

Lampiran 1. Kuesioner Analisa Organoleptik Sosis Ayam.

Nama :
 Tanggal :
 Pengamatan : Kenampakan /Kekenyalan/*Juiceness*/ Rasa *
 Produk : Sosis Ayam

Di hadapan saudara disajikan 6 buah sampel sosis ayam. Saudara diminta untuk memberikan penilaian berdasarkan tingkat kesukaan saudara terhadap kenampakan, kekenyalan, *juiceness* dan rasa sosis ayam. Skala 1 – 7 menunjukkan nilai dari sangat tidak disukai sampai sangat disukai.

Deskripsi:

- Kenampakan : tingkat kehalusan irisan sosis ayam yang disukai
- Kekenyalan : tingkat kekenyalan yang disukai pada sosis ayam saat digigit
- *Juiceness* : kesan berair saat sosis ayam digigit
- Rasa : tingkat rasa yang disukai pada sosis ayam

Keterangan:

1 = sangat tidak suka	5 = agak suka
2 = tidak suka	6 = suka
3 = agak tidak suka	7 = sangat suka
4 = netral	

Sampel

474 :	219:
310 :	531:
288 :	435:

Komentar:.....

* coret yang tidak perlu

Lampiran 2. Data Hasil Analisa untuk Bahan Baku Daging Ayam

Parameter	Ulangan I	Ulangan II	Ulangan III	Rata-rata
WHC	16,2707	18,1962	18,3072	17,5914
Kadar air	74,1883	74,2005	74,2114	74,2001
Kadar Lemak	3,9134	3,8580	4,0790	3,9501

Lampiran 3. Data Hasil Analisa Kadar Air Sosis Ayam

Perlakuan	Ulangan I	Ulangan II	Ulangan III	Ulangan VI	Jumlah	Rata-rata
T0S100	64,1466	65,7188	64,4405	64,0323	258,3382	64,5846
T20S80	64,2417	63,6296	63,5829	64,4588	255,9130	63,9783
T40S60	63,6902	63,6212	64,1660	63,7813	255,2587	63,8148
T60S40	63,8883	61,7429	64,4358	63,0866	253,1536	63,2884
T80S20	63,2082	61,4148	63,8736	64,2710	252,7676	63,1919
T100S0	63,3972	61,0721	64,5347	63,0060	252,0100	63,0025

Tabel Anova Kadar Air

Sumber Variasi	db	JK	KT	F Hitung	F Tabel
Kelompok	3	5,4836	1,8279	1,7390	2,9013
Perlakuan	5	7,0714	1,4143		
Galat	15	12,1992	0,8133		
Jumlah	23	24,7542			

F Hit < FTabel, maka proporsi kacang tunggak dan susu skim tidak berpengaruh nyata terhadap kadar air sosis ayam ($\alpha=5\%$)

Lampiran 4. Data Hasil Analisa Kadar Lemak Sosis Ayam

Perlakuan	Ulangan I	Ulangan II	Ulangan III	Ulangan VI	Jumlah	Rata-rata
T0S100	4,5261	6,0765	4,1881	5,0484	19,8391	4,9597
T20S80	4,7192	6,1432	4,4049	5,3621	20,6294	5,1574
T40S60	5,8519	6,2105	5,1600	5,6271	22,8495	5,7123
T60S40	6,6906	6,6312	5,5012	6,3065	25,1295	6,2823
T80S20	6,8501	6,8137	6,8501	6,3987	26,9126	6,7282
T100S0	7,6582	7,1767	5,9727	7,1447	27,9523	6,9881

Tabel Anova Kadar Lemak

Sumber Variasi	db	JK	KT	F Hitung	F Tabel
Kelompok	3	4,1143	1,3714	14,4958	2,9013
Perlakuan	5	13,8246	2,7649		
Galat	15	2,8611	0,1904		
Jumlah	23	20,8001			

F Hit > FTabel, maka proporsi kacang tunggak dan susu skim berpengaruh nyata terhadap kadar lemak sosis ayam (α 5%)

