DAFTAR PUSTAKA

Arpah.2007. *Penetapan Kadaluarsa Pangan*. Departemen Teknologi Pangan dan Gizi. Fakultas Teknologi Pertanian. Institut Pertanian Bogor.Bogor.

AOAC. 1995. *Official Methods of Analysis*. The Association of Official Analytical Chemistry. AOAC. Int.,Wahington DC.

Buckle, K. A., R.A. Edwrds, G.H. Fleet and M. Wotton. 1987. *Ilmu Pangan*.

Broker DB, Bakker-Arkema FW, Hall CW. 1992. *Drying and Storage of Grains and Oilseeds*. AVI Book. United States of America.

Darmoko D.S, 2003, standar Mutu dalam perdagangan.

Pelczar, M. J dan E.C.S Chan. 2007. *Dasar-Dasar Mikrobiologi*. UI.Press. Jakarta

Santosa, B.A.S, Narta. Dan D.S. Darmardjati (2008), *pembuatan brondong dari beras*, Agritech, 1888 (1) : 24-28.

Sulfiana, S.Bakri dan R.fitriana (2016), *membangkitkan usaha pedesaan melalui pengembangan kelompok usaha kue tradisional dikabupaten soppeng, prosiding seminar nasional pengabdian masyarakat* 2016, LPPM Ummas Denpasar, Agustus 2016.

Saguy, I.S., D. Dana (2003), Integrated Approach to Deep Fat Frying :Engineering, Nutrition, Health and Consumer Aspects, J. Food Eng. :143-152.

Spiess WEL and W Wolf. 1987. *Critical evaluation of methods to determine moisture sorption isotherm*. Di dalam : Water Acctivity : Theory and Application to food. Rockland RB and LR Beuchat.Marcelll-Dekker, New York.

Soekarto, S. 2002. "*penilaian organoleptik untuk industri pangan dan Hasil pertanian* ". Bharata Karya Aksara. Jakarta

Koswara, S (2009), *Teknologi pengolahan beras (Teori dan Praktek)* pangan.com

Kushwaha, U.K.S. (2016), *Black Rice*, Springer Internasional Publishing, Switzerland.

Lang, KW dan MP Steinberg. 1980. *Calculation of monture Content of Formulated food system to Any Given Water Activity*. J.Food Sci. 45:1228

Labuza, T.P. and M.K. Schmidl. 1985. Accelerated Shelf Life Testing of Foods. Food Technol. 39(9): 57-62, 64, 134

Rahayu, W.P. 1998. *Diktat Penuntun Praktikum Penilaian Organoleptik*".Fakultas Teknologi Pertanian Bogor. Institut Pertanian Bogor. Bogor.

Wibowo dan Noorkhairani. 2013. "*Koleksi Resep Jajanan Pasar*". Gramedia Pustaka Utama. Jakarta.

Widiada, N.I.G., I.K. Swirya Jaya, dan N. Lasmini (2015), *pengaruh penambahan tepung kacang hijau terhadap sifat organoleptik dan kadar air jajan keraki*, jurnal Gizi Prima, April 2015.

Yuniarti , Y., 2009. "*Pengaruh Penambahan Konsentrasi Buah Bit terhadap Mutu Organoleptik Dan Aktivitas Antioksi dan kue Bolu Kukus.*

Yuniarti, E. 2000.Mempelajari Proses Pembuatan dan Lama Penyimpanan Selai Rumput Laut. Fakultas Perikanan dan Ilmu Kelautan.IPB. *Skripsi Jurusan Gizi Kesehatan Masyaratakat ".*Universitas Esa Unggul. Jakarta

LAMPIRAN

Lampiran 1 Lembar Pengujian Metode Hedonik

KUISIONER PENGUJIAN ORGANOLEPTIK METODE HEDONIK

Nama : Tanggal :
Sampel : Kue Jipang

Instruksi

Dihadapan anda disajikan 9 sampel kue jipang. Silahkan diuji warna, aroma, tekstur, dan rasa dari masing-masing sampel dengan cara mencicipi sampel satu persatu. **Netralkan indera pengecap anda dengan air putih setelah selesai mencicipi satu sampel.**Setelah selesai, berikan komentar anda dengan memberikan penilaian pada tempat yang telah disediakan.

