

7. LAMPIRAN

7.1. Lampiran 1. Worksheet Uji Rating Mi Jagung

Worksheet Uji Rating Hedonik

Tanggal uji : 17 Januari 2017

Jenis sampel : Mi Jagung

Identifikasi sampel

Kode

Mi jagung basah kontrol (tanpa bahan tambahan pangan)	A
Mi jagung basah perbandingan gliseril monostearat : soda abu 1% : 0,5%	B
Mi jagung basah perbandingan gliseril monostearat : soda abu 0,75% : 0,75%	C
Mi jagung basah perbandingan gliseril monostearat : soda abu 0,5% : 1%	D
Mi jagung kering kontrol (tanpa bahan tambahan pangan)	E
Mi jagung kering perbandingan gliseril monostearat : soda abu 1% : 0,5%	F
Mi jagung kering perbandingan gliseril monostearat : soda abu 0,75% : 0,75%	G
Mi jagung kering perbandingan gliseril monostearat : soda abu 0,5% : 1%	H

Kode kombinasi urutan penyajian :

HDBCEF = 1	ADCGEF = 11	HDBCEF = 21	ADCGEF = 31
BAFCDE = 2	DBFEHG = 12	BAFCDE = 22	DBFEHG = 32
CFAHGB = 3	GCADEH = 13	CFAHGB = 23	GCADEH = 33
EBDACF = 4	DFBEGH = 14	EBDACF = 24	DFBEGH = 34
GDEBAH = 5	EBCFAG = 15	GDEBAH = 25	EBCFAG = 35
GFBDEA = 6	CDEBGH = 16	GFBDEA = 26	CDEBGH = 36
HCGFAB = 7	ECFBHA = 17	HCGFAB = 27	ECFBHA = 37
BDCAGH = 8	HGCAFD = 18	BDCAGH = 28	HGCAFD = 38
DGCFEH = 9	EABHFC = 19	DGCFEH = 29	EABHFC = 39
HDGEAC = 10	AFGBHD = 20	HDGEAC = 30	AFGBHD = 40

Penyajian :

Panelis	Kode Sampel ^{urutan penyajian}
#1, 21	862 245 458 396 522 498 ¹
#2, 22	163 743 593 252 581 355 ²
#3, 23	881 549 759 169 122 919 ³
#4, 24	152 237 574 611 145 784 ⁴
#5, 25	681 829 614 547 869 744 ⁵
#6, 26	414 891 129 938 863 572 ⁶
#7, 27	423 277 685 533 937 223 ⁷
#8, 28	585 821 830 267 512 638 ⁸
#9, 29	653 489 538 216 446 849 ⁹
#10, 30	628 843 725 731 553 253 ¹⁰
#11, 31	834 787 231 939 232 537 ¹¹
#12, 32	785 258 684 625 662 291 ¹²
#13, 33	894 333 612 728 487 741 ¹³
#14, 34	573 786 259 296 471 372 ¹⁴
#15, 35	965 575 112 595 615 941 ¹⁵
#16, 36	275 513 222 114 233 184 ¹⁶
#17, 37	916 582 234 373 364 799 ¹⁷
#18, 38	468 663 712 586 351 847 ¹⁸
#19, 39	742 421 226 286 523 618 ¹⁹
#20, 40	935 447 835 117 658 161 ²⁰

Rekap kode sampel :

Sampel A	743 759 611 869 572 937 267 533 612 234 615 799 586 421 935
Sampel B	458 163 919 237 547 129 223 585 258 259 575 114 373 226 117
Sampel C	396 252 881 145 277 830 538 253 231 333 112 275 582 712 618
Sampel D	245 581 574 829 938 821 653 843 787 785 728 573 513 847 161
Sampel E	522 355 152 614 863 446 731 232 625 487 296 965 222 916 742
Sampel F	498 593 549 784 891 533 216 834 537 684 786 595 351 523 447
Sampel G	122 681 414 685 512 489 725 939 291 894 471 941 233 663 835
Sampel H	862 169 744 423 638 849 628 662 741 372 184 364 468 286 658

UJI RATING HEDONIK

Nama : Tanggal :

