PIKIMAI HOPS

Nelson Sauvin™ 2023

Moisture
8.7%

Alpha Acids
15.11%

Beta Acids
7.41%

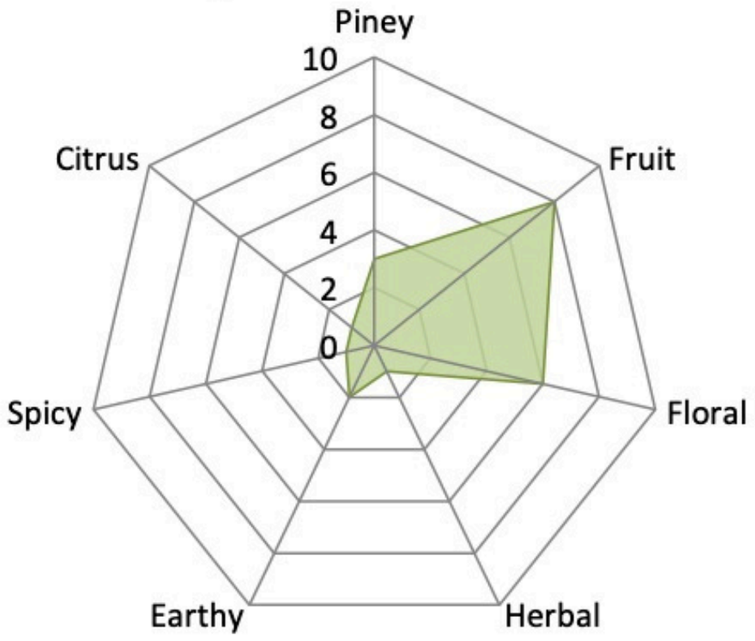
HSI
0.276

Method				
Hops-4C	Moisture Analysis	% Moisture	8.7	
		% Dry Matter	91.3	
AAR	Xanthohumol by HPLC		NT	mg/g
Hops-12	Hop Storage Index	HSI	0.276	
Hops-13	Essential Oil by Steam Distillation	mL/100g	1.51	
Hops-14 ICE-3	Alpha and Beta Acids by HPLC	Cohumulone	22.3	(% of Total AA)
		% Alpha Acids	15.11	
		Colupulone	47.0	(% of Total BA)
		% Beta Acids	7.41	
		a/b ratio	2.04	

Hops-17 Hop Essential Oil by GC-FID (as is)

	% area	mg/100g
B-Pinene	0.66	8.58
Myrcene	60.49	887.75
Linalool	0.40	6.08
Caryophyllene	6.31	84.99
Farnesene	0.19	3.16
Humulene	18.00	240.49
Geraniol	0.07	1.01

AQ vs VARIETY SPECS



Aroma Intensity= 12

		Typical Range	
% Moisture	8.7	8 - 12%	✓
HOP QUALITY (adjusted to 10% moisture)			
Total Oil ml/100g	1.48	1.0 - 2.0 mL	✓
cohumulone	22.3	23 - 25%	↓
Alpha Acids	14.90	12 - 13%	↑
Beta Acids	7.31	7.0 - 9.0%	✓

AROMA QUALITY (AQ)

	% Area			mg/mL of Hop Oil			mg/100g of Hops (@10%H20)		
B-Pinene	0.66	0.50 - 1.00 %	✓	5.70	5 - 10	✓	8.46	5 - 20	✓
Myrcene	60.49	40.00 - 50.00 %	↑	589.56	400 - 500	↑	875.38	400 - 1000	✓
Linalool	0.40	0.10 - 0.50 %	✓	4.04	1 - 5	✓	6.00	1 - 10	✓
Caryophyllene	6.31	9.00 - 12.00 %	↓	56.44	90 - 120	↓	83.80	90 - 240	↓
Farnesene	0.19	0.01 - 1.00 %	✓	2.10	0.1 - 10	✓	3.12	0.1 - 20	✓
Humulene	18.00	20.00 - 30.00 %	↓	159.71	200 - 300	↓	237.14	200 - 600	✓
Geraniol	0.07	0.40 - 1.00 %	↓	0.67	4 - 10	↓	0.99	4 - 20	↓