KODE	WARNA	AROMA	TEKSTUR	RASA
255				
479				
437				
661				
845				
148				
896				
467				
338				

Keterangan:
1 : sangat tidak disuka
2 : tidak suka
3 : agak suka
4 : suka
5 : sangat suka

Komentar

Lampiran 2 Hasil Pengujian Organoleptik Metode Hedonik pada Parameter Warna

Panelis	Perlakuan					
	FI			F2		
	U1	U2	U3	U1	U2	U3
1	4	4	4	4	4	4
2	5	4	4	4	3	4
3	4	4	4	5	5	5
4	5	4	4	4	4	5
5	4	4	3	5	5	4
6	4	4	3	4	4	5
7	4	4	4	5	4	4
8	3	5	5	3	4	4
9	4	4	3	3	4	4
10	4	4	4	4	4	4
11	5	5	4	4	5	5
12	4	5	4	4	4	5
13	5	5	4	5	4	4
14	4	4	4	4	4	4
15	4	4	4	4	4	4
Jumlah	63	64	58	62	62	65
Rata-rata	4.2	4.266666667	3.866666667	4.133333333	4.133333333	4.333333333

Lampiran 3 Hasil uji ANOVA parameter warna (metode hedonik)

Group Statistics

	perlakuan	N	Mean	Std. Deviation	Std. Error Mean
rasa	F1	15	4.0220	.54084	.13964
	F2	15	4.2673	.55214	.14256
aroma	F1	15	4.0227	.46180	.11924
	F2	15	4.2007	.56036	.14469
tektur	F1	15	4.2887	.33013	.08524
	F2	15	4.4673	.37435	.09666
warna	F1	15	4.1113	.32450	.08378
	F2	15	4.2000	.39361	.10163

Group Statistics

	perlakuan	N	Mean	Std. Deviation	Std. Error Mean
warna	F1	15	4.1113	.32450	.08378
	F2	15	4.2000	.39361	.10163

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
warna	Equal variances assumed	.557	.462	-.673	28

	Equal variances not assumed			-.673	27.017

Independent Samples Test

		t-test for Equality of Means			
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower
warna	Equal variances assumed	.506	-.08867	.13171	-.35847
	Equal variances not assumed	.507	-.08867	.13171	-.35891

Independent Samples Test

		t-test for Equality of Means 95% Confidence Interval of the Difference Upper
warna	Equal variances assumed	.18114
	Equal variances not assumed	.18158

Lampiran 4 Hasil Pengujian Organoleptik Metode Hedonik pada Parameter Aroma

Panelis	Perlakuan					
	FI			F2		
	U1	U2	U3	U1	U2	U3
1	5	5	5	5	5	5
2	3	4	5	4	5	4
3	5	4	3	4	5	5
4	5	5	4	5	5	4
5	4	4	4	5	5	5
6	4	3	4	3	5	5
7	4	4	5	4	5	5
8	4	4	4	4	5	4
9	4	3	4	5	3	4
10	4	4	4	4	4	4
11	4	4	3	3	4	4
12	4	5	4	5	3	3
13	4	4	4	3	4	4
14	4	4	4	3	5	4
15	3	3	3	3	3	3
Jumlah	61	60	60	60	66	63
Rata-rata	4.066666667	4	4	4	4.4	4.2

Lampiran 5 Hasil uji ANOVA parameter aroma (metode hedonik)

Group Statistics

	perlakuan	N	Mean	Std. Deviation	Std. Error Mean
aroma	F1	15	4.0227	.46180	.11924
	F2	15	4.2007	.56036	.14469

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
aroma	Equal variances assumed	1.677	.206	-.949	28
	Equal variances not assumed			-.949	27.014

Independent Samples Test

		t-test for Equality of Means			
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower
aroma	Equal variances assumed	.351	-.17800	.18749	-.56205