Uji DMRT (Duncan's Multiple Range Test) pada α 5%

$$S_y = \sqrt{\frac{KTG}{r}} = \sqrt{\frac{0,1904}{4}} = 0,2184$$

Perlakuan	Rata-rata	p					Notasi
		2	3	4	5	6	
T0S100	4,9597						a
T20S80	5,1574	0,1977					ab
T40S60	5,7123	0,5549	0,7526				bc
T60S40	6,2823	0,5700	1,1249	1,3226			cd
T80S20	6,7282	0,4459	1,0159	1,5708	1,7685		d
T100S0	6,9881	0,2599	0,7058	1,2758	1,8307	2,0284	d
rp		3,01	3,16	3,25	3,31	3,36	
rp x Sy		0,6574	0,6901	0,7098	0,7229	0,7338	
Sy		0,2184					

Lampiran 5. Data Hasil Analisa WHC (*Water Holding Capacity*) Sosis Ayam

Data Pengamatan WHC (%)

Perlakuan	Ulangan I	Ulangan II	Ulangan III	Ulangan IV	Jumlah	Rata-rata
T0S100	29,9704	26,4165	27,7255	30,8045	114,9169	28,7292
T20S80	32,0721	31,5821	28,5024	31,3378	123,4944	30,8736
T40S60	33,3473	32,5342	31,1981	32,0672	129,1468	32,2867
T60S40	34,0207	35,5263	31,0550	34,9245	135,5265	33,8816
T80S20	34,7573	36,1790	32,9032	32,3234	136,1629	34,0407
T100S0	38,6573	37,5509	36,7620	37,9952	150,9654	37,7414
Total	202,8251	199,7890	188,1462	199,4526	790,2129	

Tabel Anova WHC (*Water Holding Capacity*)

Sumber Variasi	db	JK	KT	F Hitung	F Tabel
Kelompok	3	20,8152	6,9384	23,1958*	2,9013
Perlakuan	5	190,3096	38,0619		
Galat	15	24,6134	1,6409		
Jumlah	23	235,7382			

Keterangan: * menunjukkan perbedaan nyata (α 5%)

Uji DMRT (Duncan's Multiple Range Test) pada α 5%

$$S_y = \sqrt{\frac{KTG}{r}} = \sqrt{\frac{1,6409}{4}} = 0,6405$$

Perlakuan	Rata-rata	p					Notasi
		2	3	4	5	6	
T0S100	28,7292						a
T20S80	30,8736	2,1444					b
T40S60	32,2867	1,4131	3,5575				bc
T60S40	33,8816	1,5949	3,008	5,1524			c
T80S20	34,0407	0,1591	1,754	3,1671	5,3115		c
T100S0	37,7414	3,7007	3,8598	5,4547	6,8678	9,0122	d
rp		3,01	3,16	3,25	3,31	3,36	
rp x Sy		1,9279	2,0240	2,0816	2,1201	2,1521	
Sy		0,6405					

Contoh Perhitungan ANOVA *Water Holding Capacity (WHC)* Sosis Ayam

$$FK = \frac{Y^2}{r \times t} = \frac{790.2129^2}{4 \times 6} = 26018.1845$$

$$\begin{aligned} JKT &= \sum_{ij} Y_{ij}^2 - FK \\ &= (29,9704^2 + 32,0721^2 + \dots + 37,9952^2) - 26018,1845 \\ &= 235,7382 \end{aligned}$$

$$\begin{aligned} JKK &= \frac{\sum_j Y_j^2}{t} - FK \\ &= \frac{202,8251^2 + \dots + 199,4526^2}{6} - 26018,1845 \\ &= 20,8152 \end{aligned}$$

$$\begin{aligned} JKP &= \frac{\sum_i Y_i^2}{r} - FK \\ &= \frac{114,9169^2 + \dots + 150,9654^2}{4} - 26018,1845 \\ &= 190,3096 \end{aligned}$$

$$\begin{aligned} JKG &= JKT - JKK - JKP \\ &= 235,7382 - 20,8152 - 190,3096 \\ &= 24,6135 \end{aligned}$$