Further quality information avaliable on request. Testing completed by a registered Lab - TTB Certified Chemist (TTB Certified Chemist - Member AOAC - ASBC - BJCP)

PIKIMAI HOPS

Rakau™

2023

Moisture
9.8%

Alpha Acids
10.82%

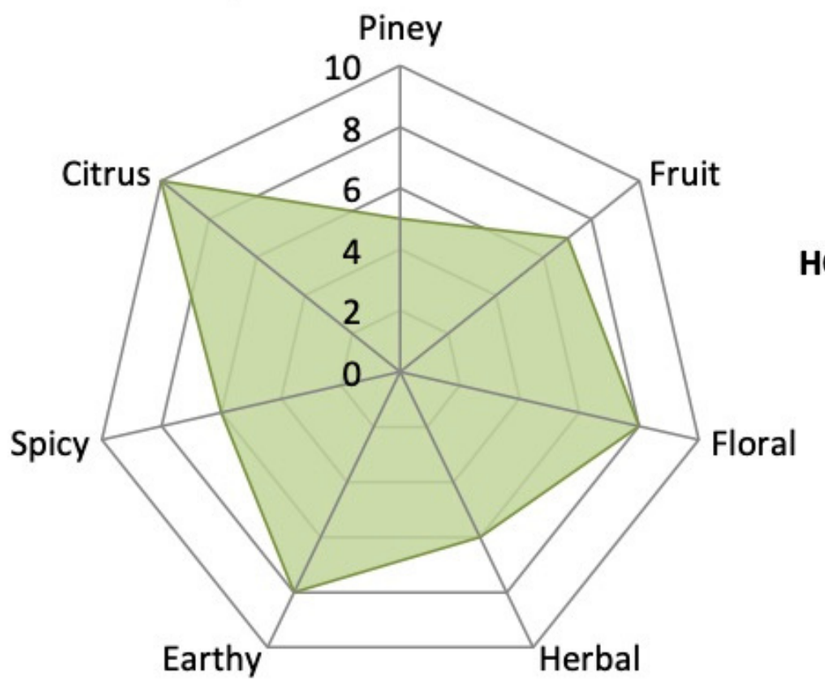
Beta Acids
4.33%

HSI
0.271

	Method		
Hops-4C	Moisture Analysis	% Moisture	9.8
		% Dry Matter	90.2
AAR	Xanthohumol by HPLC		**NT**
Hops-12	Hop Storage Index	HSI	0.271
Hops-13	Essential Oil by Steam Distillation	**mL/100g**	**1.94**
Hops-14	Alpha and Beta Acids by HPLC	Cohumulone	26.6
ICE-3		**% Alpha Acids**	**10.82**
		Colupulone	55.2
		% Beta Acids	**4.33**
		a/b ratio	2.50

Hops-17 Hop Essential Oil by GC-FID (as is)	% area	mg/100g
B-Pinene	0.45	7.39
Myrcene	45.33	838.36
Linalool	0.64	12.36
Caryophyllene	6.35	107.82
Farnesene	7.32	153.33
Humulene	19.16	322.59
Geraniol	0.30	5.88

AQ vs VARIETY SPECS



		Typical Range	
% Moisture	9.8	8 - 12%	✓
HOP QUALITY (adjusted to 10% moisture)			
Total Oil ml/100g	1.93	0.8 - 2.0 mL	↓
cohumulone	26.6	23 - 25%	↑
Alpha Acids	10.79	10 - 13%	✓
Beta Acids	4.32	5.0 - 6.0%	↓

AROMA QUALITY (AQ)

