

Botany Evolution LLC

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Certificate Of Analysis**Sample Identification Information**Date of Analysis 2/7/2017Sample: S0086Product Name LATERAL ROOTLot# VFE161211LRCountry of Origin VANUATUCountry of Processing VANUATUManufacture Date Dec-16Expiration Date Dec-19**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	10.94%	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>		423651	HPLC
<u>K/DHM</u>		3.49	Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2688.106			
Methysticin	M	1	2.28	1110.049	9.06%	1.15%	6
Dihydromethysticin	DHM	2	2.99	668.123	5.45%	1.04%	5
Kavain	K	3	1	6966.056	56.83%	3.64%	4
Dihydrokavain	DHK	4	3.15	1582.136	12.91%	2.60%	2
Desmethoxyyangonin	Y	5	2.26	829.041	6.76%	0.98%	1
Yangonin	DMY	6	2.63	1102.824	9.00%	1.52%	3
Kavalactones			Total:	12258.229	100.00%	10.94%	423651

*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 S0086
Vial 27

0.76162g

wavelength 246 nm

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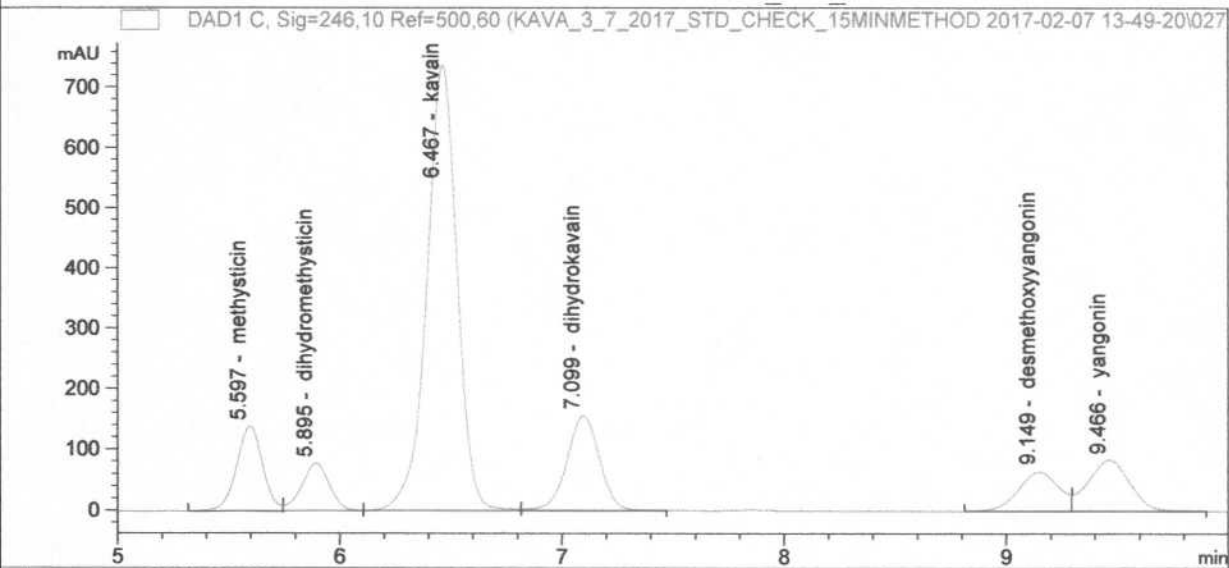
SEQUENCE C:\CHEM32\1\DATA\KAVA_3_7_2017_STD_CHECK_->

Injection date 2/7/2017

Injection time 8:00:13 PM

Acq. operator KRISTL

Method C:\CHEM32\1\METHODS\KAVA15MIN_STD_TEST.M



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.597	1110.049	9.06	0.079
2	dihydromethysticin	5.895	668.123	5.45	0.061
3	kavain	6.467	6966.056	56.83	2.626
4	dihydrokavain	7.099	1582.136	12.91	0.410
5	desmethoxyyangonin	9.149	829.041	6.76	0.059
6	yangonin	9.466	1102.824	9.00	0.093