Botany Evolution LLC

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

Certificate Of Analysis

Sample Identification Information

Date of Analysis 11/29/2023

Sample: S2026

Product Name CHIEF LATERAL ROOTS

Lot# SIK2309-CLR11

Specification

2-17% Kavalactones

Complies by HPLC

Beige to Yellow

Noble

60-30

Country of Origin

SOLOMON ISLANDS

Country of Processing USA

Manufacture Date

Sep-23

Best By Date

Sep-26

General Product Specifications

Product Species Piper Methysticum

Part Used Root

Common Names

Kava kava, Awa, Yagona

Appearance

Yellow, Brown, beige powder

Analyzed Characteristics

Standardization

<u>Identification</u>

Kavalactone Profile

Mesh Size

Color

Odor Taste

Chemotype

K/DHM

Result

15.84%

Conform

PASS

60

Pass

Pass

Pass

245631

17

Test Method

HPLC

HPLC

HPLC

Sieve

Visual

Organoleptic

Organoleptic

HPLC

Calculation

Kavalactones	Code	Peaks Ref.	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	К		1	2336.371	16/2		
Methysticin	М	1	2.21	1490.726	11.77%	1.84%	6
Dihydromethysticin	DHM	2	3.38	1077.621	8.51%	1.96%	5
Kavain	К	3	1	5862.57	46.28%	3.30%	4
Dihydrokavain	DHK	4	3.08	2404.681	18.98%	5.69%	2
Desmethoxyyangonin	DMY	5	2.52	850.32	6.71%	1.31%	1
Yangonin	Υ	6	3.12	980.488	7.74%	1.74%	3
Kavalactones			Total:	12666.406	100.00%	15.84%	245631

^{*}See data in attachment HPLC1100 Agilent Certificate with Chromatogram graph.

Chemist

Austl Youngs

Date 12/4/23

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.

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Kavalactone Analysis

SAMPLE S2026 Vial 12

0.75786g/50mL

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA 11 29 2023 15MINSTDTESTMETHOD 2023-11-29 15-53-43\01-> SEQUENCE C:\CHEM32\1\DATA\KAVA 11 29 2023 Injection date 11/29/2023 Injection time 7:56:56 PM Acq. operator KRISTL Method C:\CHEM32\1\DATA\KAVA 11 29 202-> DAD1 C, Sig=246,10 Ref=500,60 (KAVA_11_29_2023_15MINSTDTESTMETHOD 2023-11-29 15-53-43\012-1201.D) mAU -6.633 - kavain 400 dihydrokavain 350 vdromethysticin 300 20 - methysticin 250 9.805 - yangonir 200 150 100 50 0 Ó AREA COMPOUND THUOMA methysticin 1 5.820 1490.726 000 1077.621 .51 2 dihydromethysticin 6.105 0.000 3 kavain 6.633 5862.570 46.28 0.000 dihydrokavain 7.247 2404.681 18.98 850.320 0.000 desmethoxyyangonin 0.000 980,488 yangonin