	% Area			mg/mL of Hop Oil			mg/100g of Hops (@10%H20)		
B-Pinene	0.45	0.30 - 0.70 %	✓	3.81	3 - 7	✓	7.37	2.4 - 14	✓
Myrcene	45.33	45.00 - 55.00 %	✓	432.82	450 - 550	↓	836.17	360 - 1100	✓
Linalool	0.64	0.40 - 0.80 %	✓	6.38	4 - 8	✓	12.33	3.2 - 16	✓
Caryophyllene	6.35	5.00 - 8.00 %	✓	55.66	50 - 80	✓	107.54	40 - 160	✓
Farnesene	7.32	6.00 - 9.00 %	✓	79.16	60 - 90	✓	152.93	48 - 180	✓
Humulene	19.16	20.00 - 22.00 %	↓	166.54	200 - 220	↓	321.75	160 - 440	✓
Geraniol	0.30	0.10 - 0.30 %	↑	3.04	1 - 3	↑	5.87	0.8 - 6	✓

Aroma Intensity= 49

Further quality information avaliable on request. Testing completed by a registered Lab - TTB Certified Chemist (TTB Certified Chemist - Member AOAC - ASBC - BJCP)

PIKIMAI HOPS

Motueka™

2023

Moisture
10.9%

Alpha Acids
7.99%

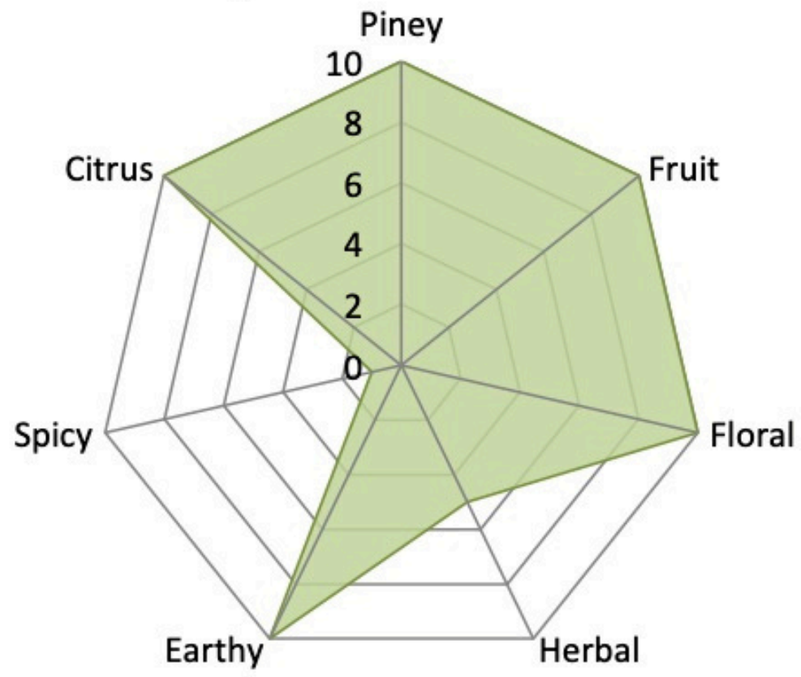
Beta Acids
5.61%

HSI
0.273

Method			
Hops-4C	Moisture Analysis	% Moisture	10.9
		% Dry Matter	89.1
AAR	Xanthohumol by HPLC		**NT**
Hops-12	Hop Storage Index	HSI	0.273
Hops-13	Essential Oil by Steam Distillation	**mL/100g**	**2.24**
Hops-14	Alpha and Beta Acids by HPLC	Cohumulone	29.9
ICE-3		**% Alpha Acids**	**7.99**
		Colupulone	52.7
		% Beta Acids	**5.61**
		a/b ratio	1.42

Hops-17 Hop Essential Oil by GC-FID (as is)	% area	mg/100g
B-Pinene	0.81	15.41
Myrcene	68.90	1486.99
Linalool	0.83	18.60
Caryophyllene	0.78	15.41
Farnesene	8.39	205.02
Humulene	0.40	7.91
Geraniol	1.08	24.29

