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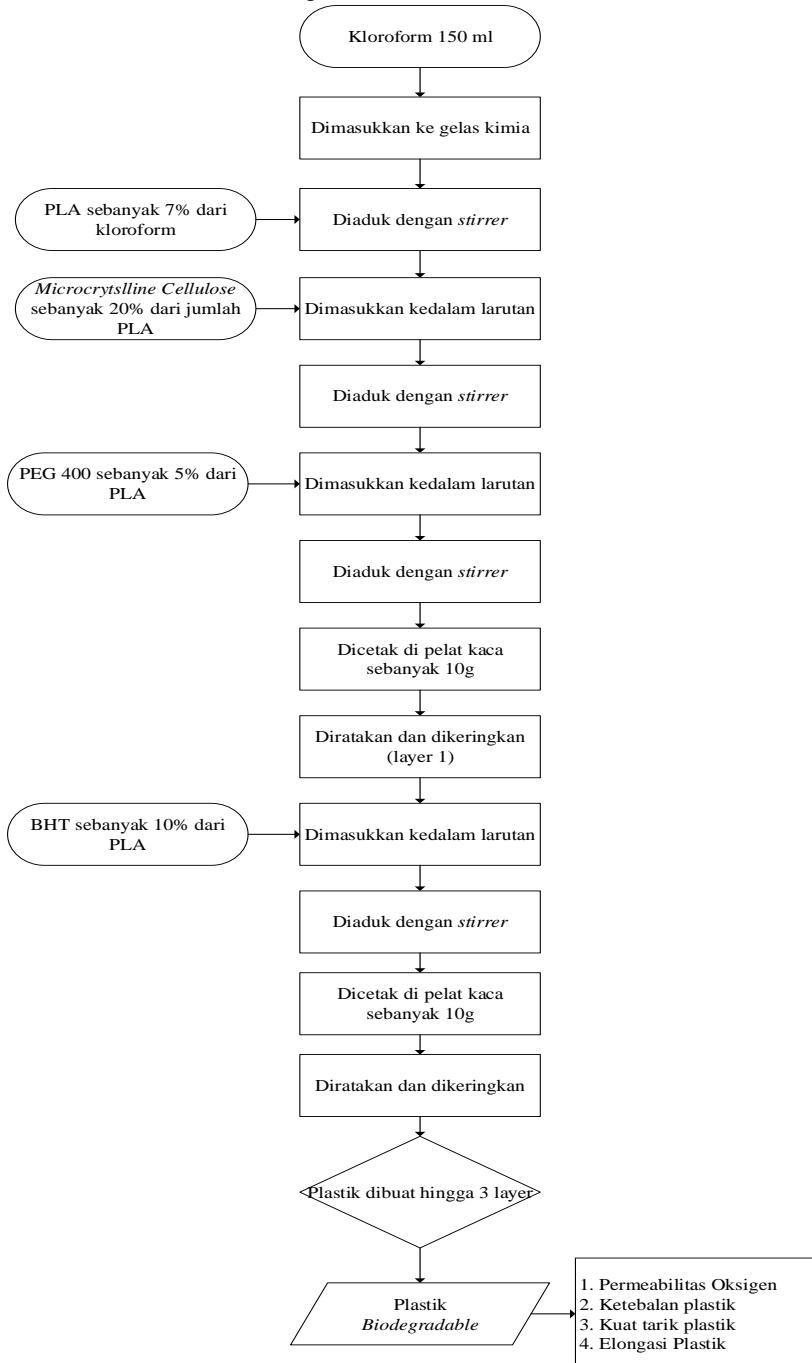
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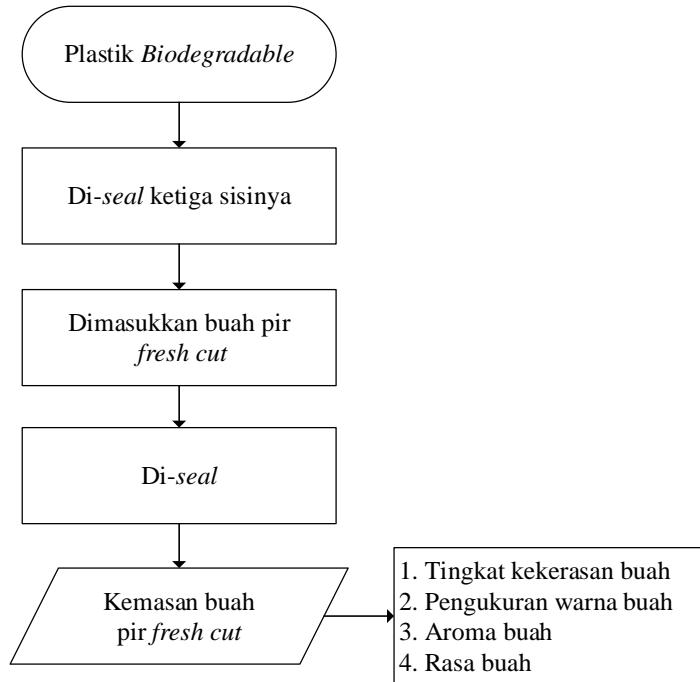
LAMPIRAN

