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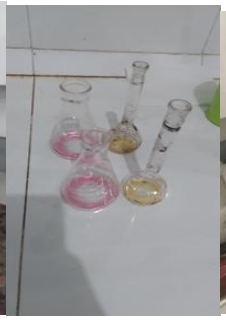
LAMPIRAN

Lampiran 1 Dokumentasi Penelitian






Lampiran 2 Langkah Prosedur Peneltian

1. Uji kadar abu dengan metode pengabuan kering AOAC (Association of Official Analytical Chemists)

- Persiapan cawan
  Cawan porselen dibersihkan, kemudian dikeringkan dalam oven pada suhu ±105 °C selama 1 jam. Setelah itu, cawan didinginkan dalam desikator dan ditimbang hingga diperoleh bobot tetap (W_0).
- Penimbangan sampel
  Sampel ditimbang sebanyak ±2–5 gram ke dalam cawan porselen yang telah diketahui bobotnya (W_1).
- Pengeringan awal
  Sampel dikeringkan dalam oven pada suhu 105 °C selama ±2 jam untuk menghilangkan kadar air, kemudian didinginkan dalam desikator.
- Proses pengabuan
  Cawan berisi sampel dimasukkan ke dalam tanur (furnace) dan dipanaskan pada suhu 550–600 °C selama ±4–6 jam hingga diperoleh abu berwarna putih keabu-abuan, menandakan bahan organik telah habis terbakar.
- Pendinginan dan penimbangan
  Cawan dikeluarkan dari tanur, didinginkan dalam desikator, kemudian ditimbang hingga bobot konstan (W_2).

Perhitungan Kadar Abu

$$\text{Kadar Abu (\%)} = \frac{(W_2 - W_0)}{(W_1 - W_0)} \times 100\%$$

2. Uji kadar air dengan metode oven berdasarkan AOAC (*Association of Official Analytical Chemists*).

- Cawan kosong dikeringkan dalam oven pada suhu 105 °C selama ±30 menit, kemudian didinginkan dalam desikator dan ditimbang (berat cawan = W_0).
- Sampel ditimbang sebanyak ±2–5 gram ke dalam cawan, kemudian ditimbang kembali (berat cawan + sampel basah = W_1).
- Cawan berisi sampel dimasukkan ke dalam oven dan dikeringkan pada suhu 105 °C selama 3–5 jam hingga berat konstan.
- Setelah pengeringan, cawan didinginkan dalam desikator selama ±15 menit, lalu ditimbang (berat cawan + sampel kering = W_2).
- Pengeringan dan penimbangan diulang hingga selisih berat kurang dari 0,01 gram.
- Kadar air dihitung menggunakan rumus berikut:

$$\text{Kadar Air } (\%) = \frac{W_1 - W_2}{W_1 - W_0} \times 100\%$$

3. Uji kadar lemak metode Soxhlet berdasarkan AOAC (*Association of Official Analytical Chemists*). (AOAC. 2005)

- Sampel brownies dihancurkan dan dikeringkan terlebih dahulu dalam oven pada suhu 105 °C selama ±1 jam untuk mengurangi kadar air.
- Labu lemak dikeringkan dalam oven, didinginkan dalam desikator, lalu ditimbang sebagai berat awal labu (W_0).
- Sampel kering ditimbang sebanyak ±2–5 gram, kemudian dimasukkan ke dalam selongsong kertas saring.
- Selongsong yang berisi sampel ditempatkan pada alat Soxhlet dan dihubungkan dengan labu lemak yang telah diketahui beratnya.
- Pelarut n-heksana/petroleum eter ditambahkan ke dalam labu lemak secukupnya.

- Proses ekstraksi dilakukan dengan pemanasan hingga pelarut menguap dan tersirkulasi selama 6–8 jam sampai pelarut jernih.
- Setelah ekstraksi selesai, pelarut diuapkan menggunakan *water bath* hingga tersisa lemak dalam labu.
- Labu lemak yang berisi residu lemak dikeringkan dalam oven pada suhu 105 °C selama ±30 menit, kemudian didinginkan dalam desikator dan ditimbang sebagai berat akhir (W_1).
- Penimbangan dilakukan hingga diperoleh berat konstan.