AQ vs VARIETY SPECS



Aroma Intensity= 60

		Typical Range	
% Moisture	10.9	8 - 12%	✓

HOP QUALITY (adjusted to 10% moisture)

Total Oil ml/100g	2.27	0.5 - 1.0 mL	↑
cohumulone	29.9	28 - 30%	✓
Alpha Acids	8.07	6.5 - 8%	↑
Beta Acids	5.67	5.0 - 6.0%	✓

AROMA QUALITY (AQ)

	% Area			mg/mL of Hop Oil			mg/100g of Hops (@10%H20)		
B-Pinene	0.81	0.30 - 1.00 %	✓	6.87	3 - 10	✓	15.56	1.5 - 10	↑
Myrcene	68.90	50.00 - 70.00 %	✓	662.90	500 - 700	✓	1502.22	250 - 700	↑
Linalool	0.83	0.50 - 1.00 %	✓	8.29	5 - 10	✓	18.79	2.5 - 10	↑
Caryophyllene	0.78	1.00 - 3.00 %	↓	6.87	10 - 30	↓	15.57	5 - 30	✓
Farnesene	8.39	9.00 - 12.00 %	↓	91.40	90 - 120	✓	207.12	45 - 120	↑
Humulene	0.40	1.00 - 4.00 %	↓	3.53	10 - 40	↓	7.99	5 - 40	✓
Geraniol	1.08	1.00 - 2.00 %	✓	10.83	10 - 20	✓	24.54	5 - 20	↑

Further quality information avaliable on request. Testing completed by a registered Lab - TTB Certified Chemist (TTB Certified Chemist - Member AOAC - ASBC - BJCP)

PIKIMAI HOPS

Cascade™

2023

Moisture
9.2%

Alpha Acids
9.11%

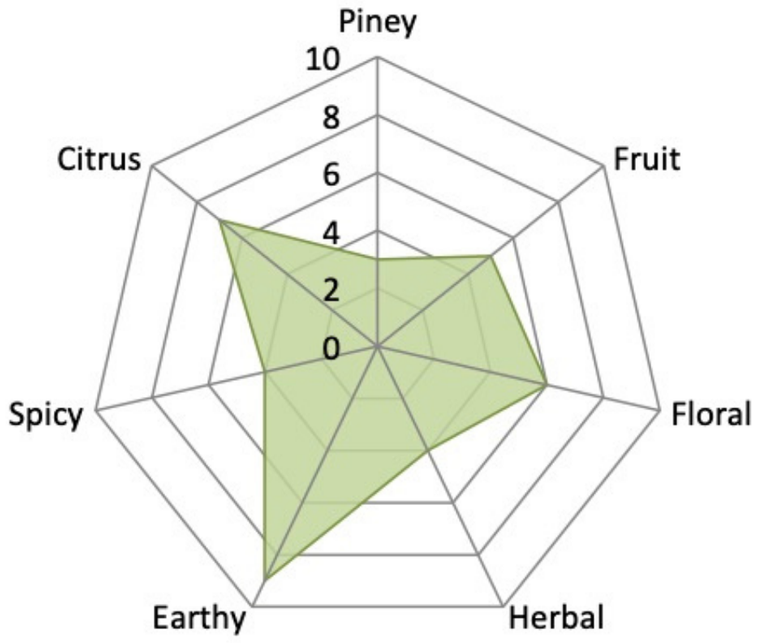
Beta Acids
5.88%

HSI
0.256

Method				
Hops-4C	Moisture Analysis	% Moisture	9.2	
		% Dry Matter	90.8	
AAR	Xanthohumol by HPLC		NT	
Hops-12	Hop Storage Index	HSI	0.256	
Hops-13	Essential Oil by Steam Distillation	**mL/100g**	**1.78**	
Hops-14	Alpha and Beta Acids by HPLC	Cohumulone	37.9	
ICE-3		**% Alpha Acids**	**9.11**	
		Colupulone	59.3	
		% Beta Acids	**5.88**	
		a/b ratio	1.55	

