

CERTIFICATE OF ANALYSIS

GENERAL INFORMATION

Report Date	6/4/2025	Country of Origin	Tonga
Sample Number	S2252	Country of Processing	USA
Product Name	Lateral Roots	Manufacture Date	Jun-25
Lot Number	TAT2505-LR6	Best By Date	Jun-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	8.09%	HPLC
Kavalactone Profile	Noble	Pass	HPLC
Chemotype	If # 5 is in 1st or 2nd in Abundance	426351	HPLC
K/DHM	> 1.2 for Noble	1.9	Calculation

HEAVY METALS

		Results		
Arsenic (As)	NMT 1,000 (ppb)*	36.3	ppb	FDA EAM 4.7
Cadmium (Cd)	NMT 1,000 (ppb)*	883	ppb	FDA EAM 4.7
Lead (Pb)	NMT 1,000 (ppb)*	182	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		
AEROBIC PLATE COUNT	NMT 10,000,000 cfu	260,000	cfu / 10 g	USP 2021
E. COLI	ABSENT (cfu/10g)	Absent	cfu / 10 g	USP 2022
PSEUDOMONAS AERUGINOSA	ABSENT (cfu/10g)	Absent	cfu / 10 g	USP 2022
SALMONELLA	ABSENT (cfu/10g)	Absent	cfu / 10 g	USP 2022
STAPHYLOCOCCUS AUREUS	ABSENT (cfu/10g)	Absent	cfu / 10 g	USP 2022
YEAST		10	cfu / 10 g	
MOLD	NMT 100,000 cfu (Combined)	660	cfu / 10 g	USP 2021
TOTAL YEAST & MOLD	NMT 100,000 cfu (Combined)	670	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.

Kava Republic, 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:

Tony Salich

Title:

Manager

Date:

06/06/2025

Kava Republic Inc.
2510 Kirby Circle NE
Palm Bay, FL 32905
321-802-4583

Certificate Of Analysis

Sample Identification Information

<u>Date of Analysis</u>	6/4/2025	<u>Country of Origin</u>	TONGA
<u>Sample:</u>	S2252	<u>Country of Processing</u>	USA
<u>Product Name</u>	LATERAL ROOTS	<u>Manufacture Date</u>	Jun-25
<u>Lot#</u>	TAT2505-LR6	<u>Best By Date</u>	Jun-28

General Product Specifications

<u>Product Species</u>	Piper Methysticum	<u>Common Names</u>	Kava kava, Awa, Yagona
<u>Part Used</u>	Root	<u>Appearance</u>	Yellow, Brown, beige powder

Analyzed Characteristics	Specification	Result	Test Method
<u>Standardization</u>	2-17% Kavalactones	8.09%	HPLC
<u>Identification</u>	Complies by HPLC	Conform	HPLC
<u>Kavalactone Profile</u>	Noble	PASS	HPLC
<u>Mesh Size</u>	60-30	60	Sieve
<u>Color</u>	Beige to Yellow	Pass	Visual
<u>Odor</u>		Pass	Organoleptic
<u>Taste</u>		Pass	Organoleptic
<u>Chemotype</u>		426351	HPLC
<u>K/DHM</u>	TUDEI < 1.2 > NOBLE	1.9	Calculation

Kavalactones	Code	Peaks Ref. (elution order)	Correction Factor	Area *	Area %	Corrected Kavalactones	Chemotype Identifier
Standard Kavain	K			2416.22			
Methysticin	M	1	2.21	1145.367	15.97%	1.46%	6
Dihydromethysticin	DHM	2	3.38	543.296	7.58%	1.06%	5
Kavain	K	3	1	3487.617	48.63%	2.01%	4
Dihydrokavain	DHK	4	3.48	732.043	10.21%	1.47%	2
Desmethoxyyangonin	DMY	5	2.52	538.195	7.51%	0.78%	1
Yangonin	Y	6	3.12	724.49	10.10%	1.30%	3
Kavalactones			Total:	7171.008	100.00%	8.09%	426351

*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.
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Chemist Kristl Youngs Date 6/5/25

SAMPLE S2252
Vial 12

0.75199g/50mL

wavelength 246 nm

C:\CHEM32\1\DATA\KAVA_06_04_2025_15MINSTDTESTMETHOD 2025-06-04 14-40-04\01->
SEQUENCE C:\CHEM32\1\DATA\KAVA_06_04_2025_ -->

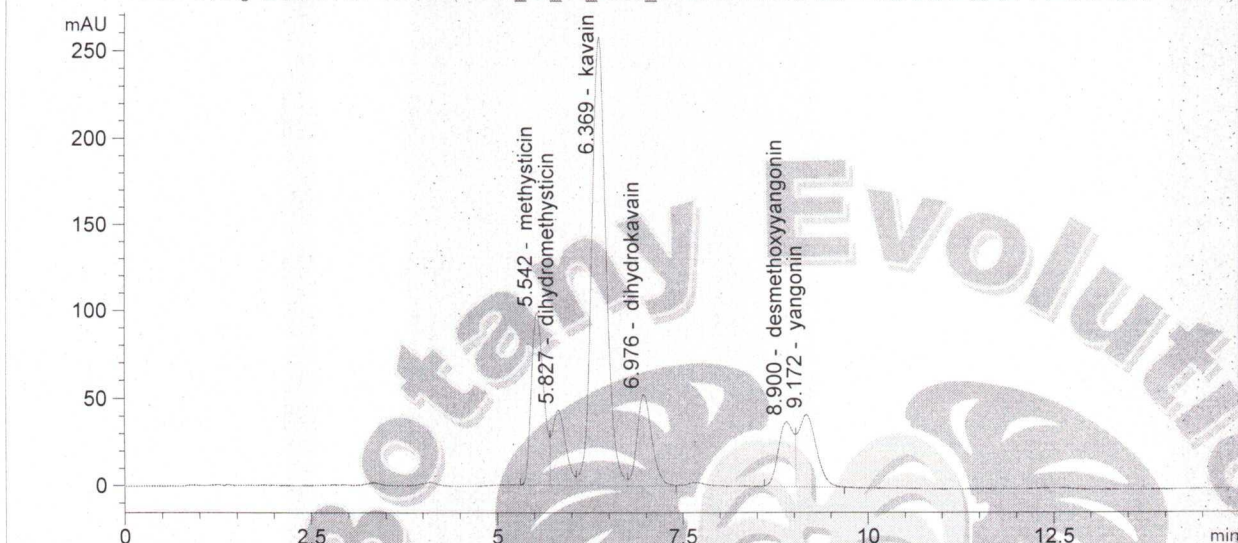
Injection date 6/4/2025

Injection time 6:42:55 PM

Acq. operator KRISTL

Method C:\CHEM32\1\DATA\KAVA_06_04_202->

DAD1 C, Sig=246,10 Ref=500,60 (KAVA_06_04_2025_15MINSTDTESTMETHOD 2025-06-04 14-40-04\012-1201.D)



#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.542	1145.367	15.97	0.000
2	dihydromethysticin	5.827	543.296	7.58	0.000
3	kavain	6.369	3487.617	48.63	0.000
4	dihydrokavain	6.976	732.043	10.21	0.000
5	desmethoxyyangonin	8.900	538.195	7.51	0.000
6	yangonin	9.172	724.490	10.10	0.000

6/5/25
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