## **3otany Evolution LLC**

2510 Kirby Circle NE <sup>2</sup>alm Bay, FL 32945 321-802-4583

## **Certificate Of Analysis**

## Sample Identification Information

Date of Analysis 11/6/2023	Country of Origin	SOLOMON ISLANDS
Sample: \$2019	Country of Processing	USA
Product Name GOLD	Manufacture Date	Sep-23
Lot# SIK2309-G11	Best By Date	Sep-26

## **General Product Specifications**

Product Species Piper Methysticum Part Used Root

**Common Names** Appearance

Kava kava, Awa, Yagona Yellow, Brown, beige powder

Analyzed Characteristics	<b>Specification</b>
<b>Standardization</b>	2-17% Kavalactor
<u>Identification</u>	Complies by HPL
Kavalactone Profile	Noble
Mesh Size	60-30
Color	Beige to Yellow
Odor Co	
Taste	
Chemotype	

K/DHM

2-17% Kavalactones
Complies by HPLC
Noble
60-30
Beige to Yellow
10

**Test Method** Result HPLC 8.69% HPLC Conform HPLC PASS Sieve 60 Visual Pass Organoleptic Pass Organoleptic Pass HPLC 243156 4.0 Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	к			2339.488	0.0		
Methysticin	м	1	2.21	312.703	4.17%	0.39%	6
Dihydromethysticin	DHM	2	3.38	332.842	4.44%	0.61%	5
Kavain	к	3	1	4339.871	57.89%	2.44%	4
Dihydrokavain	DHK	4	3.08	1509.531	20.13%	3.58%	2
Desmethoxyyangonin	DMY	5	2.52	422.485	5.64%	0.65%	1
Yangonin	Y	6	3.12	579.86	7.73%	1.03%	3
Kavalactones			Total:	7497.292	100.00%	8.69%	243156

\*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.

Chemist

Date

otany Evolution LLC	
510 Kirby Circle NE	Kavalactone Analysis
alm Bay, FL 32945	
21-802-4583	SAMPLE S2019
	Vial 11
.75631g/50mL	
avelength 246 nm	
	1_06_2023_15MINSTDTESTMETHOD 2023-11-06 17-13-11\01->
EQUENCE C:\CHEM32\1\DA	
njection date 11/6/20	
njection time 9:00:13	PM
Acq. operator KRISTL	
lethod	C:\CHEM32\1\DATA\KAVA_11_06_202->
	=500,60 (KAVA_11_06_2023_15MINSTDTESTMETHOD 2023-11-06 17-13-11\011-1101.D)
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300 -	ka
	- 2
250 -	7.047 ain
-	
200 -	
	thy of the stice
	3 D 3
150 -	
150 -	gonin ometh
	7.713 - dihydrokavain yangonin
150 -	7.713 - dihydromethysticin disydromethysticin
100	66 - methysticin 36 - dihydrometh 7.713 - 7.712 - 7.71
	186 - met 193 - dihy 10.595 - ye
100	6.493 - dihydrometh 7.713 - 7.713 - 7.713 - 10.595 - yangonin
100	186 - met 193 - dihy 10.595 - ye
	6.493 - diny
100 - 50 -	186 - met 193 - dihy 10.595 - ye
	5 7.5 10 12.5 min
	5 7.5 10 12.5 min
	B S S   9 9 9   9 9
100 50 0 2.5 # COMPOUND	B S S S   9 9 9 9   9 9 9 9   9 9 9 9   9 9 9 9   9 9 9 9   9 9 9 9   9 9 9 9   9 9 9 9   9 9 9 9   9 9 9 9   9 9 9 9   9 9 9 9   9 9 9 9   9 7 10 12.5   min AREA AREA 8   AMOUNT 0.000
100- 50- 0 2.5 # COMPOUND 1 methysticin 2 dihydromethysticin 3 kavain	Alig
100- 50- 0 - 2.5 # COMPOUND 1 methysticin 2 dihydromethysticin 3 kavain 4 dihydrokavain	Aligned
100- 50- 0 2.5 # COMPOUND 1 methysticin 2 dihydromethysticin 3 kavain 4 dihydrokavain 5 desmethoxyyangonin	Image: Second state   Image: Second state   Image: Second state   Image: Second state     5   7.5   10   12.5   min     5   7.5   10   12.5   min     6.186   312.703   4.17   0.000     6.493   332.842   4.44   0.000     7.047   4339.871   57.89   0.000     7.713   1509.531   20.13   0.000     10.107   422.485   5.64   0.000
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11/2/23