Hops-17 Hop Essential Oil by GC-FID (as is)	% area	mg/100g
B-Pinene	0.53	8.20
Myrcene	48.09	850.43
Linalool	0.52	9.59
Caryophyllene	6.20	100.68
Farnesene	9.78	195.73
Humulene	15.59	251.07
Geraniol	0.25	4.65

AQ vs VARIETY SPECS



Aroma Intensity= 27

		Typical Range	
% Moisture	9.2	8 - 12%	✓
HOP QUALITY (adjusted to 10% moisture)			
Total Oil ml/100g	1.77	0.8 - 2.5 mL	✓
cohumulone	37.9	30 - 35%	↑
Alpha Acids	9.02	5.5 - 9%	↑
Beta Acids	5.82	6.0 - 7.5%	↓

AROMA QUALITY (AQ)

	% Area			mg/mL of Hop Oil			mg/100g of Hops (@10%H20)		
B-Pinene	0.53	0.50 - 0.80 %	✓	4.60	5 - 8	↓	8.13	4 - 20	✓
Myrcene	48.09	45.00 - 60.00 %	✓	476.49	450 - 600	✓	842.84	360 - 1500	✓
Linalool	0.52	0.30 - 0.60 %	✓	5.37	3 - 6	✓	9.50	2.4 - 15	✓
Caryophyllene	6.20	5.00 - 9.00 %	✓	56.41	50 - 90	✓	99.78	40 - 225	✓
Farnesene	9.78	6.00 - 9.00 %	↑	109.67	60 - 90	↑	193.98	48 - 225	✓
Humulene	15.59	14.00 - 20.00 %	✓	140.68	140 - 200	✓	248.83	112 - 500	✓
Geraniol	0.25	0.01 - 0.30 %	✓	2.60	0.1 - 3	✓	4.60	0.08 - 7.5	✓

Further quality information avaliable on request. Testing completed by a registered Lab - TTB Certified Chemist (TTB Certified Chemist - Member AOAC - ASBC - BJCP)