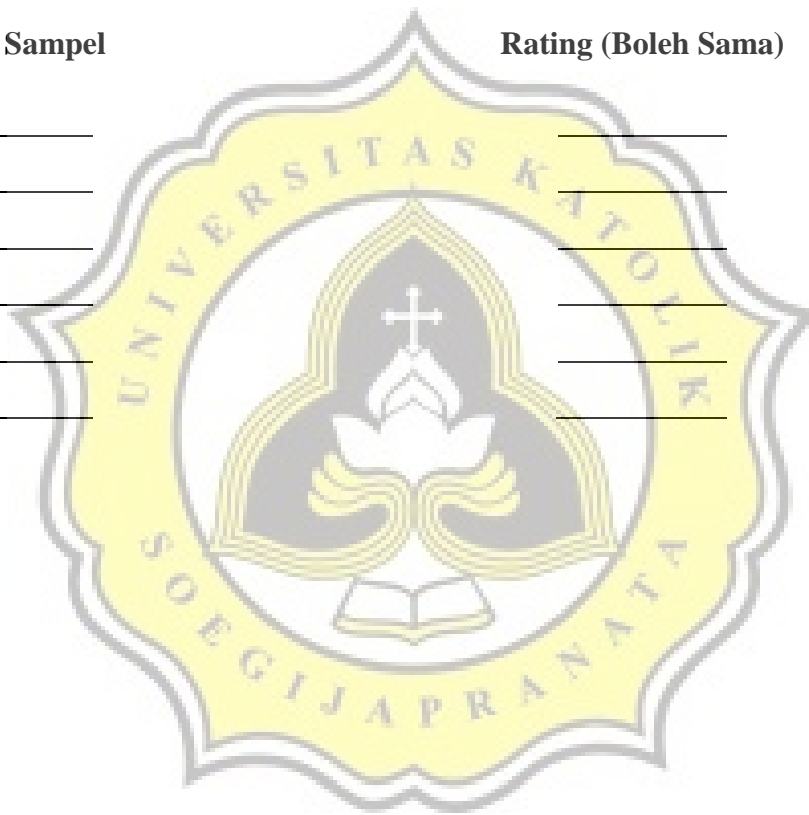
Produk : Mi jagung

Atribut : *Overall*

Instruksi

Di hadapan anda terdapat 6 sampel mi jagung. Berilah penilaian terhadap masing-masing sampel : Sangat Anda Tidak Sukai (= 1), Tidak Anda Sukai (= 2), Anda Sukai (= 3), Sangat Anda Sukai (= 4).

Kode Sampel**Rating (Boleh Sama)**



7.3. Lampiran 3. Hasil Pengolahan SPSS

7.3.1. Pengujian Fisik

- **Mie Jagung Basah**

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Cooking loss	.120	24	.200 [*]	.940	24	.162
Water activity	.126	24	.200 [*]	.909	24	.034
Warna sebelum perebusan L	.130	24	.200 [*]	.900	24	.022
Warna sebelum perebusan a*	.172	24	.064	.872	24	.006
Warna sebelum perebusan b*	.169	24	.075	.897	24	.018
Warna sesudah perebusan L	.120	24	.200 [*]	.921	24	.062
Warna sesudah perebusan a*	.123	24	.200 [*]	.941	24	.168
Warna sesudah perebusan b*	.131	24	.200 [*]	.941	24	.168
Tensile strength	.144	24	.200 [*]	.955	24	.339
Kekerasan	.148	24	.189	.897	24	.018

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Post Hoc One Way Anova

Cooking loss

Duncan

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
A	6	4.5733			
B	6		5.2000		
C	6			5.6550	
D	6				6.4517
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Water activity

Duncan

Perlakuan	N	Subset for alpha = 0.05	
		1	2
B	6	.9580	
D	6	.9680	.9680
A	6		.9708
C	6		.9750
Sig.		.081	.238

Means for groups in homogeneous subsets are displayed.

Warna sebelum dimasak L

Duncan

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
B	6	56.2767			
D	6		56.8133		
C	6			59.5000	
A	6				66.5850
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Warna sebelum dimasak a*

Duncan

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
A	6	.2067		
B	6		2.8867	
C	6		2.8967	
D	6			3.3283
Sig.		1.000	.945	1.000

Means for groups in homogeneous subsets are displayed.

Warna sebelum dimasak b*

Duncan

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
B	6	15.5750		
D	6	15.8917		
C	6		17.2550	
A	6			19.0600
Sig.		.279	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Tensile strength

Duncan

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
B	10	.034435		
C	10		.075348	
A	10			.084155
D	10			.085996
Sig.		1.000	1.000	.110

Means for groups in homogeneous subsets are displayed.

