Botany Evolution LLC

2510 Kirby Circle NE Suite 110
Palm Bay, FL 32905

(321) 802 - 4583
botanyevolution@gmail.com

CERTIFICATE OF ANALYSIS

GENERAL INFORMATION

Report Date	6/4/025	**Country of Origin**	Tonga
Sample Number	S2251	**Country of Processing**	USA
Product Name	Tanaki	**Manufacture Date**	Jun-25
Lot Number	TAT2505-T6	**Best By Date**	Jun-28

ITEM	SPECIFICATION	TEST RESULTS	METHOD
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**	426351	**HPLC**
K/DHM	**> 1.2 for Noble**	1.7	**Calculation**

HEAVY METALS

		Results		
Arsenic (As)	**NMT 1,000 (ppb)***	23.75	ppb	**FDA EAM 4.7**
Cadmium (Cd)	**NMT 1,000 (ppb)***	722.5	ppb	**FDA EAM 4.7**
Lead (Pb)	**NMT 1,000 (ppb)***	150	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**	315,000	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	**NMT 100,000 cfu (Combined)**	10	cfu / 10 g	
MOLD		360	cfu / 10 g	**USP 2021**
TOTAL YEAST & MOLD	**NMT 100,000 cfu (Combined)**	370	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 Sahl Title: Manager Date: 06/06/2025

Botany Evolution Laboratory

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

Certificate Of Analysis

Sample Identification Information

Date of Analysis	6/4/2025	**Country of Origin**	TONGA
Sample:	S2251	**Country of Processing**	USA
Product Name	TANAKI	**Manufacture Date**	Jun-25
Lot#	TAT2505-T6	**Best By Date**	Jun-28

General Product Specifications

Product Species	Piper Methysticum	**Common Names**	Kava kava, Awa, Yagona
Part Used	Root	**Appearance**	Yellow, Brown, beige powder

Analyzed Characteristics	Specification	Result	Test Method
Standardization	2-17% Kavalactones	6.61%	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		426351	HPLC
K/DHM	TUDEI < 1.2 > NOBLE	1.7	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	905.866	15.56%	1.15%	**6**
Dihydromethysticin	**DHM**	2	3.38	490.333	8.42%	0.95%	**5**
Kavain	**K**	3	1	2802.255	48.15%	1.61%	**4**
Dihydrokavain	**DHK**	4	3.48	680.109	11.68%	1.36%	**2**
Desmethoxyyangonin	**DMY**	5	2.52	400.753	6.89%	0.58%	**1**
Yangonin	**Y**	6	3.12	541.051	9.30%	0.97%	**3**
Kavalactones			**Total:**	**5820.367**	**100.00%**	**6.61%**	**426351**

*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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Chemist Austl Young Date 6/5/25

Botany Evolution Laboratory

ava Republic Inc.
510 Kirby Circle NE
alm Bay, FL 32905
21-802-4583

Kavalactone Analysis

SAMPLE S2251
Vial 11

.75669g/50mL

avelength 246 nm
:\CHEM32\1\DATA\KAVA_06_04_2025_15MINSTDTESTMETHOD 2025-06-04 14-40-04\01->
EQUENCE C:\CHEM32\1\DATA\KAVA_06_04_2025_ ->
njection date 6/4/2025
njection time 6:26:49 PM
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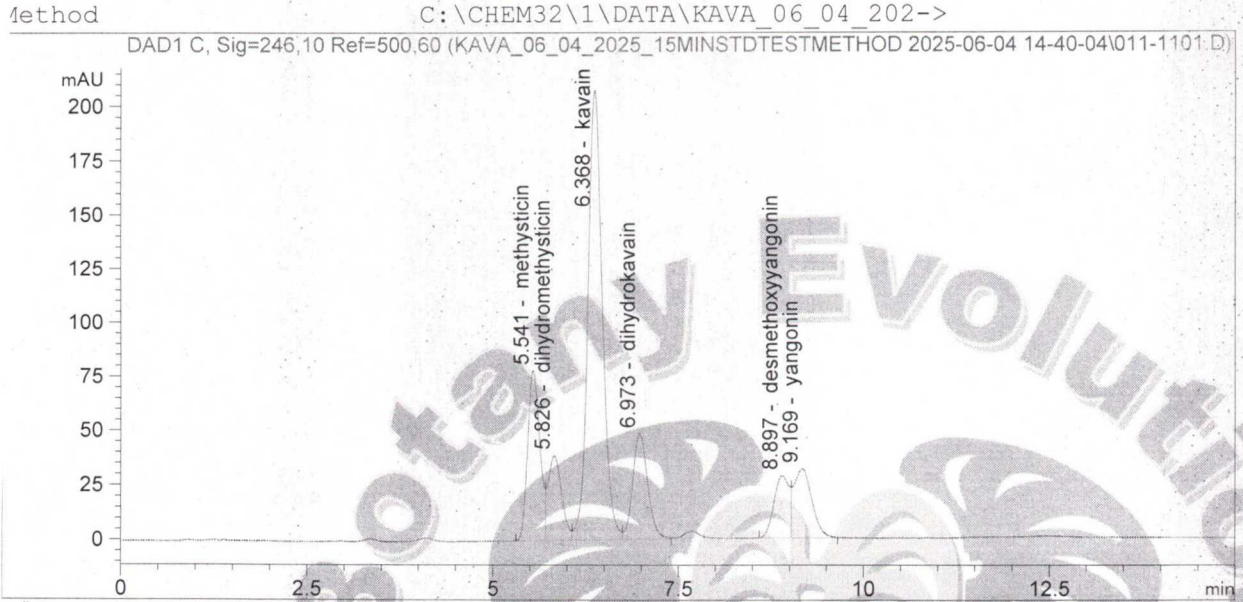

#	COMPOUND	RET. TIME	AREA	AREA %	AMOUNT
1	methysticin	5.541	905.866	15.56	0.000
2	dihydromethysticin	5.826	490.333	8.42	0.000
3	kavain	6.368	2802.255	48.15	0.000
4	dihydrokavain	6.973	680.109	11.68	0.000
5	desmethoxyyangonin	8.897	400.753	6.89	0.000
6	yangonin	9.169	541.051	9.30	0.000

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6/5/25