PIKIMAI HOPS

Wakatu™

2023

Moisture
8.3%

Alpha Acids
9.38%

Beta Acids
8.68%

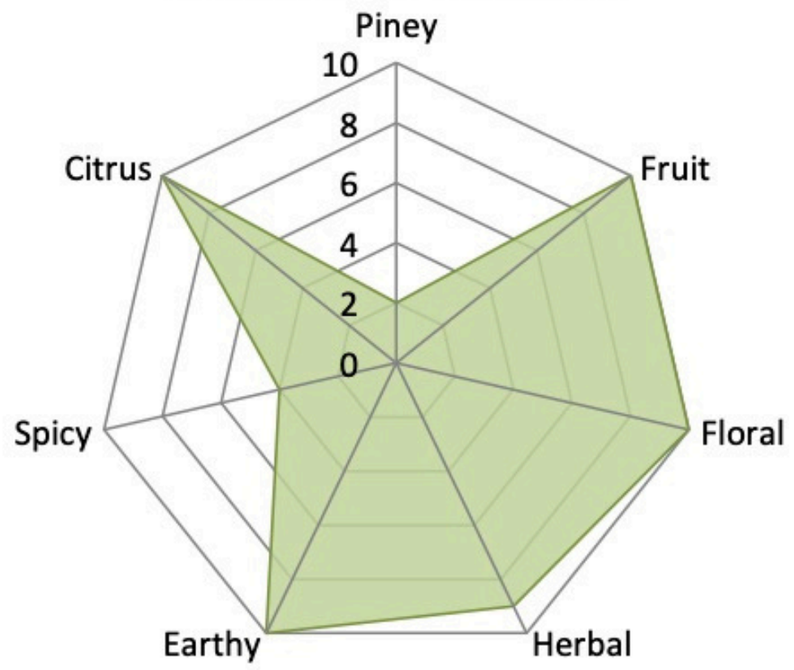
HSI
0.263

Method				
Hops-4C	Moisture Analysis	% Moisture	8.3
		% Dry Matter	91.7
AAR	Xanthohumol by HPLC		NT
Hops-12	Hop Storage Index	HSI	0.263
Hops-13	Essential Oil by Steam Distillation	**mL/100g**	**1.28**
Hops-14	Alpha and Beta Acids by HPLC	Cohumulone	33.2
ICE-3		**% Alpha Acids**	**9.38**
		Colupulone	60.2
		% Beta Acids	**8.68**
		a/b ratio	1.08

Hops-17 Hop Essential Oil by GC-FID (as is)

	% area	mg/100g
B-Pinene	0.42	4.72
Myrcene	41.54	524.99
Linalool	0.87	11.43
Caryophyllene	8.36	96.97
Farnesene	6.62	94.72
Humulene	13.97	160.79
Geraniol	1.23	16.23

AQ vs VARIETY SPECS



Aroma Intensity= 57

		Typical Range	
% Moisture	8.3	8 - 12%	✓
HOP QUALITY (adjusted to 10% moisture)			
Total Oil ml/100g	1.26	0.9 - 1.1 mL	↑
cohumulone	33.2	28 - 30%	↑
Alpha Acids	9.21	6.5 - 8.5%	↑
Beta Acids	8.53	8.4 - 8.6%	✓

AROMA QUALITY (AQ)

	% Area			mg/mL of Hop Oil			mg/100g of Hops (@10%H20)		
B-Pinene	0.42	0.40 - 1.00 %	✓	3.69	4 - 10	↓	4.64	3.6 - 11	✓
Myrcene	41.54	30.00 - 40.00 %	↑	410.07	300 - 400	↑	515.53	270 - 440	↑
Linalool	0.87	0.50 - 1.00 %	✓	8.93	5 - 10	✓	11.22	4.5 - 11	↑
Caryophyllene	8.36	7.00 - 9.00 %	✓	75.74	70 - 90	✓	95.22	63 - 99	✓
Farnesene	6.62	6.00 - 7.00 %	✓	73.98	60 - 70	↑	93.01	54 - 77	↑
Humulene	13.97	15.00 - 18.00 %	↓	125.59	150 - 180	↓	157.89	135 - 198	✓
Geraniol	1.23	0.30 - 1.00 %	↑	12.68	3 - 10	↑	15.93	2.7 - 11	↑

Further quality information avaliable on request. Testing completed by a registered Lab - TTB Certified Chemist (TTB Certified Chemist - Member AOAC - ASBC - BJCP)

