

Botany Evolution LLC

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 4/12/2018Sample: S0390Product Name BLACK LABELLot# VFE180321BLCountry of Origin/Region VANUATUCountry of Processing VANUATUManufacture Date 03/21/18Expiration Date 03/21/21**General Product Specifications**Product Species Piper MethysticumPart Used RootCommon Names Kava kava, Awa, YagonaAppearance Beige powder**Analyzed Characteristics****Specification****Result****Test Method**Standardization

2-15% Kavalactones

9.15%

HPLC

Identification

Complies by HPLC

Conform

HPLC

Kavalactone Profile

Noble

PASS

HPLC

Mesh Size

60-30

60

Sieve

Color

Beige to Yellow

Pass

Visual

Odor

Pass

Organoleptic

Taste

Pass

Organoleptic

Chemotype

423156

HPLC

K/DHM

3.73

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			3000.195			
Methysticin	M	1	2.19	714.387	7.05%	0.73%	6
Dihydromethysticin	DHM	2	3.23	501.183	4.95%	0.76%	5
Kavain	K	3	1	6030.633	59.53%	2.825%	4
Dihydrokavain	DHK	4	4.21	1430.646	14.12%	2.821%	2
Desmethoxyyangonin	DMY	5	2.74	682.687	6.74%	0.88%	1
Yangonin	Y	6	3.16	770.168	7.60%	1.14%	3
Kavalactones			Total:	10129.704	100.00%	9.15%	423156

*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

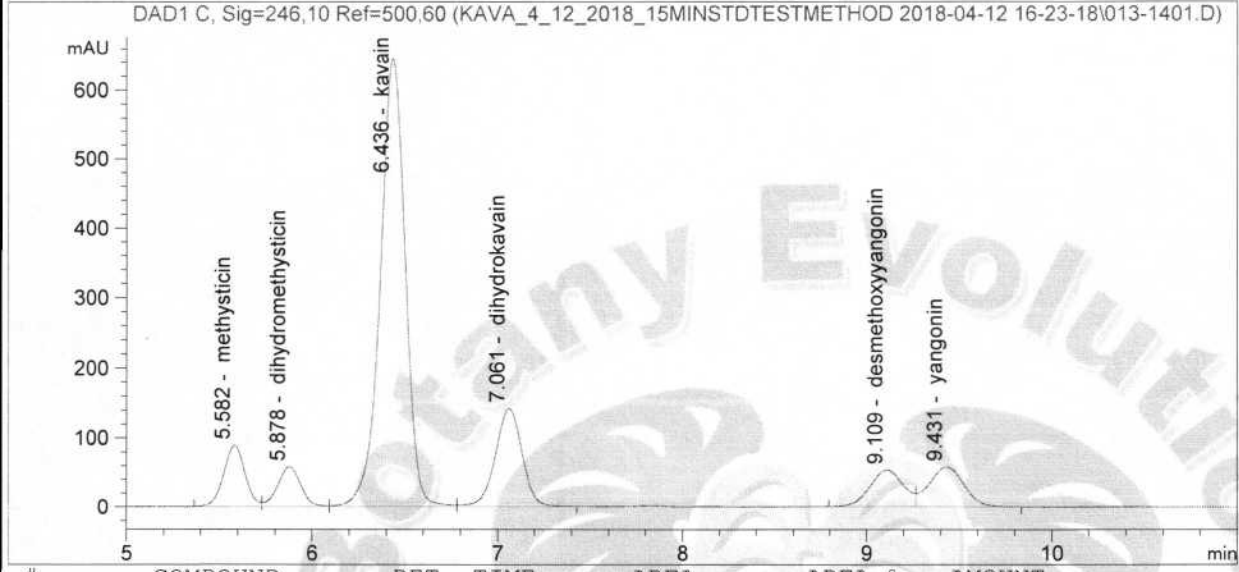
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Mustel Youngs 4/13/18

SAMPLE S0390
Vial 13

0.76141g/50ml

wavelength 246 nm
C:\CHEM32\1\DATA\KAVA_4_12_2018_15MINSTDTESTMETHOD 2018-04-12 16-23-18\013->
SEQUENCE C:\CHEM32\1\DATA\KAVA_4_12_2018_ ->
Injection date 4/12/2018
Injection time 8:57:58 PM
Acq. operator KRISTL
Method C:\CHEM32\1\METHODS\KAVA15MIN STD TEST.M



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.582	714.387	7.05	0.000
2	dihydromethysticin	5.878	501.183	4.95	0.000
3	kavain	6.436	6030.633	59.53	0.000
4	dihydrokavain	7.061	1430.646	14.12	0.001
5	desmethoxyyangonin	9.109	682.687	6.74	0.000
6	yangonin	9.431	770.168	7.60	0.000

4/13/18
vs