

Botany Evolution LLC

510 Kirby Circle NE

Palm Bay, FL 32945

21-802-4583

Certificate Of Analysis**Sample Identification Information**Date of Analysis 6/6/2022Sample: S1591Product Name ISA LATERAL ROOTSLot# PNGNK220531ILRCountry of Origin

PAPUA NEW GUINEA

Country of Processing

USA

Manufacture Date

05/31/22

Best By Date

05/31/25

General Product SpecificationsProduct Species Piper MethysticumCommon Names

Kava kava, Awa, Yagona

Part Used RootAppearance

Yellow, beige powder

Analyzed Characteristics**Specification****Result****Test Method**Standardization

2-17% Kavalactones

11.10%

HPLC

Identification

Complies by HPLC

Conform

HPLC

Kavalactone Profile

Noble

TUDEI

HPLC

Mesh Size

60-30

60

Sieve

Color

Beige to Yellow

Pass

Visual

Odor

Pass

Organoleptic

Taste

Pass

Organoleptic

Chemotype

254631

HPLC

K/DHM

0.7

Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2266.647			
Methysticin	M	1	2.21	1235.58	15.35%	1.51%	6
Dihydromethysticin	DHM	2	3.38	1190.385	14.79%	2.15%	5
Kavain	K	3	1	2823.68	35.07%	1.58%	4
Dihydrokavain	DHK	4	3.08	1739.638	21.61%	4.10%	2
Desmethoxyyangonin	DMY	5	2.52	474.245	5.89%	0.73%	1
Yangonin	Y	6	3.12	587.226	7.29%	1.04%	3
Kavalactones			Total:	8050.754	100.00%	11.10%	254631

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

This result is 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

Hustle Youngs

Date

6/8/22

SAMPLE S1591
Vial 14

0.75443g/50mL

Wavelength 246 nm

Path: C:\CHEM32\1\DATA\KAVA_06_06_2022_15MINSTDTESTMETHOD 2022-06-06 16-23-00\01->

SEQUENCE C:\CHEM32\1\DATA\KAVA_06_06_2022_ ->

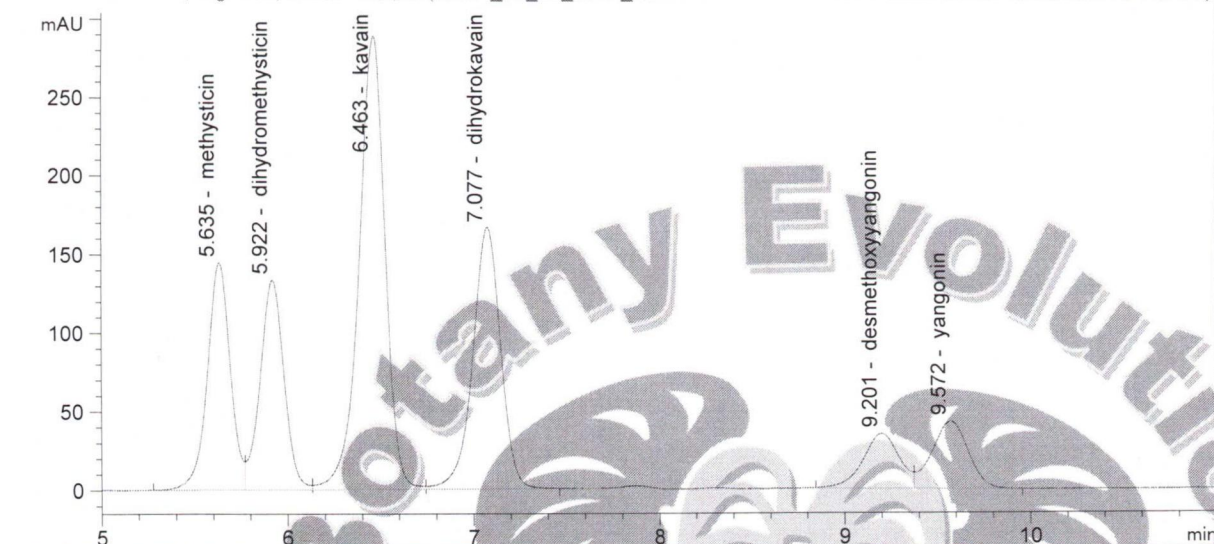
Injection date 6/6/2022

Injection time 8:57:36 PM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA_06_06_2022->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_06_06_2022_15MINSTDTESTMETHOD 2022-06-06 16-23-00\014-1401.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
	methysticin	5.635	1235.580	15.35	0.000
	dihydromethysticin	5.922	1190.385	14.79	0.000
	kavain	6.463	2823.680	35.07	0.000
	dihydrokavain	7.077	1739.638	21.61	0.000
	desmethoxyyangonin	9.201	474.245	5.89	0.000
	yangonin	9.572	587.226	7.29	0.000

6/8/22
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