

LAMPIRAN

Lampiran 1. Hasil Uji Laboratorium



Lab. Chem-Mix Pratama

HASIL ANALISA

Nomor:013/CMP/05/2024

Laboratorium Pengujian : Laboratorium Chem-Mix Pratama

Tanggal Pengujian : 13 Mei 2024

No	Kode	Air (%)		
		Ulangan 1	Ulangan 2	Ulangan 3
1	K	1,2404	1,1837	1,1901
2	3%	1,3605	1,2117	1,3846
3	4%	1,4269	1,4557	1,4586
4	5%	1,7606	1,6213	1,5694

No	Kode	Gula Reduksi (%)		
		Ulangan 1	Ulangan 2	Ulangan 3
1	K	3,0840	3,1156	3,1315
2	3%	3,5407	3,5565	3,5722
3	4%	4,0262	4,0570	4,0725
4	5%	5,2636	5,2792	5,3103

No	Kode	Antioksidan (%)		
		Ulangan 1	Ulangan 2	Ulangan 3
1	K	9,4368	9,5890	9,2846
2	3%	20,2435	20,3957	20,0913
3	4%	33,1811	33,0289	33,3333
4	5%	44,7489	44,4444	44,5967

LABORATORIUM
CMP
CHEM-MIX PRATAMA
Diperiksa Oleh Pimpinan
Dwi Widiyantoro

Analisis
Putra Mahardika

Laboratorium : Kretek ,Jambidan ,Banguntapan ,Bantul ,Yogyakarta
Telp. 081228063145/081325271288

Lampiran 2. Uji Anova Analisis Kimia

- Kadar Air

Descriptives

Aspek Kadar Air

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
K0	3	1.2047	.03105	.01793	1.1276	1.2819	1.18	1.24
3%	3	1.3189	.09365	.05407	1.0863	1.5516	1.21	1.38
4%	3	1.4471	.01752	.01012	1.4035	1.4906	1.43	1.46
5%	3	1.6504	.09887	.05708	1.4048	1.8960	1.57	1.76
Total	12	1.4053	.18295	.05281	1.2890	1.5215	1.18	1.76

ANOVA

Aspek Kadar Air

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.329	3	.110	22.107	.000
Within Groups	.040	8	.005		
Total	.368	11			

Multiple Comparisons

Dependent Variable: Aspek Kadar Air
Tukey HSD

(I) Ulangan	(J) Ulangan	Mean Difference (I-J)	Std. Error	Sig.	5% Confidence Interval	
					Lower Bound	Upper Bound
K0	3%	-.11420*	.05747	.268	-.1445	-.0839
	4%	-.24233*	.05747	.012	-.2726	-.2120
	5%	-.44570*	.05747	.000	-.4760	-.4154
3%	K0	.11420*	.05747	.268	.0839	.1445
	4%	-.12813*	.05747	.195	-.1584	-.0978
	5%	-.33150*	.05747	.002	-.3618	-.3012
4%	K0	.24233*	.05747	.012	.2120	.2726
	3%	.12813*	.05747	.195	.0978	.1584
	5%	-.20337*	.05747	.031	-.2337	-.1731
5%	K0	.44570*	.05747	.000	.4154	.4760
	3%	.33150*	.05747	.002	.3012	.3618
	4%	.20337*	.05747	.031	.1731	.2337

*. The mean difference is significant at the 0.95 level.