	Equal variances not assumed	.351	-.17800	.18749	-.56268

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the Difference
		Upper
aroma	Equal variances assumed	.20605
	Equal variances not assumed	.20668

```
T-TEST GROUPS=perlakuan(1 2)
  /MISSING=ANALYSIS
  /VARIABLES=tektur
  /CRITERIA=CI(.95).
```

Lampiran 6 Hasil Pengujian Organoleptik Metode Hedonik pada Parameter Tekstur

Panelis	Perlakuan					
	FI			F2		
	U1	U2	U3	U1	U2	U3
1	5	4	4	5	5	5
2	5	4	3	5	4	5
3	5	3	3	5	3	5
4	5	4	4	5	4	5
5	5	4	4	5	5	5
6	5	5	3	4	5	4
7	5	5	4	4	3	5
8	5	5	4	4	5	4
9	5	4	3	5	4	4
10	5	4	4	4	5	5
11	5	5	4	4	5	5
12	5	5	3	5	4	5
13	5	5	4	5	5	4
14	5	4	4	4	4	4
15	5	3	3	4	3	4
Jumlah	75	64	54	68	64	69
Rata-rata	5	4.266666667	3.6	4.533333333	4.266666667	4.6

Lampiran 7 Hasil uji ANOVA parameter tekstur (metode hedonik)

Group Statistics

	perlakuan	N	Mean	Std. Deviation	Std. Error Mean
tektur	F1	15	4.2887	.33013	.08524
	F2	15	4.4673	.37435	.09666

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
tektur	Equal variances assumed	.666	.422	-1.386	28
	Equal variances not assumed			-1.386	27.569

Independent Samples Test

		t-test for Equality of Means			
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower
tektur	Equal variances assumed	.177	-.17867	.12887	-.44265
	Equal variances not assumed	.177	-.17867	.12887	-.44283

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the Difference
		Upper
tektur	Equal variances assumed	.08532
	Equal variances not assumed	.08550

```
T-TEST GROUPS=perlakuan(1 2)
  /MISSING=ANALYSIS
  /VARIABLES=warna
  /CRITERIA=CI(.95).
```

Lampiran 8 Hasil Pengujian Organoleptik Metode Hedonik pada Parameter Rasa

Panelis	Perlakuan					
	FI			F2		
	U1	U2	U3	U1	U2	U3
1	5	5	5	5	5	5
2	4	4	3	4	3	4
3	4	3	3	4	3	5
4	4	4	4	5	4	4
5	4	5	4	5	5	5
6	3	3	5	5	4	5
7	4	5	3	3	4	4
8	3	5	4	4	5	5
9	3	4	4	5	5	4
10	4	4	4	4	4	4
11	5	5	5	4	4	4
12	4	5	4	5	3	5
13	4	5	4	5	4	4
14	4	4	4	5	5	4
15	3	3	3	3	3	3
Jumlah	58	64	59	66	61	65
Rata-rata	3.866666667	4.266666667	4	4.4	4.066666667	4.333333333

Lampiran 9 Hasil uji ANOVA parameter rasa (metode hedonik)

Group Statistics

	perlakuan	N	Mean	Std. Deviation	Std. Error Mean
rasa	F1	15	4.0220	.54084	.13964
	F2	15	4.2673	.55214	.14256

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
rasa	Equal variances assumed	.166	.687	-1.229	28
	Equal variances not assumed			-1.229	27.988

Independent Samples Test

		t-test for Equality of Means			
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower
rasa	Equal variances assumed	.229	-.24533	.19956	-.65411
	Equal variances not assumed	.229	-.24533	.19956	-.65412

Independent Samples Test

		t-test for Equality of Means
		95% Confidence Interval of the Difference
		Upper
rasa	Equal variances assumed	.16345
	Equal variances not assumed	.16346

```
T-TEST GROUPS=perlakuan(1 2)
  /MISSING=ANALYSIS
  /VARIABLES=aroma

  /CRITERIA=CI(.95).
```

