

Botany Evolution LLC

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

Certificate Of Analysis

Sample Identification Information

Date of Analysis 4/10/2019
Sample: S0638
Product Name GOLD BASAL
Lot# SIV190319YBR

Country of Origin SOLOMON ISLANDS
Country of Processing SOLOMON ISLANDS
Manufacture Date 03/19/19
Best By Date 03/19/22

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> | 2-17% Kavalactones | 7.63% | 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> | | 245361 | HPLC |
| <u>K/DHM</u> | | 1.29 | Calculation |

| Kavalactones | Code | Peaks Ref. (elution order) | Correction Factor | Area * | Area % | Corrected Kavalactones | Chemotype Identifier |
|---------------------|------|-------------------------------|----------------------|-----------------|----------------|---------------------------|----------------------|
| Standard Kavain | K | | | 2574.441 | | | |
| Methysticin | M | 1 | 2.21 | 628.747 | 10.06% | 0.72% | 6 |
| Dihydromethysticin | DHM | 2 | 3.38 | 652.747 | 10.45% | 1.10% | 5 |
| Kavain | K | 3 | 1 | 2724.945 | 43.61% | 1.42% | 4 |
| Dihydrokavain | DHK | 4 | 3.08 | 1419.257 | 22.71% | 3.12% | 2 |
| Desmethoxyyangonin | DMY | 5 | 2.52 | 376.492 | 6.02% | 0.54% | 1 |
| Yangonin | Y | 6 | 3.12 | 446.835 | 7.15% | 0.74% | 3 |
| Kavalactones | | | Total: | 6249.023 | 100.00% | 7.63% | 245361 |

*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 Mustl Youngs Date 4/11/19

SAMPLE S0638
Vial 17

0.75810g/50mL

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_4_10_2019_15MINSTDTESTMETHOD 2019-04-10 14-46-27\017->

SEQUENCE C:\CHEM32\1\DATA\KAVA_4_10_2019_ ->

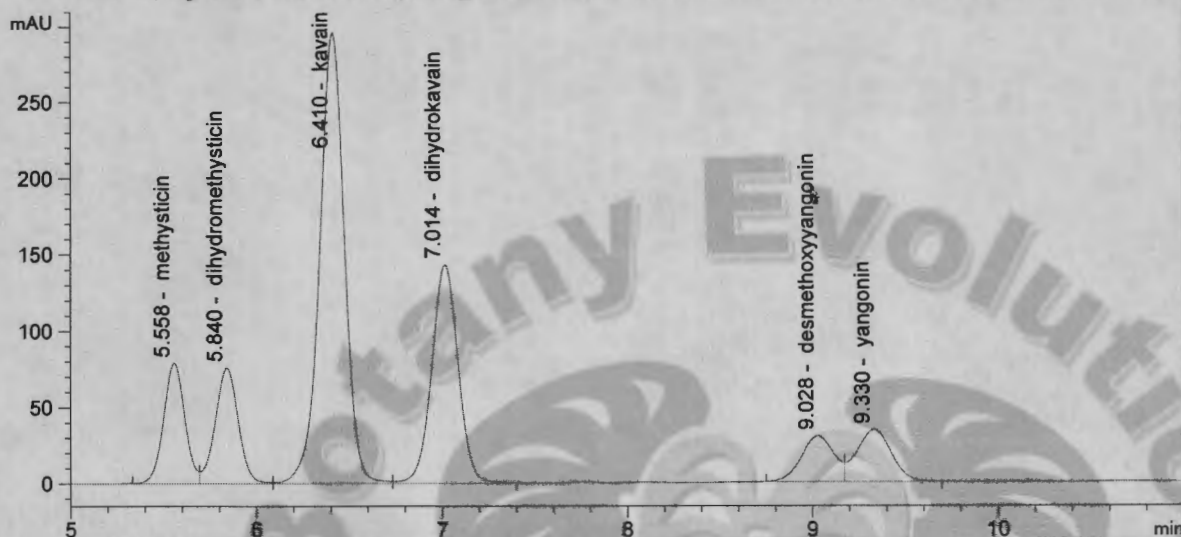
Injection date 4/10/2019

Injection time 8:09:57 PM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA_4_10_201->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_4_10_2019_15MINSTDTESTMETHOD 2019-04-10 14-46-27\017-1701.D)



| # | COMPOUND | RET. TIME | AREA | AREA % | AMOUNT |
|---|--------------------|-----------|----------|--------|--------|
| 1 | methysticin | 5.558 | 628.747 | 10.06 | 0.000 |
| 2 | dihydromethysticin | 5.840 | 652.747 | 10.45 | 0.000 |
| 3 | kavain | 6.410 | 2724.945 | 43.61 | 0.000 |
| 4 | dihydrokavain | 7.014 | 1419.257 | 22.71 | 0.000 |
| 5 | desmethoxyyangonin | 9.028 | 376.492 | 6.02 | 0.000 |
| 6 | yangonin | 9.330 | 446.835 | 7.15 | 0.000 |

4/11/19
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