Lampiran 1. Diagram Alir Prosedur Penelitian

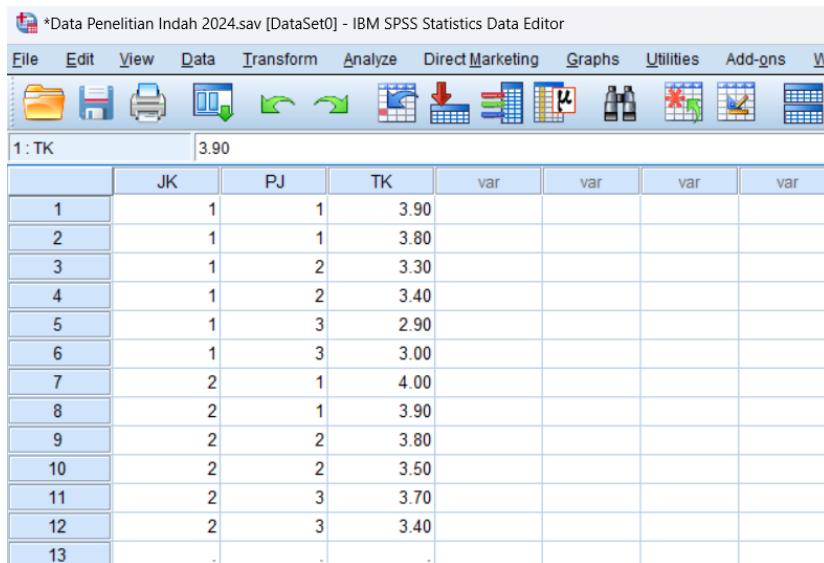
1. Pembuatan Plastik Biodegradable



2. Pengaplikasian Kemasan Plastik *Biodegradable*



Lampiran 2. Hasil Analisis *Univariate Analysis of Variance* Tingkat Kekerasan Buah Pir *Fresh cut*



*Data Penelitian Indah 2024.sav [DataSet0] - IBM SPSS Statistics Data Editor

1 : TK								3.90							
	JK	PJ	TK	var	var	var	var								
1	1	1	3.90												
2	1	1	3.80												
3	1	2	3.30												
4	1	2	3.40												
5	1	3	2.90												
6	1	3	3.00												
7	2	1	4.00												
8	2	1	3.90												
9	2	2	3.80												
10	2	2	3.50												
11	2	3	3.70												
12	2	3	3.40												
13	.	.	.												

→ Univariate Analysis of Variance

Tests of Between-Subjects Effects

Dependent Variable: Tingkat Kekerasan Buah

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	152.550 ^a	6	25.425	1386.818	.000
JK	.333	1	.333	18.182	.005
PJ	.860	2	.430	23.455	.001
JK * PJ	.127	2	.063	3.455	.100
Error	.110	6	.018		
Total	152.660	12			

a. R Squared = .999 (Adjusted R Squared = .999)

Homogeneous Subsets

Tingkat Kekerasan Buah

Duncan^{a,b}

Perlakuan Jam	N	Subset		
		1	2	3
14 jam	4	3.2500		
7 jam	4		3.5000	
0 jam	4			3.9000
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .018.

a. Uses Harmonic Mean Sample Size = 4.000.

b. Alpha = .05.

