

Botany Evolution LLC

438 Martin Road Suite A

Palm Bay, FL 32909

321-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 12/2/2016Sample: S0040Product Name Kava CeremonialLot# N/ACountry of Origin VanuatuCountry of Processing VanuatuManufacture Date 01-Sep-16Expiration Date 02-Sep-19**General Product Specifications**Product Species Piper MethysticumPart Used RootCommon Names Kava kava, Awa, YagonaAppearance Beige powder**Analyzed Characteristics****Specification****Result****Method**Standardization

2-15% Kavalactones

9.53%

HPLC

Identification

Complies by HPLC

Conform

HPLC

Kavalactone Profile

Noble

Pass

HPLC

Mesh Size

60-30

30

Sieve

Color

Beige to Yellow

Pass

Visual

Odor

Pass

Organoleptic

Taste

Pass

Organoleptic

Chemotype

423651

HPLC

| Kavalactones | Chemotype Identifier | Correction Factor | Peaks Ref. | Area * | Area % | Corrected Kavalactones |
|--------------------|----------------------|-------------------|------------|-----------------|----------------|------------------------|
| Methysticin | 6 | 0.663 | 1 | 747.571 | 8.55% | 0.49% |
| Dihydromethysticin | 5 | 1.65 | 2 | 599.31 | 6.85% | 0.97% |
| Kavain | 4 | 1 | 3 | 4644.746 | 53.12% | 4.55% |
| Dihydrokavain | 2 | 1.7 | 4 | 1412.508 | 16.16% | 2.35% |
| Desmethoxyyangonin | 1 | 0.904 | 5 | 570.504 | 6.53% | 0.51% |
| Yangonin | 3 | 0.878 | 6 | 768.665 | 8.79% | 0.66% |
| Total: | | | | 8743.304 | 100.00% | 9.53% |

*See data in attachment HPLC1100 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.

SAMPLE S0040
Vial 17

0.76399

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_12_1_16_15MINMETHOD 2016-12-01 20-08-29\017-1301.D

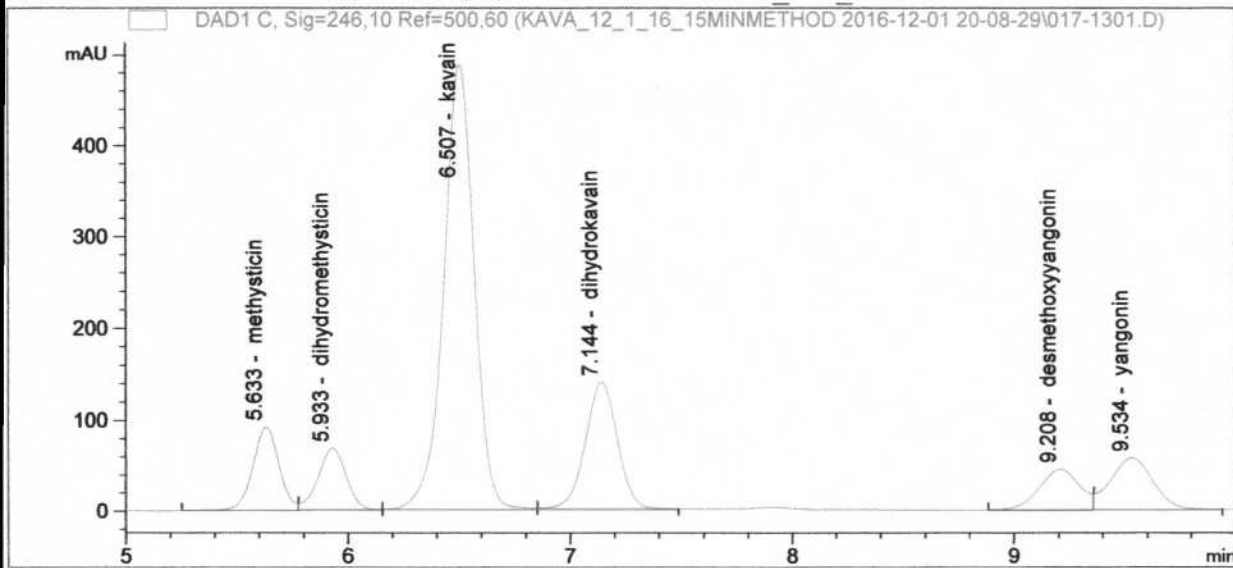
SEQUENCE C:\CHEM32\1\DATA\KAVA_12_1_16_15MINMETHOD->

Injection date 12/2/2016

Injection time 12:11:12 AM

Acq. operator KRISTL

Method C:\CHEM32\1\METHODS\KAVA15MIN_STD_TEST.M



COMPOUND RET. TIME AREA AREA % AMOUNT

| # | COMPOUND | RET. TIME | AREA | AREA % | AMOUNT |
|---|--------------------|-----------|----------|--------|--------|
| 1 | methysticin | 5.633 | 747.571 | 8.550 | 0.05 |
| 2 | dihydromethysticin | 5.933 | 599.310 | 6.855 | 0.06 |
| 3 | kavain | 6.507 | 4644.746 | 53.123 | 1.75 |
| 4 | dihydrokavain | 7.144 | 1412.508 | 16.155 | 0.37 |
| 5 | desmethoxyyangonin | 9.208 | 570.504 | 6.525 | 0.04 |
| 6 | yangonin | 9.534 | 768.665 | 8.791 | 0.06 |