

**Botany Evolution LLC**

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**Certificate Of Analysis****Sample Identification Information**Date of Analysis 2/7/2017Sample: S0084Product Name FIVE STAR BLACK LABELLot# VFE170118BLCountry of Origin VANUATUCountry of Processing VANUATUManufacture Date Jan-17Expiration Date Jan-20**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	10.02%	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>		3.31	Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2688.106			
Methysticin	M	1	2.19	775.877	7.94%	0.89%	6
Dihydromethysticin	DHM	2	3.23	524.087	5.36%	0.88%	5
Kavain	K	3	1	5596.979	57.28%	2.92%	4
Dihydrokavain	DHK	4	4.21	1348.972	13.81%	2.96%	2
Desmethoxyyangonin	Y	5	2.74	656.172	6.72%	0.94%	1
Yangonin	DMY	6	3.16	868.896	8.89%	1.43%	3
<b>Kavalactones</b>			<b>Total:</b>	<b>9770.983</b>	<b>100.00%</b>	<b>10.02%</b>	<b>243165</b>

\*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 S0084  
 Vial 25

0.76331g

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA\_3\_7\_2017\_STD\_CHECK\_15MINMETHOD 2017-02-07 13-49-20\ ->

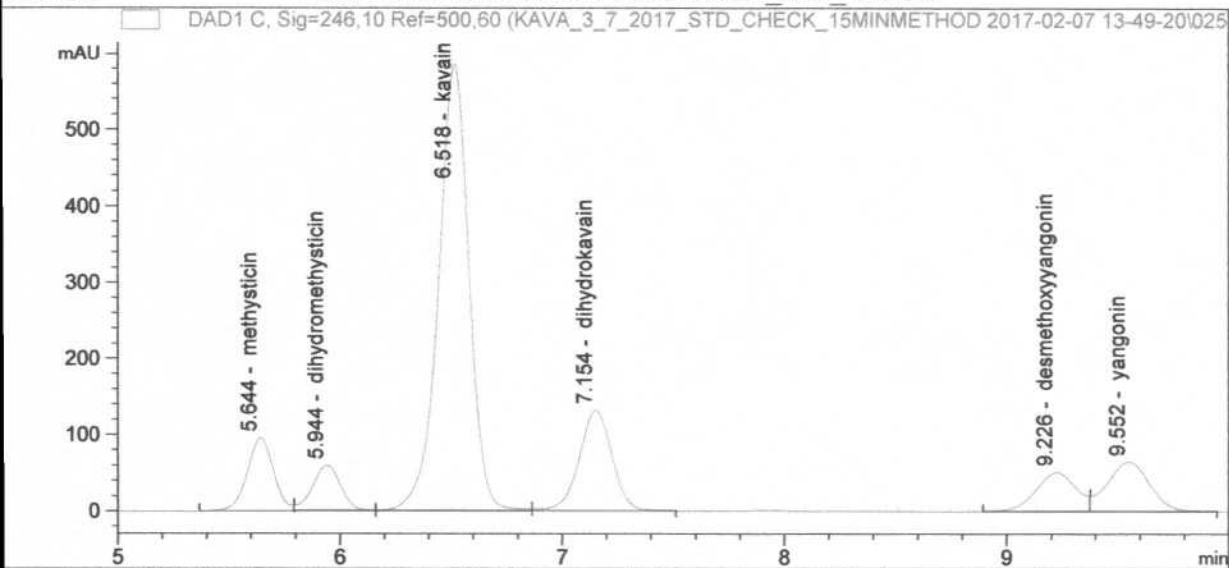
SEQUENCE C:\CHEM32\1\DATA\KAVA\_3\_7\_2017\_STD\_CHECK\_->

Injection date 2/7/2017

Injection time 7:27:58 PM

Acq. operator KRISTL

Method C:\CHEM32\1\METHODS\KAVA15MIN\_STD\_TEST.M



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.644	775.877	7.94	0.055
2	dihydromethysticin	5.944	524.087	5.36	0.048
3	kavain	6.518	5596.979	57.28	2.110
4	dihydrokavain	7.154	1348.972	13.81	0.350
5	desmethoxyyangonin	9.226	656.172	6.72	0.047
6	yangonin	9.552	868.896	8.89	0.073