Lampiran 3. Hasil Analisis *Univariate Analysis of Variance* Nilai Kecerahan (L*)
Buah Pir Fresh cut

Univariate Analysis of Variance

Tests of Between-Subjects Effects

Dependent Variable: Nilai Kecerahan

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	48841.155 ^a	6	8140.193	16528.310	.000
JK	238.521	1	238.521	484.306	.000
PJ	232.827	2	116.413	236.372	.000
JK * PJ	122.407	2	61.203	124.271	.000
Error	2.955	6	.493		
Total	48844.110	12			

a. R Squared = 1.000 (Adjusted R Squared = 1.000)

Homogeneous Subsets

Nilai Kecerahan			
		Subset	
Perlakuan Jam	N	1	2
		58.8750	61.9750
14 jam	4		69.3750
7 jam	4		
0 jam	4		
Sig.		1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .493.

a. Uses Harmonic Mean Sample Size = 4.000.

b. Alpha = .05.

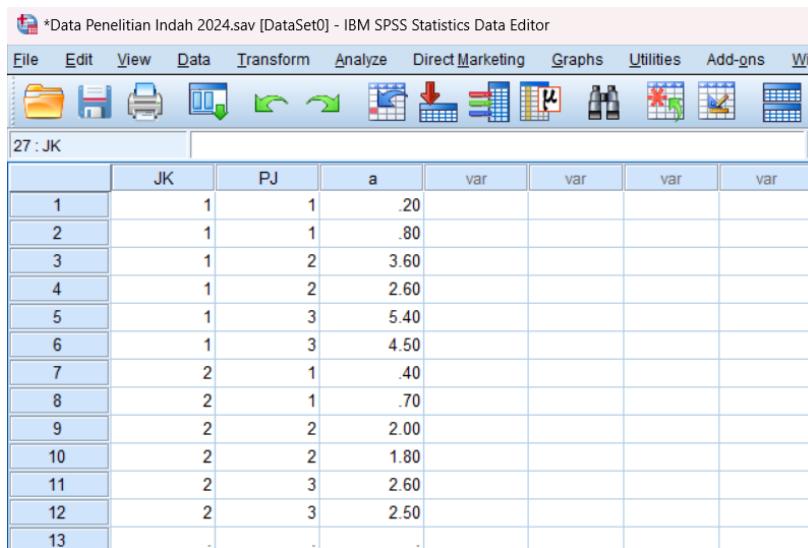
Homogeneous Subsets

Nilai Kecerahan		Subset for alpha = 0.05			
JanisKemasan_PerlakuanJam	N	1	2	3	4
tk 14jam	2	51.7000			
tk 7jam	2		55.7500		
pb 14 jam	2			66.0500	
pb 7 jam	2				68.2000
pb 0 jam	2				69.3500
tanpa kemasan 0 jam	2				69.4000
Sig.		1.000	1.000	1.000	.150

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

Lampiran 4. Hasil Analisis *Univariate Analysis of Variance* Nilai Kemerahan (a*) Buah Pir *Fresh cut*



The screenshot shows the IBM SPSS Statistics Data Editor interface. The title bar reads: *Data Penelitian Indah 2024.sav [DataSet0] - IBM SPSS Statistics Data Editor. The menu bar includes File, Edit, View, Data, Transform, Analyze, Direct Marketing, Graphs, Utilities, Add-ons, and Window. Below the menu is a toolbar with various icons. The main area displays a data table titled '27: JK'. The columns are labeled JK, PJ, a, and var. The data rows show values for each column across 13 observations.