Lampiran 10 Hasil Pengujian Parameter Kadar Air

No	Kode Perlakuan	Kode Analisis	Bobot Cawan (g)	Bobot Sampel (g)	Bobot Setelah Oven (g)	Kadar Air (%)
1	Suhu Ruang U1	P.80	76.2053	2.3846	78.4723	4.93
2	Suhu Ruang U2	P.81	55.2854	2.2931	57.4616	5.10
3	Suhu Ruang U3	P.82	52.5984	2.2691	54.7527	5.06
4	Suhu Dingin U1	P.83	41.7723	2.2522	43.9226	4.52
5	Suhu Dingin U2	P.84	76.2078	2.2553	78.3630	4.44
6	Suhu Dingin U3	P.85	55.2827	2.1942	57.3772	4.54

Lampiran 11. Data Pengamatan Karakteristik Sensori Warna

Pengujian	Suhu Penyimpanan		Rerata
	Suhu 10	Suhu 28	
H0	4.13	4.13	4.13
H3	4.53	4.33	4.43
H6	4.33	4.20	4.27
H9	4.27	4.20	4.23
H12	4.40	4.00	4.20
H15	4.53	4.40	4.47
H18	4.40	4.27	4.33
H21	4.40	4.13	4.27
H24	4.13	4.33	4.23
H27	4.20	4.33	4.27
Rerata	4.33	4.23	

Lampiran 12. Hasil Uji Anova Pengamatan Karakteristik Sensori Warna

Group Statistics

	Suhu	N	Mean	Std. Deviation	Std. Error Mean
Organoleptik - Warna	Suhu 10	150	4.3333	.60940	.04976
	Suhu 28	150	4.2333	.54854	.04479
Organoleptik - Tekstur	Suhu 10	150	4.4000	.51813	.04230
	Suhu 28	150	4.1533	.57623	.04705
Organoleptik - Aroma	Suhu 10	150	4.3000	.61031	.04983
	Suhu 28	150	4.2533	.54572	.04456
Organoleptik - Rasa	Suhu 10	150	4.3733	.60807	.04965
	Suhu 28	150	4.2133	.61945	.05058

Univariate Analysis of Variance

Tests of Between-Subjects Effects

Dependent Variable: Organoleptik - Warna

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	5.717[a]	19	.301	.885	.602
Intercept	5504.083	1	5504.083	16188.480	.000
suhu	.750	1	.750	2.206	.139
waktu	2.817	9	.313	.920	.508
suhu * waktu	2.150	9	.239	.703	.706
Error	95.200	280	.340		
Total	5605.000	300			
Corrected Total	100.917	299			

a. R Squared = .057 (Adjusted R Squared = -.007)

Organoleptik - Warna

Duncana,b

Waktu	N	Subset 1
H0	30	4.1333
H3	30	4.4333
H6	30	4.2667
H9	30	4.2333
H12	30	4.2000
H15	30	4.4667
H18	30	4.3333
H21	30	4.2667
H24	30	4.2333
H27	30	4.2667
Sig.		.064

Lampiran 13. Data Pengamatan Karakteristik Sensori Rasa

Pengujian	Suhu Penyimpanan		Rerata
	Suhu 10	Suhu 28	
H0	4.40	3.80	4.10
H3	4.40	4.20	4.30
H6	4.40	4.47	4.43
H9	4.20	4.20	4.20
H12	4.33	4.07	4.20
H15	4.40	4.27	4.33
H18	4.40	4.40	4.40
H21	4.33	4.27	4.30
H24	4.33	4.47	4.40
H27	4.53	4.00	4.27
Rerata	4.37	4.21	

Lampiran 14. Hasil Uji Anova Pengamatan Karakteristik Sensori Rasa

Univariate Analysis of Variance

Tests of Between-Subjects Effects

Dependent Variable: Organoleptik - Rasa

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	8.987[a]	19	.473	1.259	.210
Intercept	5529.813	1	5529.813	14718.134	.000
suhu	1.920	1	1.920	5.110	.025
waktu	2.987	9	.332	.883	.541
suhu * waktu	4.080	9	.453	1.207	.291
Error	105.200	280	.376		
Total	5644.000	300			
Corrected Total	114.187	299			

a. R Squared = .079 (Adjusted R Squared = .016)