Aspek Kadar Air

Tukey HSD

Ulangan	N	Subset for alpha = 0.95			
		1	2	3	4
K0	3	1.2047			
3%	3		1.3189		
4%	3			1.4471	
5%	3				1.6504
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

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- Gula Reduksi

Descriptives

Aspek Gula Reduksi

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
K0	3	3.1104	.02418	.01396	3.0503	3.1704	3.08	3.13
3%	3	3.5565	.01575	.00909	3.5173	3.5956	3.54	3.57
4%	3	4.0519	.02357	.01361	3.9934	4.1104	4.03	4.07
5%	3	5.2844	.02377	.01373	5.2253	5.3434	5.26	5.31
Total	12	4.0008	.84881	.24503	3.4615	4.5401	3.08	5.31

ANOVA

Aspek Gula Reduksi

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.921	3	2.640	5407.063	.000
Within Groups	.004	8	.000		
Total	7.925	11			

Multiple Comparisons

Dependent Variable: Aspek Gula Reduksi

Tukey HSD

(I) Ulangan	(J) Ulangan	Mean Difference (I-J)	Std. Error	Sig.	5% Confidence Interval	
					Lower Bound	Upper Bound
K0	3%	-.44610*	.01804	.000	-.4556	-.4366
	4%	-.94153*	.01804	.000	-.9510	-.9320
	5%	-2.17400*	.01804	.000	-2.1835	-2.1645
3%	K0	.44610*	.01804	.000	.4366	.4556
	4%	-.49543*	.01804	.000	-.5049	-.4859
	5%	-1.72790*	.01804	.000	-1.7374	-1.7184
4%	K0	.94153*	.01804	.000	.9320	.9510
	3%	.49543*	.01804	.000	.4859	.5049
	5%	-1.23247*	.01804	.000	-1.2420	-1.2230
5%	K0	2.17400*	.01804	.000	2.1645	2.1835
	3%	1.72790*	.01804	.000	1.7184	1.7374
	4%	1.23247*	.01804	.000	1.2230	1.2420

*. The mean difference is significant at the 0.95 level.

Aspek Gula Reduksi

Tukey HSD

Ulangan	N	Subset for alpha = 0.95			
		1	2	3	4
K0	3	3.1104			
3%	3		3.5565		
4%	3			4.0519	
5%	3				5.2844
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

- Antioksidan

Descriptives

Aspek Antioksidan

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					K0	3		
3%	3	20.2435	.15220	.08787	19.8654	20.6216	20.09	20.40
4%	3	33.1811	.15220	.08787	32.8030	33.5592	33.03	33.33
5%	3	44.5967	.15225	.08790	44.2185	44.9749	44.44	44.75
Total	12	26.8645	13.83625	3.99418	18.0734	35.6557	9.28	44.75

ANOVA

Aspek Antioksidan

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2105.675	3	701.892	30294.888	.000
Within Groups	.185	8	.023		
Total	2105.860	11			

Multiple Comparisons

Dependent Variable: Aspek Antioksidan

Tukey HSD

(I) Ulangan	(J) Ulangan	Mean Difference (I-J)	Std. Error	Sig.	5% Confidence Interval	
					Lower Bound	Upper Bound
K0	3%	-10.80670*	.12428	.000	-10.8722	-10.7412
	4%	-23.74430*	.12428	.000	-23.8098	-23.6788
	5%	-35.15987*	.12428	.000	-35.2254	-35.0943
3%	K0	10.80670*	.12428	.000	10.7412	10.8722
	4%	-12.93760*	.12428	.000	-13.0031	-12.8721
	5%	-24.35317*	.12428	.000	-24.4187	-24.2876
4%	K0	23.74430*	.12428	.000	23.6788	23.8098
	3%	12.93760*	.12428	.000	12.8721	13.0031
	5%	-11.41557*	.12428	.000	-11.4811	-11.3500
5%	K0	35.15987*	.12428	.000	35.0943	35.2254
	3%	24.35317*	.12428	.000	24.2876	24.4187
	4%	11.41557*	.12428	.000	11.3500	11.4811

*. The mean difference is significant at the 0.95 level.