	JK	PJ	a	var	var	var	var
1	1	1	.20				
2	1	1	.80				
3	1	2	3.60				
4	1	2	2.60				
5	1	3	5.40				
6	1	3	4.50				
7	2	1	.40				
8	2	1	.70				
9	2	2	2.00				
10	2	2	1.80				
11	2	3	2.60				
12	2	3	2.50				
13							

➔ **Univariate Analysis of Variance**

Tests of Between-Subjects Effects

Dependent Variable: Nilai Kemerahan

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	89.555 ^a	6	14.926	77.537	.000
JK	4.201	1	4.201	21.823	.003
PJ	21.152	2	10.576	54.939	.000
JK * PJ	3.002	2	1.501	7.797	.021
Error	1.155	6	.193		
Total	90.710	12			

a. R Squared = .987 (Adjusted R Squared = .975)

Homogeneous Subsets

Homogeneous Subsets

Nilai Kemerahan

Perlakuan Jam	N	Subset		
		1	2	3
0 jam	4	.5250		
7 jam	4		2.5000	
14 jam	4			3.7500
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .193.

a. Uses Harmonic Mean Sample Size = 4.000.

b. Alpha = .05.

Nilai Kemerahan

JenisKemasan_Perlakua nJam	N	Subset for alpha = 0.05			
		1	2	3	4
tanpa kemasan 0 jam	2	.5000			
pb 0 jam	2	.5500			
pb 7 jam	2		1.9000		
pb 14 jam	2			2.5500	
tk 7jam	2				3.1000
tk 14jam	2				4.9500
Sig.		.913	.189	.257	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

Lampiran 5. Hasil Analisis *Univariate Analysis of Variance* Nilai Kekuningan (b*)
 Buah Pir Fresh cut

*Data Penelitian Indah 2024.sav [DataSet0] - IBM SPSS Statistics Data Editor

	JK	PJ	b	var	var	var	var
1	1	1	11.20				
2	1	1	10.70				
3	1	2	18.30				
4	1	2	18.60				
5	1	3	19.90				
6	1	3	19.70				
7	2	1	10.90				
8	2	1	10.70				
9	2	2	15.80				
10	2	2	16.00				
11	2	3	16.10				
12	2	3	16.30				
13	-	-	-				

Tests of Between-Subjects Effects

Dependent Variable: Nilai Kekuningan

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	2968.470 ^a	6	494.745	11873.880	.000
JK	13.230	1	13.230	317.520	.000
PJ	121.515	2	60.757	1458.180	.000
JK * PJ	6.255	2	3.127	75.060	.000
Error	.250	6	.042		
Total	2968.720	12			

a. R Squared = 1.000 (Adjusted R Squared = 1.000)

Homogeneous Subsets

Homogeneous Subsets

Nilai Kekuningan

Duncan^{a,b}

Perlakuan Jam	N	Subset		
		1	2	3
0 jam	4	10.8750		
7 jam	4		17.1750	
14 jam	4			18.0000
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .042.

a. Uses Harmonic Mean Sample Size = 4.000.

b. Alpha = .05.

Nilai Kekuningan

Duncan^a

JenisKemasan_Perlakua nJam	N	Subset for alpha = 0.05			
		1	2	3	4
pb 0 jam	2	10.8000			
tanpa kemasan 0 jam	2	10.9500			
pb 7 jam	2		15.9000		
pb 14 jam	2			16.2000	
tk 7jam	2				18.4500
tk 14jam	2				19.8000
Sig.		.490	.192	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

Lampiran 6. Hasil Analisis *Univariate Analysis of Variance* Uji Organoleptik Parameter Warna Pada Buah Pir Fresh cut

	JK	PJ	warna	var	var	var	var
1	1	1	4.67				
2	1	1	4.53				
3	1	2	2.80				
4	1	2	2.20				
5	1	3	2.27				
6	1	3	2.30				
7	2	1	4.53				
8	2	1	4.07				
9	2	2	3.50				
10	2	2	3.40				
11	2	3	3.33				
12	2	3	2.98				
13	.	.	.				

➔ **Univariate Analysis of Variance**

Tests of Between-Subjects Effects

Dependent Variable: Tingkat kesukaan warna

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	145.956 ^a	6	24.326	402.858	.000
JK	.770	1	.770	12.754	.012
PJ	6.978	2	3.489	57.781	.000
JK * PJ	.979	2	.490	8.109	.020
Error	.362	6	.060		
Total	146.318	12			

a. R Squared = .998 (Adjusted R Squared = .995)

Post Hoc Tests

Perlakuan Jam

Homogeneous Subsets

Tingkat kesukaan warna

Duncan^{a,b}

Perlakuan Jam	N	Subset	
		1	2
14 jam	4	2.7200	
7 jam	4	2.9750	
0 jam	4		4.4500
Sig.		.193	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .060.

a. Uses Harmonic Mean Sample Size = 4.000.

b. Alpha = .05.