Kekerasan

Duncan

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
B	10	1.3322E2			
C	10		1.5966E2		
D	10			1.8536E2	
A	10				2.0360E2
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

- **Mi Jagung Kering**

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Cooking loss	.125	24	.200*	.952	24	.300
Warna sebelum perebusan L	.129	24	.200*	.954	24	.337
Warna sebelum perebusan a*	.168	24	.078		24	
Warna sebelum perebusan b*	.166	24	.084	.873	24	.006
Warna sesudah perebusan L	.175	24	.056	.843	24	.002
Warna sesudah perebusan a*	.121	24	.200*	.959	24	.413
Warna sesudah perebusan b*	.148	24	.185	.893	24	.015
Kekerasan	.184	24	.054	.923	24	.070
Tensile strength	.142	24	.200*	.962	24	.487
Water activity	.176	24	.052	.858	24	.003

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Post Hoc One Way Anova

Cooking loss

Duncan

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
A	6	4.4733			
B	6		7.1483		
C	6			10.0412	
D	6				12.3600
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Water activity

Duncan

Perlakuan	N	Subset for alpha = 0.05	
		1	2
C	6	.53150	
B	6	.53150	
A	6		.56100
D	6		.58667
Sig.		1.000	.050

Means for groups in homogeneous subsets are displayed.

Warna sesudah dimasak L

Duncan

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
D	6	61.4350			
C	6		62.5883		
B	6			64.7050	
A	6				75.6883
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Warna sesudah dimasak a*

Duncan

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
A	6	-1.8983			
C	6		-1.4983		
B	6			-1.1833	
D	6				-.7117
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Warna sesudah dimasak b*

Duncan

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
A	6	9.4417			
B	6		13.0933		
C	6			16.1650	
D	6				16.9667
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Kekerasan

Duncan

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
C	10	1.2376E2			
B	10		1.5473E2		
D	10			1.8345E2	
A	10				2.2652E2
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Tensile strenght

Duncan

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
B	10	.016380			
A	10		.026478		
C	10			.032478	
D	10				.044091
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

7.3.2. Pengujian Kimia

- **Mie Jagung Basah**

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kadar air	.143	24	.200 [*]	.916	24	.047
pH	.176	24	.054	.894	24	.016

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Post Hoc One Way Anova

Kadar air

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
B	6	24.5338		
D	6		26.4358	
C	6		27.4253	
A	6			30.8373
Sig.		1.000	.052	1.000

Means for groups in homogeneous subsets are displayed.

pH

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
A	6	5.4850			
B	6		8.2767		
C	6			8.4400	
D	6				9.3083
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

- **Mi Jagung Kering**

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kadar air	.103	24	.200 [*]	.934	24	.120
pH	.116	24	.200 [*]	.956	24	.362

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Post Hoc One Way Anova

pH

Duncan		Subset for alpha = 0.05			
Perla kuan	N	1	2	3	4
A	6	5.8800			
B	6		8.3133		
C	6			8.9383	
D	6				9.1967
Sig.		1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Kadar air

Duncan		Subset for alpha = 0.05
Perla kuan	N	1
B	6	9.7243
A	6	9.7342
C	6	10.0412
D	6	10.1300
Sig.		.117

Means for groups in homogeneous subsets are displayed.

7.3.3. Pengujian Sensoris

- **Mi Jagung Basah**

Kruskal Wallis

Ranks

	Pe...	N	Mean Rank
Kekenyalan	A	30	63.93
	B	30	61.38
	C	30	57.20
	D	30	59.48
	Total	120	
Warna	A	30	62.95
	B	30	59.82
	C	30	55.85
	D	30	63.38
	Total	120	
Overall	A	30	68.65
	B	30	60.25
	C	30	43.98
	D	30	69.12
	Total	120	

Test Statistics^{a, b}

	Kekenyalan	Warna	Overall
Chi-Square	.670	.975	11.274
df	3	3	3
Asymp. Sig.	.880	.807	.010

a. Kruskal Wallis Test

b. Grouping Variable: Perlakuan

Uji Beda Mann Whitney

➤ A vs B

Ranks

	Pe...	N	Mean Rank	Sum of Ranks
Warna	A	30	31.33	940.00
	B	30	29.67	890.00
	Total	60		
Kekenyalan	A	30	31.17	935.00
	B	30	29.83	895.00
	Total	60		
Overall	A	30	32.80	984.00
	B	30	28.20	846.00
	Total	60		

