## **Botany Evolution LLC**

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

## **Certificate Of Analysis**

Sample Identification Information

Date of Analyis 4/6/2020 **Country of Origin** FIJI Sample: S0859 FIJI **Country of Processing** 

**Product Name KADAVU WAKA Manufacture Date** 03/25/20 **Best By Date** 03/25/23

Lot# FKK200325KW

**General Product Specifications** 

**Product Species** Piper Methysticum **Common Names** Kava kava, Awa, Yagona Part Used Root Yellow, beige powder **Appearance** 

**Specification** Result **Test Method Analyzed Characteristics** HPLC Standardization 2-17% Kavalactones 7.15% Conform HPLC **Identification** Complies by HPLC HPLC **Kavalactone Profile PASS** Noble **Mesh Size** 60-30 60 Sieve Color Beige to Yellow **Pass** Visual Organoleptic Odor **Pass Organoleptic** Taste **Pass** Chemotype 426351 HPLC K/DHM 1.87 Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier	
Standard Kavain	K	1	1	2476.022	6			
Methysticin	М	1	2.21	1120.064	17.26%	1.31%	6	
Dihydromethysticin	DHM	2	3.38	506.964	7.81%	0.87%	5	
Kavain	К	3	1	3070.031	47.31%	1.64%	4	
Dihydrokavain	DHK	4	3.08	707.918	10.91%	1.59%	2	
Desmethoxyyangonin	DMY	5	2.52	392.316	6.05%	0.57%	1	
Yangonin	Υ	6	3.12	691.982	10.66%	1.17%	3	
Kavalactones			Total:	6489.275	100.00%	7.15%	426351	

<sup>\*</sup>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.

Musto Youngs Chemist

## Kavalactone Analysis

SAMPLE S0859 Vial 18

0.75419g/50ml

wavelength 246 nm C:\CHEM32\1\DATA\KAVA 4 6 20 15MINSTDTESTMETHOD 2020-04-06 17-15-04\018- -> SEQUENCE C:\CHEM32\1\DATA\KAVA 4 6 20 Injection date 4/6/2020 Injection time 10:55:40 PM Acq. operator KRISTL C:\CHEM32\1\DATA\KAVA 4 6 20 15MINSTDTESTMETH-> DAD1 C, Sig=246,10 Ref=500,60 (KAVA\_4\_6\_20\_15MINSTDTESTMETHOD 2020-04-06 17-15-04\018-1801.D) mAU 6.507 - kavai 300 5.656 - methysticin 250 dihydromethysticin 200 150 5.951 - ( 100 50 0 10 COMPOUND TIME AMOUNT RET. AREA AREA %

1	methysticin	5.656	1120.064	17.26	0.000
2	dihydromethysticin	5.951	506.964	7.81	0.000
3	kavain	6.507	3070.031	47.31	0.000
4	dihydrokavain	7.134	707.918	10.91	0.000
5	desmethoxyyangonin	9.246	392.316	6.05	0.000
6	yangonin	9.602	691.982	10.66	0.000