Perhitungan Kadar Lemak

$$\text{Kadar Lemak (\%)} = \frac{W_1 - W_0}{\text{Berat sampel}} \times 100\%$$

4. Uji kadar protein metode Kjeldahl berdasarkan AOAC (*Association of Official Analytical Chemists*). (AOAC. 2005.)

- Sampel brownies dihaluskan, kemudian ditimbang sebanyak ±0,5–1 gram dan dimasukkan ke dalam labu Kjeldahl.
- Ditambahkan ±10 mL H_2SO_4 pekat dan ±1 gram katalis Kjeldahl.
- Sampel didestruksi dengan pemanasan hingga larutan menjadi jernih kehijauan, kemudian didinginkan.
- Larutan hasil destruksi ditambahkan aquades secukupnya, lalu dipindahkan ke alat destilasi.
- Ditambahkan larutan NaOH 40% hingga suasana basa.
- Proses destilasi dilakukan, dan hasil destilat ditampung dalam erlenmeyer yang berisi larutan asam borat dan indikator.
- Destilat yang terbentuk kemudian dititrasi menggunakan HCl 0,1 N hingga terjadi perubahan warna.
- Volume titran dicatat untuk perhitungan kadar nitrogen.

Perhitungan Kadar Protein

1. **Kadar Nitrogen (%):**

$$\%N = \frac{(V_s - V_b) \times N \times 14{,}007}{\text{Berat sampel (mg)}} \times 100$$

2. **Kadar Protein (%):**

$$\text{Protein (\%)} = \%N \times 6{,}25$$

Keterangan

- $\mathbf{V_s}$ = volume titrasi sampel (mL)
- $\mathbf{V_\beta}$ = volume titrasi blanko (mL)
- **N** = normalitas larutan asam
- **6,25** = faktor konversi protein pangan

5. Uji kadar kalsium metode pengabuan kering yang dilanjutkan dengan analisis menggunakan *Atomic Absorption Spectrophotometry* (AAS) (AOAC. 2005)

- Timbang sampel yang sudah dihaluskan sebanyak 5 gram ke dalam krus porcelain,
- Masukkan krus porcelain ke dalam muufle furnice atau tanur kemudian panaskan sampai menjadi abu.
- Setelah menjdai abu kemudian dinginkan, masukkan abu ke dalam lumpang porcelain kemudian.tambahkan 50 ml HNO, 1:3 kemudian gerus hingga larut.
- Saring menggunakan kertas saring kemudian tampung filtrate.
- Bacamenggunakan AAS (Atomic Absorbtion Spektrofotometry)

6. Uji kadar karbohidrat brownies dengan metode by difference yang jelas menyebutkan metode dan sumbernya (AOAC).

- Sampel brownies dianalisis terlebih dahulu untuk menentukan kadar air, kadar protein, kadar lemak, dan kadar abu menggunakan metode standar AOAC.
- Hasil analisis masing-masing komponen dinyatakan dalam satuan persen (%).
- Kadar karbohidrat dihitung dengan metode by difference menggunakan rumus perhitungan.
- Nilai kadar karbohidrat dinyatakan dalam persen (% b/b).

Perhitungan Kadar Karbohidrat

$$\text{Karbohidrat (\%)} = 100\% - (\text{Air} + \text{Protein} + \text{Lemak} + \text{Abu})$$

Keterangan:

- Air = kadar air (%)
- Protein = kadar protein (%)
- Lemak = kadar lemak (%)
- Abu = kadar abu (%)

7. Analisa Uji Organoleptik (Kartika et al., 1998)

Nama : Hari/tanggal :

NIM : Tanda tangan :

Dihadapan saudara disajikan 9 sampel brownies dengan variasi perbandingan tepung terigu dan tepung biji nangka serta persentase penambahan tepung cangkang telur. Saudara diminta untuk memberi penilaian kesukaan aroma dengan cara mencium, kesukaan warna dengan melihat, kesukaan rasa dengan cara mencicipi dan kesukaan sampel. Lalu memberi penialian 1 -7.