➔ **Oneway**

[DataSet1]

Descriptives

Tingkat kesukaan warna

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
tanpa kemasan 0 jam	2	4.6000	.09899	.07000	3.7106	5.4894	4.53	4.67
tk 7jam	2	2.5000	.42426	.30000	-1.3119	6.3119	2.20	2.80
tk 14jam	2	2.2850	.02121	.01500	2.0944	2.4756	2.27	2.30
pb 0 jam	2	4.3000	.32527	.23000	1.3776	7.2224	4.07	4.53
pb 7 jam	2	3.4500	.07071	.05000	2.8147	4.0853	3.40	3.50
pb 14 jam	2	3.1550	.24749	.17500	.9314	5.3786	2.98	3.33
Total	12	3.3817	.90903	.26242	2.8041	3.9592	2.20	4.67

ANOVA

Tingkat kesukaan warna

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.727	5	1.745	28.907	.000
Within Groups	.362	6	.060		
Total	9.090	11			

Homogeneous Subsets

Tingkat kesukaan warna

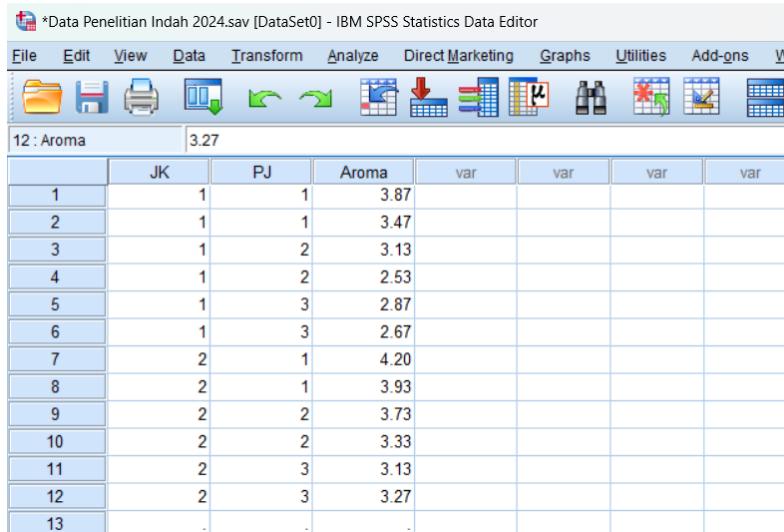
Duncan^a

JenisKemasan_PerlakuanJam	N	Subset for alpha = 0.05		
		1	2	3
tk 14jam	2	2.2850		
tk 7jam	2	2.5000		
pb 14 jam	2		3.1550	
pb 7 jam	2		3.4500	
pb 0 jam	2			4.3000
tanpa kemasan 0 jam	2			4.6000
Sig.		.415	.275	.268

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

Lampiran 7. Hasil Analisis *Univariate Analysis of Variance* Uji Organoleptik Parameter Aroma Pada Buah Pir *Fresh cut*



The screenshot shows the SPSS Data Editor window. The title bar reads "Data Penelitian Indah 2024.sav [DataSet0] - IBM SPSS Statistics Data Editor". The menu bar includes File, Edit, View, Data, Transform, Analyze, Direct Marketing, Graphs, Utilities, Add-ons, and Help. Below the menu is a toolbar with various icons. The main area displays a table with 13 rows and 9 columns. The first column is labeled "12 : Aroma" and contains values from 3.27 down to .13. The second column is labeled "JK" and the third is "PJ". The fourth column is labeled "Aroma" and contains values ranging from 2.53 to 4.20. The remaining five columns are labeled "var" and contain empty cells.