PIKIMAI HOPS

Pacifica™

2023

Moisture
9.9%

Alpha Acids
5.62%

Beta Acids
6.25%

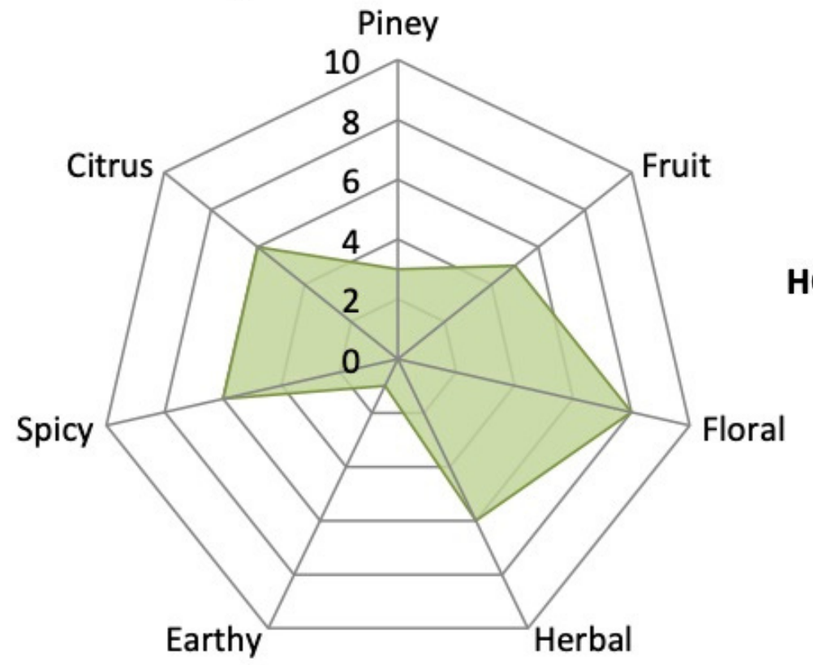
HSI
0.260

Method			
Hops-4C	Moisture Analysis	% Moisture	9.9
		% Dry Matter	90.1
AAR	Xanthohumol by HPLC		NT
Hops-12	Hop Storage Index	HSI	0.260
Hops-13	Essential Oil by Steam Distillation	**mL/100g**	**1.43**
Hops-14	Alpha and Beta Acids by HPLC	Cohumulone	25.2
ICE-3		**% Alpha Acids**	**5.62**
		Colupulone	47.8
		% Beta Acids	**6.25**
		a/b ratio	0.90

Hops-17 Hop Essential Oil by GC-FID (as is)

	% area	mg/100g
B-Pinene	0.30	3.92
Myrcene	29.63	445.70
Linalool	1.01	15.66
Caryophyllene	14.48	200.08
Farnesene	0.03	0.42
Humulene	38.79	531.26
Geraniol	0.23	3.64

AQ vs VARIETY SPECS



Aroma Intensity= 24

		Typical Range	
% Moisture	9.9	8 - 12%	✓

HOP QUALITY (adjusted to 10% moisture)

Total Oil ml/100g	1.43	0.5 - 2.0 mL	✓
cohumulone	25.2	24 - 26%	✓
Alpha Acids	5.62	5.0 - 6%	✓
Beta Acids	6.25	5.0 - 7.0%	✓

AROMA QUALITY (AQ)

	% Area			mg/mL of Hop Oil			mg/100g of Hops (@10%H20)		
B-Pinene	0.30	0.20 - 0.60 %	✓	2.74	2 - 6	✓	3.91	1 - 12	✓
Myrcene	29.63	30.00 - 40.00 %	↓	311.38	300 - 400	✓	445.43	150 - 800	✓
Linalool	1.01	0.60 - 1.00 %	↑	10.94	6 - 10	↑	15.65	3 - 20	✓
Caryophyllene	14.48	12.00 - 16.00 %	✓	139.78	120 - 160	✓	199.96	60 - 320	✓
Farnesene	0.03	0.01 - 1.00 %	✓	0.29	0.1 - 10	✓	0.42	0.05 - 20	✓
Humulene	38.79	35.00 - 40.00	✓	371.16	350 - 400	✓	530.94	175 - 800	✓
Geraniol	0.23	0.10 - 0.30 %	✓	2.55	1 - 3	✓	3.64	0.5 - 6	✓

Further quality information avaliable on request. Testing completed by a registered Lab - TTB Certified Chemist (TTB Certified Chemist - Member AOAC - ASBC - BJCP)

