

# CERTIFICATE OF ANALYSIS

**GENERAL INFORMATION**

Report Date	13-Jan-25	Country of Origin	Fiji
Sample Number	S2205	Country of Processing	United States
Product Name	Savusavu Waka	Manufacture Date	Jan-25
Lot Number	FLK2412-SW1	Best By Date	Jan-28

ITEM	SPECIFICATION	TEST RESULTS	METHOD
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**PHYSICAL & CHEMICAL**

Identification	Piper methysticum	Complies	HPLC
Appearance	Beige to Yellow Powder	Complies	Organoleptic
Kavalactone Standard	2-17 % Kavalactones	7%	HPLC
Kavalactone Profile	Noble	Pass	HPLC
Chemotype	If # 5 is in 1st or 2nd in Abundance	426531	HPLC
K/DHM	> 1.2 for Noble	1.5	Calculation

**HEAVY METALS**

		Results	
Arsenic (As)	NMT 1,000 (ppb)*	16.7 ppb	FDA EAM 4.7
Cadmium (Cd)	NMT 1,000 (ppb)*	437 ppb	FDA EAM 4.7
Lead (Pb)	NMT 1,000 (ppb)*	185 ppb	FDA EAM 4.7
Mercury (Hg)	NMT 1,000 (ppb)*	< 10 ppb	FDA EAM 4.7

\*Heavy Metals Action Limits Based on Maximum PDE at 5% Kavalactones. Results May Exceed 1,000 ppb action limit with higher kavalactone contents.

**MICROBIOLOGICAL**

		Results	
<b>AEROBIC PLATE COUNT</b>	<b>NMT 10,000,000 cfu</b>	192,000 cfu / 10 g	USP 2021
E. COLI	ABSENT (cfu/10g)	Negative cfu / 10 g	USP 2022
PSEUDOMONAS AERUGINOSA	ABSENT (cfu/10g)	Negative cfu / 10 g	USP 2022
SALMONELLA	ABSENT (cfu/10g)	Negative cfu / 10 g	USP 2022
STAPHYLOCOCCUS AUREUS	ABSENT (cfu/10g)	Negative cfu / 10 g	USP 2022
YEAST	NMT 100,000 cfu (Combined)	6,900 cfu / 10 g	
MOLD		80 cfu / 10 g	USP 2021
<b>TOTAL YEAST &amp; MOLD</b>	<b>NMT 100,000 cfu (Combined)</b>	6,980 cfu / 10 g	

cfu/g = Colony Forming Units Per Gram      NMT = No More Than      PDE = Permitted Daily Exposure      PPB = Parts Per Billion

*Analysis Performed by a Third-Party Laboratory*

*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.*

Completed By:  Title: Manager Date: 1/14/2025



**Botany Evolution LLC**

2510 Kirby Circle NE

Palm Bay, FL 32945

321-802-4583

**Certificate Of Analysis****Sample Identification Information****Date of Analysis** 1/13/2025**Sample:** S2205**Product Name** SAVUSAVU WAKA**Lot#** FLK2412-SW1**Country of Origin** FIJI**Country of Processing** USA**Manufacture Date** Dec-24**Best By Date** Dec-27**General Product Specifications****Product Species** Piper Methysticum**Part Used** Root**Common Names** Kava kava, Awa, Yagona**Appearance** Yellow, Brown, beige powder**Analyzed Characteristics****Specification****Result****Test Method****Standardization**

2-17% Kavalactones

6.78%

HPLC

**Identification**

Complies by HPLC

Conform

HPLC

**Kavalactone Profile**

Noble

PASS

HPLC

**Mesh Size**

60-30

60

Sieve

**Color**

Beige to Yellow

Pass

Visual

**Odor**

Pass

Organoleptic

**Taste**

Pass

Organoleptic

**Chemotype**

426531

HPLC

**K/DHM**

TUDEI &lt; 1.2 &gt; NOBLE

1.5

Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2458.841			
Methysticin	M	1	2.21	1003.896	16.76%	1.25%	<b>6</b>
Dihydromethysticin	DHM	2	3.38	561.301	9.37%	1.07%	<b>5</b>
Kavain	K	3	1	2840.25	47.41%	1.60%	<b>4</b>
Dihydrokavain	DHK	4	3.48	729.751	12.18%	1.44%	<b>2</b>
Desmethoxyyangonin	DMY	5	2.52	268.713	4.49%	0.38%	<b>1</b>
Yangonin	Y	6	3.12	587.238	9.80%	1.04%	<b>3</b>
<b>Kavalactones</b>			<b>Total:</b>	<b>5991.149</b>	<b>100.00%</b>	<b>6.78%</b>	<b>426531</b>

\*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.