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Aspek Antioksidan

Tukey HSD

Ulangan	N	Subset for alpha = 0.95			
		1	2	3	4
K0	3	9.4368			
3%	3		20.2435		
4%	3			33.1811	
5%	3				44.5967
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 3. Data Statistik Anova Uji Hedonik

- Warna

Descriptives

Aspek Warna

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Acuan Kode 119	33	4.03	.810	.141	3.74	4.32	2	5
Acuan Kode 336	33	3.58	.867	.151	3.27	3.88	2	5
Acuan Kode 254	33	3.52	.755	.131	3.25	3.78	2	5
Acuan Kode 385	33	3.64	.783	.136	3.36	3.91	2	5
Total	132	3.69	.821	.071	3.55	3.83	2	5

ANOVA

Aspek Warna

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.356	3	1.785	2.756	.045
Within Groups	82.909	128	.648		
Total	88.265	131			

Multiple Comparisons

Dependent Variable: Aspek Warna

Tukey HSD

(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	5% Confidence Interval	
					Lower Bound	Upper Bound
	Acuan Kode 336	.455*	.198	.105	.35	.56
Acuan Kode 119	Acuan Kode 254	.515*	.198	.050	.41	.62
	Acuan Kode 385	.394*	.198	.198	.29	.50
	Acuan Kode 119	-.455*	.198	.105	-.56	-.35
Acuan Kode 336	Acuan Kode 254	.061	.198	.990	-.05	.17
	Acuan Kode 385	-.061	.198	.990	-.17	.05
	Acuan Kode 119	-.515*	.198	.050	-.62	-.41
Acuan Kode 254	Acuan Kode 336	-.061	.198	.990	-.17	.05
	Acuan Kode 385	-.121*	.198	.928	-.23	-.01
	Acuan Kode 119	-.394*	.198	.198	-.50	-.29
Acuan Kode 385	Acuan Kode 336	.061	.198	.990	-.05	.17
	Acuan Kode 254	.121*	.198	.928	.01	.23

*. The mean difference is significant at the 0.95 level.

Aspek Warna

Tukey HSD

Formula	N	Subset for alpha = 0.95		
		1	2	3
Acuan Kode 254	33	3.52		
Acuan Kode 336	33	3.58	3.58	
Acuan Kode 385	33		3.64	
Acuan Kode 119	33			4.03
Sig.		.990	.990	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 33,000.

- Aroma

Descriptives

Aspek Aroma

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Acuan Kode 119	33	3.70	.810	.141	3.41	3.98	2	5
Acuan Kode 336	33	3.24	.830	.145	2.95	3.54	2	5
Acuan Kode 254	33	3.21	.857	.149	2.91	3.52	1	5
Acuan Kode 385	33	3.33	.736	.128	3.07	3.59	2	5
Total	132	3.37	.823	.072	3.23	3.51	1	5

ANOVA

Aspek Aroma

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.932	3	1.644	2.509	.062
Within Groups	83.879	128	.655		
Total	88.811	131			

Multiple Comparisons

Dependent Variable: Aspek Aroma

Tukey HSD

(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	5% Confidence Interval	
					Lower Bound	Upper Bound
	Acuan Kode 336	.455*	.199	.108	.35	.56
Acuan Kode 119	Acuan Kode 254	.485*	.199	.076	.38	.59
	Acuan Kode 385	.364*	.199	.267	.26	.47
	Acuan Kode 119	-.455*	.199	.108	-.56	-.35
Acuan Kode 336	Acuan Kode 254	.030	.199	.999	-.08	.14
	Acuan Kode 385	-.091	.199	.968	-.20	.02
	Acuan Kode 119	-.485*	.199	.076	-.59	-.38
Acuan Kode 254	Acuan Kode 336	-.030	.199	.999	-.14	.08
	Acuan Kode 385	-.121*	.199	.929	-.23	-.01
	Acuan Kode 119	-.364*	.199	.267	-.47	-.26
Acuan Kode 385	Acuan Kode 336	.091	.199	.968	-.02	.20
	Acuan Kode 254	.121*	.199	.929	.01	.23

*. The mean difference is significant at the 0.95 level.

Aspek Aroma

Tukey HSD

Formula	N	Subset for alpha = 0.95		
		1	2	3
Acuan Kode 254	33	3.21		
Acuan Kode 336	33	3.24	3.24	
Acuan Kode 385	33		3.33	
Acuan Kode 119	33			3.70
Sig.		.999	.968	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 33,000.