PIKIMAI HOPS

Riwaka™
2023

Moisture 11.5%

Alpha Acids 6.1%

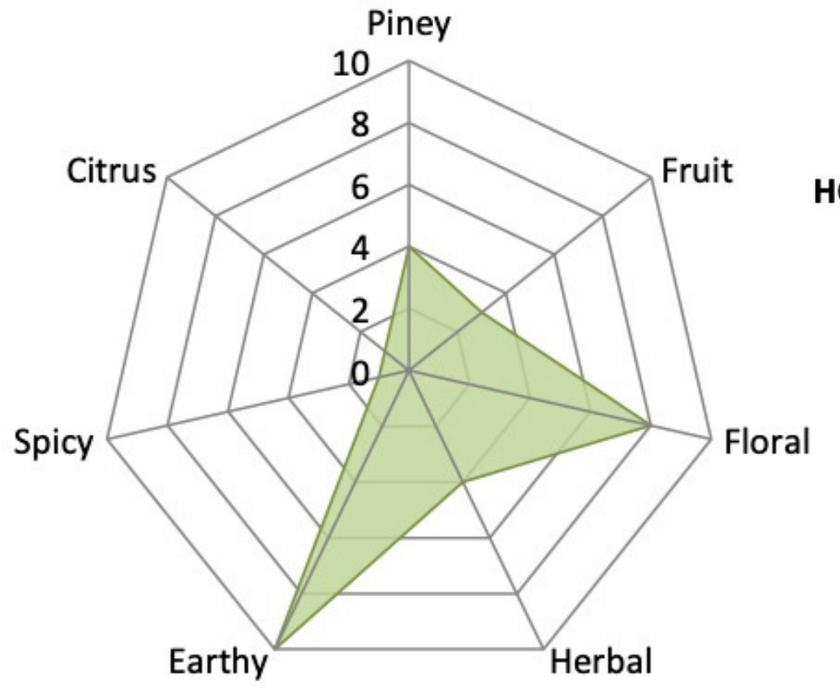
Beta Acids 4.62%

HSI 0.264

Method			
Hops-4C	Moisture Analysis	% Moisture	11.5
		% Dry Matter	88.5
AAR	Xanthohumol by HPLC		NT
Hops-12	Hop Storage Index	HSI	0.264
Hops-13	Essential Oil by Steam Distillation	**mL/100g**	**1.52**
Hops-14	Alpha and Beta Acids by HPLC	Cohumulone	35.2
ICE-3		**% Alpha Acids**	**6.10**
		Colupulone	59.5
		% Beta Acids	**4.62**
		a/b ratio	1.32

Hops-17 Hop Essential Oil by GC-FID (as is)	% area	mg/100g
B-Pinene	0.74	9.27
Myrcene	63.66	910.01
Linalool	0.91	13.48
Caryophyllene	4.03	52.87
Farnesene	2.99	48.45
Humulene	0.74	9.61
Geraniol	0.38	5.61

AQ vs VARIETY SPECS



Aroma Intensity= 18

		Typical Range	
% Moisture	11.5	8 - 12%	✓

HOP QUALITY (adjusted to 10% moisture)

Total Oil ml/100g	1.55	1.4 - 1.6 mL	✓
cohumulone	35.2	31 - 33%	↑
Alpha Acids	6.20	4.5 - 6.5%	✓
Beta Acids	4.69	4.0 - 5.0%	✓

AROMA QUALITY (AQ)

	% Area			mg/mL of Hop Oil			mg/100g of Hops (@10%H20)		
B-Pinene	0.74	0.40 - 1.00 %	✓	6.08	4 - 10	✓	9.43	5.6 - 16	✓
Myrcene	63.66	62.00 - 72.00 %	✓	596.97	620 - 720	↓	925.55	868 - 1152	✓
Linalool	0.91	0.50 - 1.00 %	✓	8.84	5 - 10	✓	13.71	7 - 16	✓
Caryophyllene	4.03	3.20 - 4.50 %	✓	34.68	32 - 45	✓	53.77	44.8 - 72	✓
Farnesene	2.99	0.01 - 1.00 %	↑	31.78	0.1 - 10	↑	49.28	0.14 - 16	↑
Humulene	0.74	7.00 - 10.00 %	↓	6.30	70 - 100	↓	9.77	98 - 160	↓
Geraniol	0.38	0.40 - 1.00 %	↓	3.68	4 - 10	↓	5.70	5.6 - 16	✓

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