Test Statistics^a

	Warna	Kekenyalan	Overall
Mann-Whitney U	425.000	430.000	381.000
Wilcoxon W	890.000	895.000	846.000
Z	-.384	-.313	-1.077
Asymp. Sig. (2-tailed)	.701	.754	.282

a. Grouping Variable: Perlakuan

➤ A VS C

Ranks

	Pe...	N	Mean Rank	Sum of Ranks
Warna	A	30	32.20	966.00
	C	30	28.80	864.00
	Total	60		
Kekenyalan	A	30	32.20	966.00
	C	30	28.80	864.00
	Total	60		
Overall	A	30	36.27	1088.00
	C	30	24.73	742.00
	Total	60		

Test Statistics^a

	Warna	Kekenyalan	Overall
Mann-Whitney U	399.000	399.000	277.000
Wilcoxon W	864.000	864.000	742.000
Z	-.780	-.791	-2.649
Asymp. Sig. (2-tailed)	.435	.429	.008

a. Grouping Variable: Perlakuan

➤ A VS D

Ranks

	Pe...	N	Mean Rank	Sum of Ranks
Warna	A	30	30.42	912.50
	D	30	30.58	917.50
	Total	60		
Kekenyalan	A	30	31.57	947.00
	D	30	29.43	883.00
	Total	60		
Overall	A	30	30.58	917.50
	D	30	30.42	912.50
	Total	60		

Test Statistics^a

	Warna	Kekenyalan	Overall
Mann-Whitney U	447.500	418.000	447.500
Wilcoxon W	912.500	883.000	912.500
Z	-.038	-.499	-.039
Asymp. Sig. (2-tailed)	.969	.618	.969

a. Grouping Variable: Perlakuan

➤ B VS C

Ranks

	Pe...	N	Mean Rank	Sum of Ranks
Warna	B	30	31.57	947.00
	C	30	29.43	883.00
	Total	60		
Kekenyalan	B	30	31.60	948.00
	C	30	29.40	882.00
	Total	60		
Overall	B	30	35.03	1051.00
	C	30	25.97	779.00
	Total	60		

Test Statistics^a

	Warna	Kekenyalan	Overall
Mann-Whitney U	418.000	417.000	314.000
Wilcoxon W	883.000	882.000	779.000
Z	-.500	-.511	-2.124
Asymp. Sig. (2-tailed)	.617	.609	.034

a. Grouping Variable: Perlakuan

➤ B VS D

Ranks

	Pe...	N	Mean Rank	Sum of Ranks
Warna	B	30	29.58	887.50
	D	30	31.42	942.50
	Total	60		
Kekenyalan	B	30	30.95	928.50
	D	30	30.05	901.50
	Total	60		
Overall	B	30	28.02	840.50
	D	30	32.98	989.50
	Total	60		

Test Statistics^a

	Warna	Kekenyalan	Overall
Mann-Whitney U	422.500	436.500	375.500
Wilcoxon W	887.500	901.500	840.500
Z	-.425	-.210	-1.184
Asymp. Sig. (2-tailed)	.671	.834	.237

a. Grouping Variable: Perlakuan

➤ C VS D

Ranks

	Pe...	N	Mean Rank	Sum of Ranks
Warna	C	30	28.62	858.50
	D	30	32.38	971.50
	Total	60		
Kekenyalan	C	30	30.00	900.00
	D	30	31.00	930.00
	Total	60		
Overall	C	30	24.28	728.50
	D	30	36.72	1101.50
	Total	60		

Test Statistics^a

	Warna	Kekenyalan	Overall
Mann-Whitney U	393.500	435.000	263.500
Wilcoxon W	858.500	900.000	728.500
Z	-.869	-.231	-2.878
Asymp. Sig. (2-tailed)	.385	.817	.004

a. Grouping Variable: Perlakuan

- **Mi Jagung Kering**

Kruskal Wallis

Ranks

	Pe...	N	Mean Rank
Warna	E	30	59.67
	F	30	68.00
	G	30	51.50
	H	30	62.83
	Total	120	
Kekenyalan	E	30	69.98
	F	30	54.30
	G	30	59.42
	H	30	58.30
	Total	120	
Overall	E	30	67.73
	F	30	59.68
	G	30	46.98
	H	30	67.60
	Total	120	

