Botany Evolution LLC

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

Certificate Of Analysis

Sample Identification Information

Date of Analysis 1/9/2024

Sample: S2058

Product Name ISA LATERAL ROOTS

Lot# PNGNK2401-LR

Country of Origin

PAPUA NEW GUINEA

Country of Processing

Manufacture Date

Jan-24

Best By Date

Jan-27

General Product Specifications

Product Species Piper Methysticum

Part Used Root

Common Names

Kava kava, Awa, Yagona

Appearance

Yellow, Brown, beige powder

Analyzed Characteristics

Standardization

Identification

Specification

2-17% Kavalactones

Complies by HPLC

Beige to Yellow

Kavalactone Profile Noble **Mesh Size** 60-30

Color

Odor

Taste

Chemotype

K/DHM

Result **Test Method**

7.99%

TUDEL

PASS

60

Pass

Pass

Pass

0.6

254631

HPLC

HPLC HPLC

HPLC

Sieve

Visual

Calculation

Organoleptic Organoleptic

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	К			2362.911			
Methysticin	М	1	2.21	809.328	13.38%	0.99%	6
Dihydromethysticin	DHM	2	3.38	1001.477	16.56%	1.88%	5
Kavain	К	3	1	2054.052	33.96%	1.14%	4
Dihydrokavain	DHK	4	3.48	1426.568	23.58%	2.76%	2
Desmethoxyyangonin	DMY	5	2.52	318.664	5.27%	0.45%	1
/angonin	Υ	6	3.12	439.171	7.26%	0.76%	3
Kavalactones			Total:	6049.260	100.00%	7.99%	254631

^{&#}x27;See data in attachment HPLC1100 Agilent Certificate with Chromatogram graph.

Chemist

1/10/24

his 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.

isclaimer* the test results are accurate to the best of our knowledge and are based upon reputable laboratory and industry standard testing methods.

hese 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

n house quality control department or obtain an additional independent third party lab to verify that this material meets specifications

otany Evolution, its board of directors, contract laboratories, employees, and affiliates are held harmless from any loss or damages resulting from the ise or misuse of this document. The appropriate use of this product is the sole responsibility of the user of the purchasing party.

Kavalactone Analysis

SAMPLE S2058 Vial 13

0.75829g/50mL

wavelength 246 nm C:\CHEM32\1\DATA\KAVA 01 09 2024 15MINSTDTESTMETHOD 2024-01-09 16-09-45\01-> SEQUENCE C:\CHEM32\1\DATA\KAVA 01 09 2024 Injection date 1/9/2024 Injection time 8:29:51 PM Acq. operator KRISTL Method C:\CHEM32\1\DATA\KAVA 01 09 202-> DAD1 C, Sig=246,10 Ref=500,60 (KAVA_01_09_2024_15MINSTDTESTMETHOD 2024-01-09 16-09-45\013-1301.D) mAU -5.820 - methysticin 6.095 - dihydromethysticin 6.622 - kavain 227 - dihydrokavain 140 120 101/4/2 9.385 - desmethoxyyangonin 100 80 60 40 20 0 12.5 7.5 10 AMOUNT AREA TIME RET. AREA 13.38 0.000 809.328 methysticin 5.820 16.56 0.000 dihydromethysticin 6.095 1001.477 33.96 0.000 3 2054.052 kavain 6.622 1426.568 23.58 0.000 dihydrokavain 7.227 4 0.000 5.27 5 desmethoxyyangonin 9.385 318.664

439.171

9.793

1/10/24

0.000

7.26

yangonin