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

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Chemist

*Hustl Youngs*

Date

*1/14/25*

SAMPLE S2205  
Vial 11

0.75428g/50mL

wavelength 246 nm

Path: \CHEM32\1\DATA\KAVA\_01\_13\_2025\_15MINSTDTESTMETHOD 2025-01-13 17-00-36\01->

SEQUENCE C:\CHEM32\1\DATA\KAVA\_01\_13\_2025\_ ->

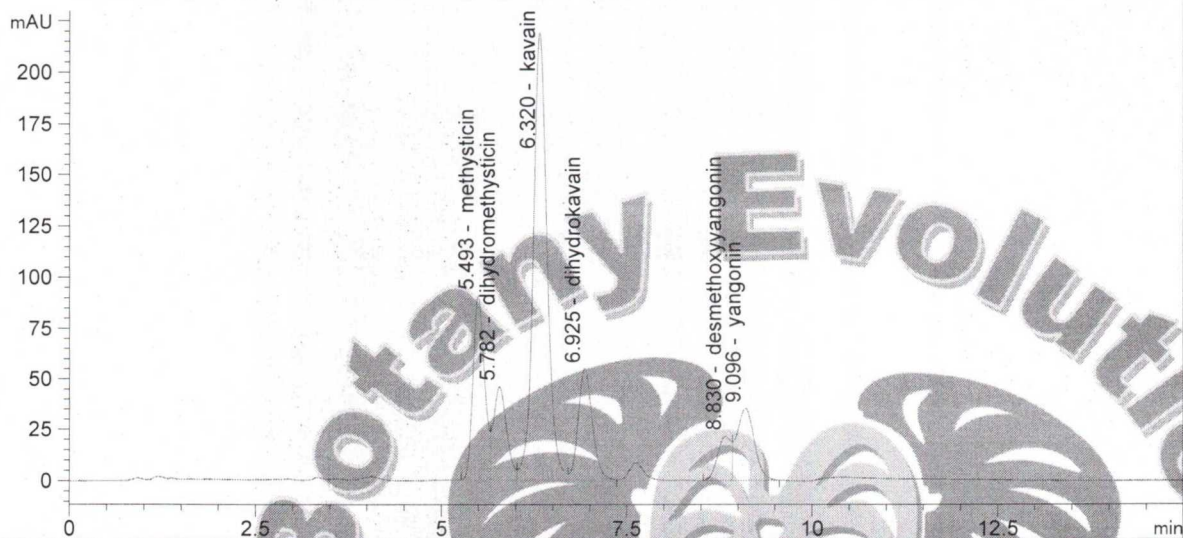
Injection date 1/13/2025

Injection time 8:47:34 PM

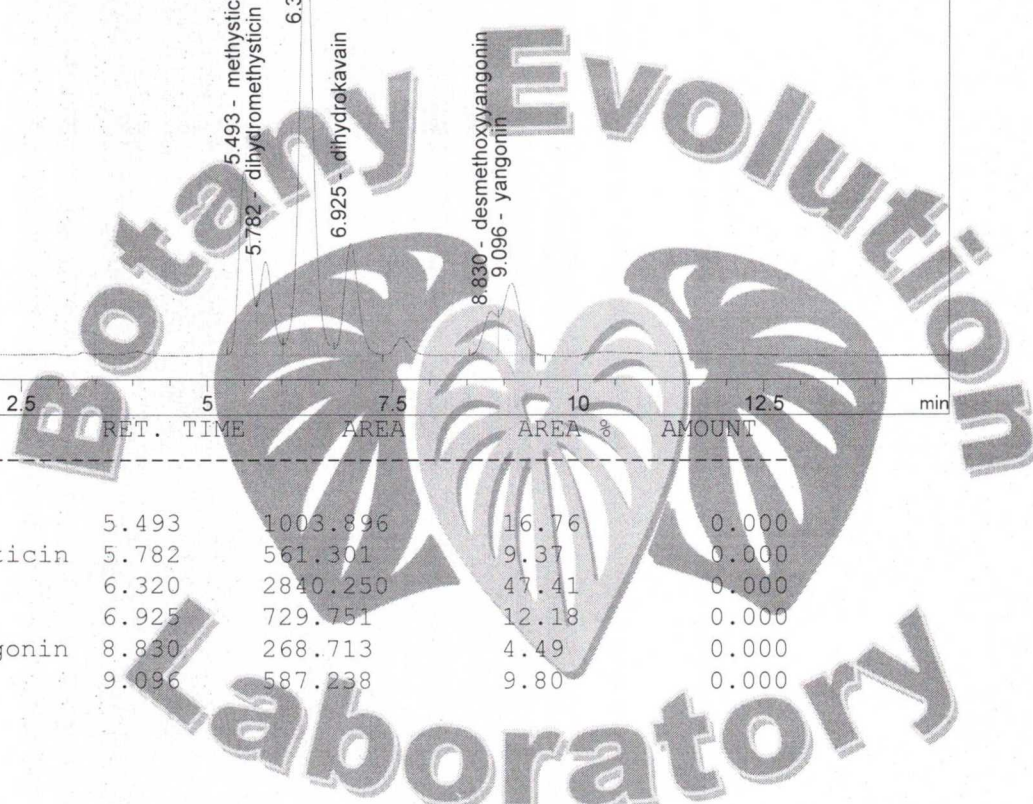
Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA\_01\_13\_202->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA\_01\_13\_2025\_15MINSTDTESTMETHOD 2025-01-13 17-00-36\011-1101.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.493	1003.896	16.76	0.000
2	dihydromethysticin	5.782	561.301	9.37	0.000
3	kavain	6.320	2840.250	47.41	0.000
4	dihydrokavain	6.925	729.751	12.18	0.000
5	desmethoxyyangonin	8.830	268.713	4.49	0.000
6	yangonin	9.096	587.238	9.80	0.000



1/14/25  
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