12 : Aroma	JK	PJ	Aroma	var	var	var	var	var
3.27	1	1	3.87					
.13	2	1	3.47					
.13	3	1	3.13					
.13	4	1	2.53					
.13	5	1	2.87					
.13	6	1	2.67					
.13	7	2	4.20					
.13	8	2	3.93					
.13	9	2	3.73					
.13	10	2	3.33					
.13	11	2	3.13					
.13	12	2	3.27					
.13	13	.	.					

➔ **Univariate Analysis of Variance**

Tests of Between-Subjects Effects

Dependent Variable: Tingkat kesukaan aroma

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	136.752 ^a	6	22.792	336.619	.000
JK	.775	1	.775	11.449	.015
PJ	1.719	2	.860	12.696	.007
JK * PJ	.056	2	.028	.411	.680
Error	.406	6	.068		
Total	137.158	12			

a. R Squared = .997 (Adjusted R Squared = .994)

Homogeneous Subsets

Tingkat kesukaan aroma

Duncan^{a,b}

Perlakuan Jam	N	Subset	
		1	2
14 jam	4	2.9850	
7 jam	4	3.1800	
0 jam	4		3.8675
Sig.		.330	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .068.

a. Uses Harmonic Mean Sample Size = 4.000.

b. Alpha = .05.

Lampiran 8. Hasil Analisis *Univariate Analysis of Variance* Uji Organoleptik Parameter Tekstur Pada Buah Pir *Fresh cut*

12 : tekstur		3.73					
		JK	PJ	tekstur	var	var	var
1		1	1	4.40			
2		1	1	4.50			
3		1	2	3.50			
4		1	2	3.27			
5		1	3	3.10			
6		1	3	2.78			
7		2	1	4.60			
8		2	1	4.47			
9		2	2	3.90			
10		2	2	3.90			
11		2	3	3.60			
12		2	3	3.73			
13		.	.	.			

➔ Univariate Analysis of Variance

Tests of Between-Subjects Effects

Dependent Variable: Tingkat kesukaan tekstur

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	178.226 ^a	6	29.704	1790.312	.000
JK	.585	1	.585	35.271	.001
PJ	3.006	2	1.503	90.576	.000
JK * PJ	.213	2	.106	6.415	.032
Error	.100	6	.017		
Total	178.325	12			

a. R Squared = .999 (Adjusted R Squared = .999)

Homogeneous Subsets

Tingkat kesukaan tekstur

Duncan^{a,b}

Perlakuan Jam	N	Subset		
		1	2	3
14 jam	4	3.3025		
7 jam	4		3.6425	
0 jam	4			4.4925
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .017.

a. Uses Harmonic Mean Sample Size = 4.000.

b. Alpha = .05.

➔ Oneway

[DataSet1]

Descriptives

Tingkat kesukaan tekstur

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
tanpa kemasan 0 jam	2	4.4500	.07071	.05000	3.8147	5.0853	4.40	4.50
tk 7jam	2	3.3850	.16263	.11500	1.9238	4.8462	3.27	3.50
tk 14jam	2	2.9400	.22627	.16000	.9070	4.9730	2.78	3.10
pb 0 jam	2	4.5350	.09192	.06500	3.7091	5.3609	4.47	4.60
pb 7 jam	2	3.9000	.00000	.00000	3.9000	3.9000	3.90	3.90
pb 14 jam	2	3.6650	.09192	.06500	2.8391	4.4909	3.60	3.73
Total	12	3.8125	.59568	.17196	3.4340	4.1910	2.78	4.60

ANOVA

Tingkat kesukaan tekstur

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.804	5	.761	45.850	.000
Within Groups	.100	6	.017		
Total	3.903	11			

Homogeneous Subsets

Tingkat kesukaan tekstur

Duncan^a

JenisKemasan_PerlakuanJam	N	Subset for alpha = 0.05			
		1	2	3	4
tk 14jam	2	2.9400			
tk 7jam	2		3.3850		
pb 14 jam	2		3.6650	3.6650	
pb 7 jam	2			3.9000	
tanpa kemasan 0 jam	2				4.4500
pb 0 jam	2				4.5350
Sig.		1.000	.073	.118	.534

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

Lampiran 9. Hasil Analisis *Univariate Analysis of Variance* Uji Organoleptik Parameter Rasa Pada Buah Pir *Fresh cut*

*Data Penelitian Indah 2024.sav [DataSet0] - IBM SPSS Statistics Data Editor

	JK	PJ	rasa	var	var	var	var
1		1	3.80				
2		1	3.87				
3		1	3.80				
4		1	3.47				
5		1	3.00				
6		1	3.27				
7		2	4.47				
8		2	4.47				
9		2	3.80				
10		2	3.67				
11		2	3.40				
12		2	3.33				
13		.	.				

