0.000
7		1.632	15.080	0.34	0.000
8		1.712	42.343	0.95	0.000
9		2.107	28.327	0.64	0.000
10		2.294	15.982	0.36	0.000
11		2.419	31.719	0.71	0.000
12		2.655	14.434	0.32	0.000
13		2.752	17.494	0.39	0.000
14		3.105	18.924	0.43	0.000
15		3.211	14.856	0.33	0.000
16		3.398	13.546	0.30	0.000
17		3.649	30.132	0.68	0.000
18		3.999	40.349	0.91	0.000
19	METHYSTICIN	5.477	264.319	5.95	0.000
20	DIHYDROMETHYSTICIN	5.768	257.214	5.79	0.000
21	KAVAIN	6.323	2127.905	47.88	0.000
22	DIHYDROKAVAIN	6.936	788.185	17.74	0.001
23		7.677	11.422	0.26	0.000
24	DESMETHOXYANGONIN	8.929	254.600	5.73	0.000
25	YANGONIN	9.230	366.526	8.25	0.000