## otany Evolution LLC

10 Kirby Circle NE Im Bay, FL 32945 1-802-4583

## Certificate Of Analysis

ample Identification Information

Date of Analyis 9/13/2022

Sample: S1539 RERUN

**Product Name** VANUATU PREMIUM ROOTS

Specification

2-17% Kavalactones

Complies by HPLC

Beige to Yellow

Noble

60-30

Lot# VPS220420PR

Country of Origin

VANUATU

Country of Processing

USA

Manufacture Date

04/20/22

Best By Date

04/20/25

**General Product Specifications** 

**Product Species** Piper Methysticum

Part Used Root

**Common Names** 

Kava kava, Awa, Yagona

Appearance

Yellow, beige powder

Anal	yzed	Chara	cter	istics

**Standardization** 

<u>Identification</u>

Kavalactone Profile

Mesh Size

Color

Odor

Taste

Chemotype

K/DHM

Re	esu	<u>It</u>
11	109	<b>%</b>

Conform

PASS

60

Pass

Pass

Pass

423165

3.8

## **Test Method**

**HPLC** 

HPLC

HPLC

Sieve

Visual

Organoleptic

Organoleptic

**HPLC** 

Calculation

			A CONTRACTOR SALES			
Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
К			2381.077			
M	1	2.21	810.266	7.77%	0.98%	6
DHM	2	3.38	502.942	4.82%	0.90%	5
К	3	1	6140.6	58.86%	3.40%	4
DHK	4	3.08	1347.797	12.92%	3.14%	2
DMY	5	2.52	786.891	7.54%	1.19%	1
Υ .	6	3.12	843.46	8.09%	1.48%	3
		Total:	10431.956	100.00%	11.10%	423165
	K M DHM K DHK DMY	K M 1 DHM 2 K 3 DHK 4 DMY 5	Code         (elution order)         Factor           K         M         1         2.21           DHM         2         3.38           K         3         1           DHK         4         3.08           DMY         5         2.52           Y         6         3.12	Code         (elution order)         Factor         Area *           K         2381.077           M         1         2.21         810.266           DHM         2         3.38         502.942           K         3         1         6140.6           DHK         4         3.08         1347.797           DMY         5         2.52         786.891           Y         6         3.12         843.46	Code         (elution order)         Factor         Area *         Area %           K         2381.077         M         1         2.21         810.266         7.77%           DHM         2         3.38         502.942         4.82%           K         3         1         6140.6         58.86%           DHK         4         3.08         1347.797         12.92%           DMY         5         2.52         786.891         7.54%           Y         6         3.12         843.46         8.09%	Code         Factor         Area *         Area %         Kavalactones           K         2381.077         0.98%           M         1         2.21         810.266         7.77%         0.98%           DHM         2         3.38         502.942         4.82%         0.90%           K         3         1         6140.6         58.86%         3.40%           DHK         4         3.08         1347.797         12.92%         3.14%           DMY         5         2.52         786.891         7.54%         1.19%           Y         6         3.12         843.46         8.09%         1.48%

See data in attachment HPLC1100 Agilent Certificate with Chromatogram graph.

Chemist /hust youngs

ate 9/14/

nis result are in house tested and the best of our knowledge and experience. Using calibrated equipment.

Ve are dedicated to offer the best Quality of Botanical products on the market. We test and stand behind our products.

isclaimer\* the test results are accurate to the best of our knowledge and are based upon reputable laboratory and industry standard testing methods.

nese 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

house quality control department or obtain an additional independent third party lab to verify that this material meets specifications

stany Evolution, its board of directors, contract laboratories, employees, and affiliates are held harmless from any loss or damages resulting from the

se or misuse of this document. The appropriate use of this product is the sole responsibility of the user of the purchasing party.

## Kavalactone Analysis

SAMPLE S1539 RESAMPLE RERUN Vial 32

.75529g/50mL

avelength 246 nm :\CHEM32\1\DATA\KAVA\_09\_14\_2022\_15MINSTDTESTMETHOD 2022-09-14 15-06-43\03-> EQUENCE C:\CHEM32\1\DATA\KAVA 09 14 2022 njection date 9/14/2022 njection time 4:28:32 PM KRISTL cq. operator ethod C:\CHEM32\1\DATA\KAVA 09 14 202-> DAD1 C, Sig=246,10 Ref=500,60 (KAVA\_09\_14\_2022\_15MINSTDTESTMETHOD 2022-09-14 15-06-43\032-0401.D) mAU 6.452 - kavain 600 500 9.190 - desmethoxyvangonir 400 5.916 - dihydromethysticin 5.631 - methysticin 300 200 100 10 COMPOUND TIME AREA THUOMA methysticin 5.631 810.266 0.000 dihydromethysticin 0.000 5.916 502.942 4.82 kavain 6.452 6140.600 58.86 0.000 dihydrokavain 7.064 1347.797 12.92 0.000 desmethoxyyangonin 9.190 786.891 7.54 0.000 yangonin 9.569 8.09 0.000 843.460

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