→ Univariate Analysis of Variance

Tests of Between-Subjects Effects

Dependent Variable: Tingkat kesukaan rasa

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	166.006 ^a	6	27.668	1592.384	.000
JK	.310	1	.310	17.865	.006
PJ	1.630	2	.815	46.898	.000
JK * PJ	.156	2	.078	4.481	.064
Error	.104	6	.017		
Total	166.110	12			

a. R Squared = .999 (Adjusted R Squared = .999)

Homogeneous Subsets

Tingkat kesukaan rasa

Duncan^{a,b}

Perlakuan Jam	N	Subset		
		1	2	3
14 jam	4	3.2500		
7 jam	4		3.6850	
0 jam	4			4.1525
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

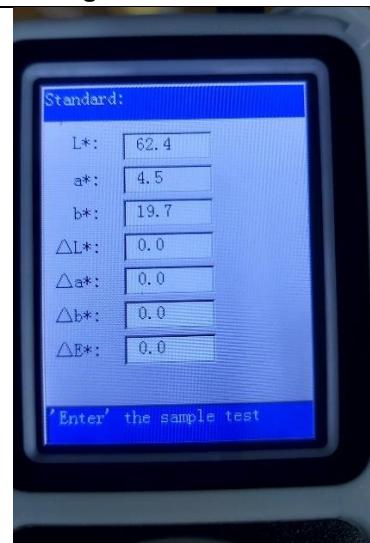
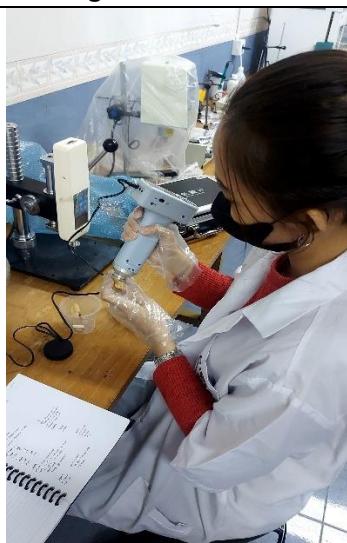
The error term is Mean Square(Error) = .017.

a. Uses Harmonic Mean Sample Size = 4.000.

b. Alpha = .05.

Lampiran 10. Dokumentasi Penelitian

Pembuatan Plastik Biodegradable					
					
					
Pengujian Permeabilitas Oksigen Plastik Biodegradable					
					
					

Pengujian Ketebalan, Kuat tarik, Elongasi Plastik Biodegradable**Pengujian Tingkat Kekerasan Buah****Pengukuran Warna Buah Pir Fresh Cut dengan Colorimeter**



CURRICULUM VITAE**A. Data Pribadi**

- | | |
|-----------------------|--------------------------------------|
| 1. Nama | : Dwiyuliani Indah Lestari |
| 2. Tempat, tgl. Lahir | : Makassar, 6 Juli 2002 |
| 3. Alamat | : Jl. Ruhui Rahayu No.10, Balikpapan |
| 4. Kewarganegaraan | : Warga Negara Indonesia |

B. Riwayat Pendidikan

1. Tamat SD tahun 2014 di SDN 001 Balikpapan
2. Tamat SMP tahun 2017 di SMPN 2 Balikpapan
3. Tamat SMA tahun 2020 di SMAN 5 Balikpapan

C. Pekerjaan dan Riwayat Pekerjaan

- Jenis Pekerjaan : Mahasiswa
- NIP atau Identitas lain (NIK) : 7371114607020008
- Pangkat/jabatan : -