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- Rasa

Descriptives

Aspek Rasa

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Acuan Kode 119	33	4.03	.918	.160	3.70	4.36	2	5
Acuan Kode 336	33	2.88	1.166	.203	2.47	3.29	1	5
Acuan Kode 254	33	3.18	1.074	.187	2.80	3.56	1	5
Acuan Kode 385	33	3.21	1.317	.229	2.75	3.68	1	5
Total	132	3.33	1.195	.104	3.12	3.53	1	5

ANOVA

Aspek Rasa

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	24.083	3	8.028	6.308	.001
Within Groups	162.909	128	1.273		
Total	186.992	131			

Multiple Comparisons

Dependent Variable: Aspek Rasa

Tukey HSD

(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	5% Confidence Interval	
					Lower Bound	Upper Bound
	Acuan Kode 336	1.152*	.278	.000	1.00	1.30
Acuan Kode 119	Acuan Kode 254	.848*	.278	.014	.70	1.00
	Acuan Kode 385	.818*	.278	.020	.67	.97
	Acuan Kode 119	-1.152*	.278	.000	-1.30	-1.00
Acuan Kode 336	Acuan Kode 254	-.303*	.278	.696	-.45	-.15
	Acuan Kode 385	-.333*	.278	.628	-.48	-.18
	Acuan Kode 119	-.848*	.278	.014	-1.00	-.70
Acuan Kode 254	Acuan Kode 336	.303*	.278	.696	.15	.45
	Acuan Kode 385	-.030	.278	1.000	-.18	.12
	Acuan Kode 119	-.818*	.278	.020	-.97	-.67
Acuan Kode 385	Acuan Kode 336	.333*	.278	.628	.18	.48
	Acuan Kode 254	.030	.278	1.000	-.12	.18

*. The mean difference is significant at the 0.95 level.

Aspek Rasa

Tukey HSD

Formula	N	Subset for alpha = 0.95		
		1	2	3
Acuan Kode 336	33	2.88		
Acuan Kode 254	33		3.18	
Acuan Kode 385	33		3.21	
Acuan Kode 119	33			4.03
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 33,000.

- Tekstur

Descriptives

Aspek Tekstur

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Acuan Kode 119	33	3.21	1.111	.193	2.82	3.61	1	5
Acuan Kode 336	33	3.00	1.031	.179	2.63	3.37	1	5
Acuan Kode 254	33	2.94	.966	.168	2.60	3.28	1	5
Acuan Kode 385	33	3.00	1.275	.222	2.55	3.45	1	5
Total	132	3.04	1.094	.095	2.85	3.23	1	5

ANOVA

Aspek Tekstur

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.417	3	.472	.389	.761
Within Groups	155.394	128	1.214		
Total	156.811	131			

Multiple Comparisons

Dependent Variable: Aspek Tekstur

Tukey HSD

(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	5% Confidence Interval	
					Lower Bound	Upper Bound
	Acuan Kode 336	.212 [*]	.271	.862	.07	.36
Acuan Kode 119	Acuan Kode 254	.273 [*]	.271	.747	.13	.42
	Acuan Kode 385	.212 [*]	.271	.862	.07	.36
	Acuan Kode 119	-.212 [*]	.271	.862	-.36	-.07
Acuan Kode 336	Acuan Kode 254	.061	.271	.996	-.08	.21
	Acuan Kode 385	.000	.271	1.000	-.15	.15
	Acuan Kode 119	-.273 [*]	.271	.747	-.42	-.13
Acuan Kode 254	Acuan Kode 336	-.061	.271	.996	-.21	.08
	Acuan Kode 385	-.061	.271	.996	-.21	.08
	Acuan Kode 119	-.212 [*]	.271	.862	-.36	-.07
Acuan Kode 385	Acuan Kode 336	.000	.271	1.000	-.15	.15
	Acuan Kode 254	.061	.271	.996	-.08	.21

*. The mean difference is significant at the 0.95 level.