Test Statistics^a

	Warna	Kekenyalan	Overall
Chi-Square	3.937	3.671	7.825
df	3	3	3
Asymp. Sig.	.268	.299	.050

a. Kruskal Wallis Test

b. Grouping Variable: Perlakuan

Uji Beda Mann Whitney

➤ E vs F

Ranks

	Pe...	N	Mean Rank	Sum of Ranks
Warna	E	30	29.23	877.00
	F	30	31.77	953.00
	Total	60		
Kekenyalan	E	30	34.45	1033.50
	F	30	26.55	796.50
	Total	60		
Overall	E	30	32.45	973.50
	F	30	28.55	856.50
	Total	60		

Test Statistics^a

	Warna	Kekenyalan	Overall
Mann-Whitney U	412.000	331.500	391.500
Wilcoxon W	877.000	796.500	856.500
Z	-.591	-1.855	-.907
Asymp. Sig. (2-tailed)	.555	.064	.364

a. Grouping Variable: Perlakuan

➤ E VS G

Ranks

	Pe...	N	Mean Rank	Sum of Ranks
Warna	E	30	31.80	954.00
	G	30	29.20	876.00
	Total	60		
Kekenyalan	E	30	33.08	992.50
	G	30	27.92	837.50
	Total	60		
Overall	E	30	35.82	1074.50
	G	30	25.18	755.50
	Total	60		

Test Statistics^a

	Warna	Kekenyalan	Overall
Mann-Whitney U	411.000	372.500	290.500
Wilcoxon W	876.000	837.500	755.500
Z	-.597	-1.205	-2.499
Asymp. Sig. (2-tailed)	.551	.228	.012

a. Grouping Variable: Perlakuan

➤ E VS H

Ranks

	Pe...	N	Mean Rank	Sum of Ranks
Warna	E	30	29.63	889.00
	H	30	31.37	941.00
	Total	60		
Kekenyalan	E	30	33.45	1003.50
	H	30	27.55	826.50
	Total	60		
Overall	E	30	30.47	914.00
	H	30	30.53	916.00
	Total	60		

Test Statistics^a

	Warna	Kekenyalan	Overall
Mann-Whitney U	424.000	361.500	449.000
Wilcoxon W	889.000	826.500	914.000
Z	-.399	-1.380	-.016
Asymp. Sig. (2-tailed)	.690	.167	.988

a. Grouping Variable: Perlakuan

➤ F V S G

Ranks

	Pe...	N	Mean Rank	Sum of Ranks
Warna	F	30	35.10	1053.00
	G	30	25.90	777.00
	Total	60		
Kekenyalan	F	30	29.25	877.50
	G	30	31.75	952.50
	Total	60		
Overall	F	30	33.57	1007.00
	G	30	27.43	823.00
	Total	60		

Test Statistics^a

	Warna	Kekenyalan	Overall
Mann-Whitney U	312.000	412.500	358.000
Wilcoxon W	777.000	877.500	823.000
Z	-2.210	-.581	-1.438
Asymp. Sig. (2-tailed)	.027	.561	.150

a. Grouping Variable: Perlakuan

➤ F V S H

Ranks

	Pe...	N	Mean Rank	Sum of Ranks
Warna	F	30	32.13	964.00
	H	30	28.87	866.00
	Total	60		
Kekenyalan	F	30	29.50	885.00
	H	30	31.50	945.00
	Total	60		
Overall	F	30	28.57	857.00
	H	30	32.43	973.00
	Total	60		

Test Statistics^a

	Warna	Kekenyalan	Overall
Mann-Whitney U	401.000	420.000	392.000
Wilcoxon W	866.000	885.000	857.000
Z	-.791	-.466	-.897
Asymp. Sig. (2-tailed)	.429	.641	.370

a. Grouping Variable: Perlakuan

➤ G VS H

Ranks

	Pe...	N	Mean Rank	Sum of Ranks
Warna	G	30	27.40	822.00
	H	30	33.60	1008.00
	Total	60		
Kekenyalan	G	30	30.75	922.50
	H	30	30.25	907.50
	Total	60		
Overall	G	30	25.37	761.00
	H	30	35.63	1069.00
	Total	60		

Test Statistics^a

	Warna	Kekenyalan	Overall
Mann-Whitney U	357.000	442.500	296.000
Wilcoxon W	822.000	907.500	761.000
Z	-1.476	-.117	-2.400
Asymp. Sig. (2-tailed)	.140	.907	.016

a. Grouping Variable: Perlakuan