

**Botany Evolution LLC**

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

**Certificate Of Analysis**

**Sample Identification Information**

Date of Analysis 11/1/2018  
Sample: S0572  
Product Name GOLD  
Lot# SIV181011YG

Country of Origin SOLOMON ISLANDS  
Country of Processing SOLOMON ISLANDS  
Manufacture Date 10/11/18  
Expiration Date 10/11/21

**General Product Specifications**

Product Species Piper Methysticum  
Part Used Root

Common Names Kava kava, Awa, Yagona  
Appearance Beige powder

**Analyzed Characteristics**

**Specification**

**Result**

**Test Method**

<u>Standardization</u>	2-15% Kavalactones	9.42%	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>		245631	HPLC
<u>K/DHM</u>		1.47	Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2423.995			
Methysticin	M	1	2.21	813.668	10.92%	0.99%	6
Dihydromethysticin	DHM	2	3.38	710.525	9.53%	1.27%	5
Kavain	K	3	1	3368.204	45.19%	1.87%	4
Dihydrokavain	DHK	4	3.08	1583.761	21.25%	3.69%	2
Desmethoxyyangonin	DMY	5	2.52	465.073	6.24%	0.71%	1
Yangonin	Y	6	3.12	511.734	6.87%	0.90%	3
<b>Kavalactones</b>			<b>Total:</b>	<b>7452.965</b>	<b>100.00%</b>	<b>9.42%</b>	<b>245631</b>

\*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.

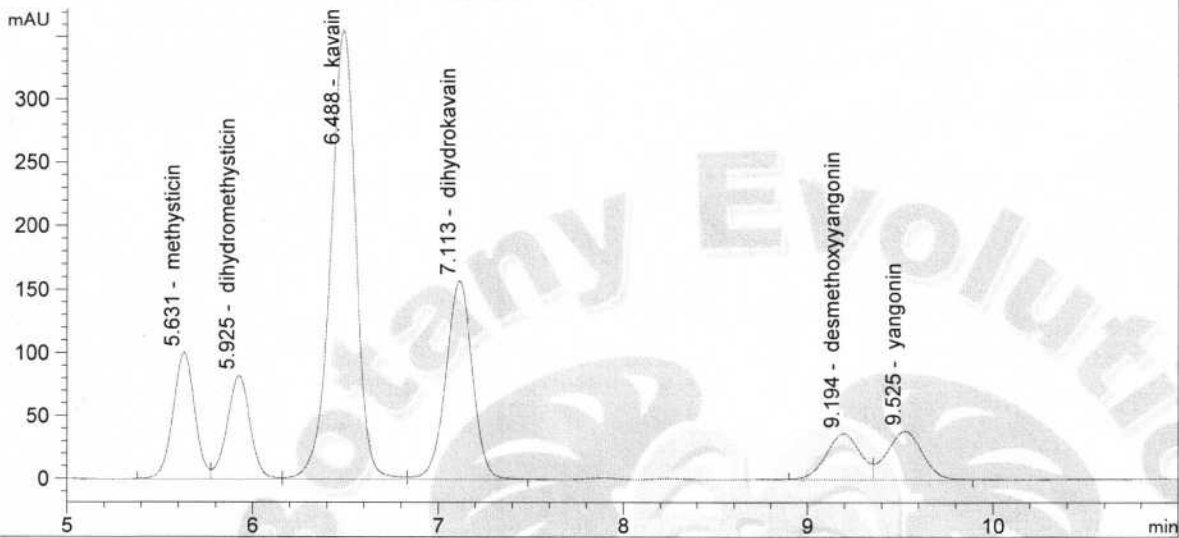
*Mustle Youngs 11/5/18*

SAMPLE S0572  
Vial 15

0.75787g/50ml

wavelength 246 nm  
C:\CHEM32\1\DATA\KAVA\_11\_1\_2018\_15MINSTDTESTMETHOD 2018-11-01 17-59-36\015->  
SEQUENCE C:\CHEM32\1\DATA\KAVA\_11\_1\_2018\_ ->  
Injection date 11/1/2018  
Injection time 10:51:10 PM  
Acq. operator KRISTL  
Method C:\CHEM32\1\DATA\KAVA\_11\_1\_201->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA\_11\_1\_2018\_15MINSTDTESTMETHOD 2018-11-01 17-59-36\015-1501.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.631	813.668	10.92	0.000
2	dihydromethysticin	5.925	710.525	9.53	0.000
3	kavain	6.488	3368.204	45.19	0.000
4	dihydrokavain	7.113	1583.761	21.25	0.000
5	desmethoxyyangonin	9.194	465.073	6.24	0.000
6	yangonin	9.525	511.734	6.87	0.000

11/5/18  
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