Aspek Tekstur

Tukey HSD

Formula	N	Subset for alpha = 0.95	
		1	2
Acuan Kode 254	33	2.94	
Acuan Kode 336	33	3.00	
Acuan Kode 385	33	3.00	
Acuan Kode 119	33		3.21
Sig.		.996	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 33,000.

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- Keseluruhan

Descriptives

Aspek Keseluruhan

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Acuan Kode 119	33	3.88	.820	.143	3.59	4.17	2	5
Acuan Kode 336	33	3.09	.947	.165	2.75	3.43	1	5
Acuan Kode 254	33	3.24	.902	.157	2.92	3.56	1	5
Acuan Kode 385	33	3.21	1.111	.193	2.82	3.61	1	5
Total	132	3.36	.990	.086	3.19	3.53	1	5

ANOVA

Aspek Keseluruhan

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12.447	3	4.149	4.585	.004
Within Groups	115.818	128	.905		
Total	128.265	131			

Multiple Comparisons

Dependent Variable: Aspek Keseluruhan
Tukey HSD

(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	5% Confidence Interval	
					Lower Bound	Upper Bound
	Acuan Kode 336	.788*	.234	.006	.66	.91
Acuan Kode 119	Acuan Kode 254	.636*	.234	.037	.51	.76
	Acuan Kode 385	.667*	.234	.026	.54	.79
	Acuan Kode 119	-.788*	.234	.006	-.91	-.66
Acuan Kode 336	Acuan Kode 254	-.152*	.234	.916	-.28	-.03
	Acuan Kode 385	-.121	.234	.955	-.25	.00
	Acuan Kode 119	-.636*	.234	.037	-.76	-.51
Acuan Kode 254	Acuan Kode 336	.152*	.234	.916	.03	.28
	Acuan Kode 385	.030	.234	.999	-.10	.16
	Acuan Kode 119	-.667*	.234	.026	-.79	-.54
Acuan Kode 385	Acuan Kode 336	.121	.234	.955	.00	.25
	Acuan Kode 254	-.030	.234	.999	-.16	.10

*. The mean difference is significant at the 0.05 level.

Aspek Keseluruhan

Tukey HSD

Formula	N	Subset for alpha = 0.95		
		1	2	3
Acuan Kode 336	33	3.09		
Acuan Kode 385	33	3.21	3.21	
Acuan Kode 254	33		3.24	
Acuan Kode 119	33			3.88
Sig.		.955	.999	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 33,000.

Lampiran 4. Dokumentasi Uji Hedonik



BIODATA PENULIS



Nama : Okta Sarwiji
NIM : 20.03.08.025
Jurusan : D-IV Pengembangan Produk Agroindustri
Email : oktasarwiji72@gmail.com
Tempat/tanggal lahir : Cilacap, 16 Oktober 2002
Alamat : Jl Budi Utomo RT 05 RW 02, Kelurahan
Tegalkamulyan, Kecamatan Cilacap Selatan, Cilacap
Telepon/Hp : +6289-5392-8065-83
Motto : Hari Esok akan Lebih Baik

Riwayat Pendidikan:

Jenjang	Nama Instansi	Jurusan	Lama/Tahun
SD	SD Negeri Sidakaya 07 Cilacap	-	2008 – 2014
SMP	SMP Purnama 1 Cilacap	-	2014 – 2017
SMA	SMK Yayasan Pendidikan Ekonomi (YPE) Cilacap	Akuntansi Keuangan dan Lembaga	2017 – 2020
Perguruan Tinggi	Politeknik Negeri Cilacap	D-IV Pengembangan Produk Aroindustri	2020 – sekarang

Penulis telah mengikuti Seminar Tugas Akhir pada tanggal 05 Agustus 2024, sebagai salah satu persyaratan untuk memperoleh gelar Sarjana Terapan Teknik (S.Tr.T)