Organoleptik - Rasa

Duncan[a,b]

Waktu	N	Subset 1
H1	30	4.1000
H2	30	4.3000
H3	30	4.4333
H4	30	4.2000
H5	30	4.2000
H6	30	4.3333

H7	30	4.4000
H8	30	4.3000
H9	30	4.4000
H10	30	4.2667
Sig.		.079

Lampiran 15. Data Pengamatan Karakteristik Sensori Aroma

Pengujian	Suhu Penyimpanan		Rerata
	Suhu 10	Suhu 28	
H0	4.20	4.07	4.13
H3	4.20	4.40	4.30
H6	4.60	4.33	4.47
H9	4.33	4.33	4.33
H12	4.20	4.33	4.27
H15	4.27	4.13	4.20
H18	4.07	4.27	4.17
H21	4.27	4.27	4.27
H24	4.40	4.07	4.23
H27	4.47	4.33	4.40
Rerata	4.30	4.25	

Lampiran 16. Hasil Uji Anova Pengamatan Karakteristik Sensori Aroma

Univariate Analysis of Variance

Tests of Between-Subjects Effects

Dependent Variable: Organoleptik - Aroma

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	5.370[a]	19	.283	.836	.663
Intercept	5486.963	1	5486.963	16229.046	.000
suhu	.163	1	.163	.483	.488
waktu	2.870	9	.319	.943	.488
suhu * waktu	2.337	9	.260	.768	.646
Error	94.667	280	.338		
Total	5587.000	300			
Corrected Total	100.037	299			

a. R Squared = .054 (Adjusted R Squared = -.011)

Organoleptik - Aroma

Duncana,b

Waktu	N	Subset 1
H1	30	4.1333
H2	30	4.3000
H3	30	4.4667
H4	30	4.3333
H5	30	4.2667
H6	30	4.2000
H7	30	4.1667

H8	30	4.2667
H9	30	4.2333
H10	30	4.4000
Sig.		.063

Lampiran 17. Data Pengamatan Karakteristik Sensori Tekstur

Pengujian	Suhu Penyimpanan		Rerata
	Suhu 10	Suhu 28	
H0	4.53	4.07	4.30
H3	4.60	4.27	4.43
H6	4.53	4.13	4.33
H9	4.40	4.07	4.23
H12	4.20	4.27	4.23
H15	4.53	3.93	4.23
H18	4.13	4.20	4.17
H21	4.33	4.27	4.30
H24	4.33	4.13	4.23
H27	4.40	4.20	4.30
Rerata	4.40	4.15	

Lampiran 18. Hasil Uji Anova Pengamatan Karakteristik Sensori Tekstur

Univariate Analysis of Variance

Tests of Between-Subjects Effects

Dependent Variable: Organoleptik - Tekstur

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	9.370[a]	19	.493	1.631	.048
Intercept	5486.963	1	5486.963	18145.863	.000
suhu	4.563	1	4.563	15.091	.000
waktu	1.470	9	.163	.540	.845
suhu * waktu	3.337	9	.371	1.226	.279
Error	84.667	280	.302		
Total	5581.000	300			
Corrected Total	94.037	299			

a. R Squared = .100 (Adjusted R Squared = .039)

Organoleptik - Tekstur

Duncana,b

Waktu	N	Subset 1
H1	30	4.3000
H2	30	4.4333
H3	30	4.3333
H4	30	4.2333
H5	30	4.2333
H6	30	4.2333
H7	30	4.1667

H8	30	4.3000
H9	30	4.2333
H10	30	4.3000
Sig.		.120

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = .376.

a. Uses Harmonic Mean Sample Size = 30.000.

b. Alpha = 0.05.

Lampiran 19. Hasil Penyimpanan Kue jipang

Suhu Hari-0

Hari-3

Hari-6

Hari-9

Hari-12

Hari-15

Hari-18

Hari-21

Hari-24

Hari-27