Kode Sampel	Aroma	Warna	Rasa	Tekstur
428				
173				
629				
374				
943				
232				
258				
614				
333				

Komentar

……

Keterangan : 1= Sangat tidak suka 4= Netral

2= Tidak suka 5= Agak suka

3= Agak tidak suka 6= Suka 7= Sangat suka

Lampiran 3 Diagram Alir

pembuatan brownies panggang

Persiapa bahan pembuatan brownies pnggang

Masukan semua adonan ke loyang

Mixer adonan hinggah tercampur rata

Masukkan adonan ke loyang 20x10cm

Lalu Masukan ke oven dengan suhu 160–170°C dengan waktu 20-25 menit

Brownies di angkat dan dinginkan

Analisis: kadar air,kadar abu, kalsium, karbohidrad, lemak, protein.(rasa,tekstur, aroma, warna)

Lampiran 3 Perhitugan SPSS 26

a. kadar air

Tests of Between-Subjects Effects					
Dependent Variable: Kadar_Air					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	11.436[a]	8	1.430	.856	.581
Intercept	301.679	1	301.679	180.668	.000
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	.269	2	.135	.081	.923
Penambahan_Tepung_Cangkang_Telur	.028	2	.014	.008	.992
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka * Penambahan_Tepung_Cangkang_Telur	11.139	4	2.785	1.668	.240
Error	15.028	9	1.670		
Total	328.143	18			
Corrected Total	26.465	17			
a. R Squared = ,432 (Adjusted R Squared = -,073)					

A		N	Subset

	Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka		1
Duncan[a,b]	3.00	6	3.9867
	1.00	6	4.0300
	2.00	6	4.2650
	Sig.		.729

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 1.670.

a. Uses Harmonic Mean Sample Size = 6.000.

b. Alpha = 0,05.

B	Penambahan_Tepung_Cangkang_Telur	N	Subset 1
Duncan[a,b]	1.00	6	4.0383
	2.00	6	4.1183
	3.00	6	4.1250
	Sig.		.914

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 1.670.

a. Uses Harmonic Mean Sample Size = 6.000.

b. Alpha = 0,05.

b. kadar abu

Tests of Between-Subjects Effects					
Dependent Variable: Kadar_Abu					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	123.010[a]	8	15.376	1.650	.235
Intercept	12360.636	1	12360.636	1326.400	.000
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	24.907	2	12.454	1.336	.310
Penambahan_Tepung_Cangkang_Telur	71.213	2	35.606	3.821	.063
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka * Penambahan_Tepung_Cangkang_Telur	26.890	4	6.722	.721	.599
Error	83.870	9	9.319		
Total	12567.517	18			
Corrected Total	206.880	17			
a. R Squared = .595 (Adjusted R Squared = .234)					

A	Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	N	Subset
			1
Duncan[a,b]	2.00	6	24.5650
	1.00	6	26.7833
	3.00	6	27.2667
	Sig.		.176

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 9.319.

a. Uses Harmonic Mean Sample Size = 6.000.

b. Alpha = 0,05.

B	Penambahan_Tepung_Cangkang_Telur	N	Subset	
			1	2
Duncan[a,b]	2.00	6	24.1250	
	3.00	6	25.6050	25.6050
	1.00	6		28.8850
	Sig.		.423	.096

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 9.319.

a. Uses Harmonic Mean Sample Size = 6.000.

b. Alpha = 0,05.

c. kadar lemak

Tests of Between-Subjects Effects					
Dependent Variable: Kadar_Lemak					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	45.380[a]	8	5.673	.486	.838
Intercept	19292.372	1	19292.372	1654.162	.000
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	31.345	2	15.673	1.344	.309
Penambahan_Tepung_Cangkang_Telur	5.052	2	2.526	.217	.809
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka * Penambahan_Tepung_Cangkang_Telur	8.983	4	2.246	.193	.936
Error	104.966	9	11.663		
Total	19442.719	18			

Corrected Total	150.346	17			

a. R Squared = .302 (Adjusted R Squared = -.319)

A	Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	N	Subset 1
Duncan[a,b]	3.00	6	30.9217
	1.00	6	33.2767
	2.00	6	34.0167
	Sig.		.167

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 11.663.

a. Uses Harmonic Mean Sample Size = 6.000.

b. Alpha = 0,05.

d. protein

Tests of Between-Subjects Effects					
Dependent Variable: Protein					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.568[a]	8	.071	1.098	.442
Intercept	529.860	1	529.860	8190.893	.000

Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	.234	2	.117	1.809	.219
Penambahan_Tepung_Cangkang_Telur	.070	2	.035	.540	.601
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka * Penambahan_Tepung_Cangkang_Telur	.264	4	.066	1.022	.446
Error	.582	9	.065		
Total	531.010	18			
Corrected Total	1.150	17			

a. R Squared = .494 (Adjusted R Squared = .044)

A	Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	N	Subset
			1
Duncan[a,b]	3.00	6	5.2983
	2.00	6	5.4033
	1.00	6	5.5750
	Sig.		.105

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .065.

a. Uses Harmonic Mean Sample Size = 6.000.

b. Alpha = 0,05.

B	Penambahan_Tepung_Cangkang_Telur	N	Subset 1
Duncan[a,b]	1.00	6	5.3450
	2.00	6	5.4350
	3.00	6	5.4967
	Sig.		.349

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .065.

a. Uses Harmonic Mean Sample Size = 6.000.

b. Alpha = 0,05.

e. calsium

Tests of Between-Subjects Effects
Dependent Variable: calsium

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	281.860[a]	8	35.233	177.115	.000
Intercept	12687.072	1	12687.072	63778.183	.000
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	16.337	2	8.169	41.063	.000
Penambahan_Tepung_Cangkang_Telur	231.479	2	115.740	581.826	.000
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka * Penambahan_Tepung_Cangkang_Telur	34.044	4	8.511	42.785	.000
Error	1.790	9	.199		
Total	12970.722	18			
Corrected Total	283.650	17			

a. R Squared = .994 (Adjusted R Squared = .988)

A	Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	N	Subset		
			1	2	3
Duncan[a,b]	2.00	6	25.3740		
	1.00	6		26.5650	

	3.00	6			27.7074
	Sig.		1.000	1.000	1.000

The error term is Mean Square(Error) = .199.

a. Uses Harmonic Mean Sample Size = 6.000.

B	Penambahan_Tepung_Cangkang_Telur	N	Subset		
			1	2	3
Duncan[a,b]	1.00	6	22.2755		
	2.00	6		26.3202	
	3.00	6			31.0507
	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) = .199.

a. Uses Harmonic Mean Sample Size = 6.000.

b. Alpha = 0,05**.**

f. carbohidart

Tests of Between-Subjects Effects					
Dependent Variable: karbohidrat					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.

Corrected Model	182.249[a]	8	22.781	.952	.522
Intercept	17902.104	1	17902.104	748.214	.000
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	14.726	2	7.363	.308	.743
Penambahan_Tepung_Cangkang_Telur	106.337	2	53.169	2.222	.164
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka * Penambahan_Tepung_Cangkang_Telur	61.186	4	15.297	.639	.648
Error	215.338	9	23.926		
Total	18299.691	18			
Corrected Total	397.587	17			

a. R Squared = .458 (Adjusted R Squared = -.023)

	Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	N	Subset
A			1
Duncan[a,b]	1.00	6	30.3383
	2.00	6	31.7483
	3.00	6	32.5233
	Sig.		.478

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 23.926.

a. Uses Harmonic Mean Sample Size = 6.000.

b. Alpha = 0,05.

	Penambahan_Tepung_Cangkang_Telur	N	Subset
B			1
Duncan[a,b]	1.00	6	28.3317
	3.00	6	32.0633
	2.00	6	34.2150
	Sig.		.077

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 23.926.

a. Uses Harmonic Mean Sample Size = 6.000.

b. Alpha = 0,05.

g. organoleptik rasa

Tests of Between-Subjects Effects					
Dependent Variable: rasa					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.209[a]	8	.026	.938	.531

Intercept	538.467	1	538.467	19288.363	.000
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	.037	2	.018	.662	.539
Penambahan_Tepung_Cangkang_Telur	.002	2	.001	.035	.966
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka * Penambahan_Tepung_Cangkang_Telur	.171	4	.043	1.527	.274
Error	.251	9	.028		
Total	538.928	18			
Corrected Total	.461	17			

a. R Squared = .455 (Adjusted R Squared = -.030)

	Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	N	Subset
A			1
	2.00	6	5.4083
	1.00	6	5.4833
	3.00	6	5.5167
	Sig.		.311

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .028.

a. Uses Harmonic Mean Sample Size = 6.000.

b. Alpha = 0,05.

	Penambahan_Tepung_Cangkang_Telur	N	Subset 1
B			
Duncan[a,b]	2.00	6	5.4583
	3.00	6	5.4667
	1.00	6	5.4833
	Sig.		.810

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .028.

a. Uses Harmonic Mean Sample Size = 6.000.

b. Alpha = 0,05.

h. organoleptic warna

Tests of Between-Subjects Effects					
Dependent Variable: warna					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.244[a]	8	.031	1.719	.218

Intercept	563.361	1	563.361	31689.031	.000
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	.047	2	.023	1.320	.314
Penambahan_Tepung_Cangkang_Telur	.054	2	.027	1.531	.268
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka * Penambahan_Tepung_Cangkang_Telur	.143	4	.036	2.012	.176
Error	.160	9	.018		
Total	563.765	18			
Corrected Total	.404	17			

a. R Squared = .604 (Adjusted R Squared = .253)

	Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	N	Subset
A			1
Duncan[a,b]	1.00	6	5.5333
	2.00	6	5.5917
	3.00	6	5.6583
	Sig.		.155

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 = 6.000.

b. Alpha = 0,05.

	Penambahan_Tepung_Cangkang_Telur	N	Subset 1
B			
Duncan[a,b]	2.00	6	5.5333
	1.00	6	5.5833
	3.00	6	5.6667
	Sig.		.132

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 = 6.000.

b. Alpha = 0,05.

i. organolptik aroma

Tests of Between-Subjects Effects					
Dependent Variable: aroma					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.135[a]	8	.017	.415	.885

Intercept	513.601	1	513.601	12620.918	.000
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	.053	2	.026	.645	.547
Penambahan_Tepung_Cangkang_Telur	.011	2	.005	.133	.877
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka * Penambahan_Tepung_Cangkang_Telur	.072	4	.018	.440	.777
Error	.366	9	.041		
Total	514.103	18			
Corrected Total	.501	17			

a. R Squared = .269 (Adjusted R Squared = -.380)

	Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	N	Subset
A			1
Duncan[a,b]	1.00	6	5.2917
	3.00	6	5.3167
	2.00	6	5.4167
	Sig.		.331

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .041.

a. Uses Harmonic Mean Sample Size = 6.000.

b. Alpha = 0,05.

	Penambahan_Tepung_Cangkang_Telur	N	Subset 1
B			
Duncan[a,b]	3.00	6	5.3167
	2.00	6	5.3333
	1.00	6	5.3750
	Sig.		.643

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .041.

a. Uses Harmonic Mean Sample Size = 6.000.

b. Alpha = 0,05.

j. tekstur

Tests of Between-Subjects Effects
Dependent Variable: tekstur

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.497[a]	8	.062	2.889	.067
Intercept	500.861	1	500.861	23265.813	.000
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	.093	2	.047	2.168	.170
Penambahan_Tepung_Cangkang_Telur	.120	2	.060	2.787	.114
Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka * Penambahan_Tepung_Cangkang_Telur	.284	4	.071	3.300	.063
Error	.194	9	.022		
Total	501.552	18			
Corrected Total	.691	17			

a. R Squared = .720 (Adjusted R Squared = .471)

	Perbandingan_Tepung_Terigu_Dan_Tepung_Biji_Nangka	N	Subset
A			1
Duncan[a,b]	1.00	6	5.1750
	3.00	6	5.3083

	2.00	6	5.3417
	Sig.		.092

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .022.

a. Uses Harmonic Mean Sample Size = 6.000.

b. Alpha = 0,05.

	Penambahan_Tepung_Cangkang_Telur	N	Subset
B			1
Duncan[a,b]	2.00	6	5.1750
	3.00	6	5.2750
	1.00	6	5.3750
	Sig.		.050

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .022.

a. Uses Harmonic Mean Sample Size = 6.000.

b. Alpha = 0,05.