$$db \text{ total} = (r \times t) - 1 = (4 \times 6) - 1 = 23$$

$$db \text{ kelompok} = r - 1 = 4 - 1 = 3$$

$$db \text{ perlakuan} = t - 1 = 6 - 1 = 5$$

$$db \text{ galat} = (r-1)(t-1) = (4-1)(6-1) = 15$$

$$KTK = \frac{JKK}{r-1} = \frac{20,8152}{4-1} = 6,9384$$

$$KTP = \frac{JKP}{t-1} = \frac{190,3096}{6-1} = 38,0619$$

$$KTG = \frac{JKG}{(r-1)(t-1)} = \frac{24,6135}{(4-1)(6-1)} = 1,6409$$

$$F \text{ hitung} = \frac{KTP}{KTG} = \frac{38,0619}{1,6409} = 23,1958$$

Lampiran 6. Data Hasil Analisa Stabilitas Emulsi Sosis Ayam

A. Data Pengamatan Stabilitas Emulsi (%)

Perlakuan	Ulangan I	Ulangan II	Ulangan III	Ulangan IV	Jumlah	Rata-rata
T0S100	97,2240	98,5387	96,7242	97,5195	390,0064	97,5016
T20S80	97,2904	98,6396	96,9891	97,7341	390,6532	97,6636
T40S60	98,4385	98,7141	97,6181	98,2361	393,0068	98,2517
T60S40	98,8914	98,8087	98,1047	98,7214	394,5262	98,6316
T80S20	98,9064	99,0021	98,9447	98,7518	395,6050	98,9013
T100S0	99,1757	99,0064	98,7372	99,0055	395,9248	98,9812
Total	589,9264	592,7096	587,1180	589,9684	2359,7224	

B. Tabel Anova Stabilitas Emulsi

Sumber variasi	db	JK	KT	F Hitung	F Tabel
Kelompok	3	2,6058	0,8686		
Perlakuan	5	7,9111	1,5822	12,6881*	2,9013
Galat	15	1,8712	0,1247		
Total	23	12,3882			

Keterangan: * menunjukkan perbedaan nyata (α 5%)

C. Uji DMRT (Duncan's Multiple Range Test) pada α 5%

$$S_y = \sqrt{\frac{KTG}{r}} = \sqrt{\frac{0,1247}{4}} = 0,1766$$

Perlakuan	Rata-rata	p					Notasi
		2	3	4	5	6	
T0S100	97,5016						a
T20S80	97,6636	0,1620					a
T40S60	98,2517	0,5881	0,7501				b
T60S40	98,6316	0,3799	0,9680	1,1300			bc
T80S20	98,9013	0,2697	0,6496	1,2377	1,3997		c
T100S0	98,9812	0,0799	0,3496	0,7295	1,3176	1,4796	c
rp		3,01	3,16	3,25	3,31	3,36	
rp x Sy		0,5316	0,5581	0,5740	0,5845	0,5934	
Sy		0,1766					

Lampiran 7. Data Hasil Analisa Tekstur Kekerasan Sosis Ayam

A. Data Pengamatan Tekstur Kekerasan

Perlakuan	Ulangan I	Ulangan II	Ulangan III	Ulangan IV	Jumlah	Rata-rata
T0S100	96,33	98,13	72,63	80,13	347,22	86,81
T20S80	96,87	100,47	78,63	77,90	353,87	88,47
T40S60	99,50	108,67	64,17	97,07	369,41	92,35
T60S40	110,50	108,73	59,23	100,40	378,86	94,72
T80S20	123,73	116,20	59,47	101,23	400,63	100,16
T100S0	121,80	131,00	94,17	108,67	455,64	113,91
Total	648,73	663,20	428,30	565,40	2305,63	

B. Tabel Uji Anova Tekstur Kekerasan

Sumber variasi	db	JK	KT	F Hitung	F Tabel
Kelompok	3	5803,4130	1934,471	4,9584*	2,9013
Perlakuan	5	1977,0690	395,4138		
Galat	15	1196,2040	79,7469		
Jumlah	23	8976,6870			

Keterangan: * menunjukkan perbedaan nyata (α 5%)

C. Uji DMRT (Duncan's Multiple Range Test) pada α 5%

$$S_y = \sqrt{\frac{KTG}{r}} = \sqrt{\frac{79,7469}{4}} = 4,4651$$

Perlakuan	Rata-rata	p					Notasi
		2	3	4	5	6	
T0S100	86,81						a
T20S80	88,47	1,66					a
T40S60	92,35	3,88	5,54				a
T60S40	94,72	2,37	6,25	7,91			a
T80S20	100,16	5,44	7,81	11,69	13,35		ab
T100S0	113,91	13,75	19,19	21,56	25,44	27,1	b
rp		3,01	3,16	3,25	3,31	3,36	
rp x Sy		13,4399	14,1097	14,5116	14,7795	15,0027	
Sy		4,4651					

Lampiran 8. Data Hasil Organoleptik Kenampakan Sosis Ayam

A. Data Organoleptik Kenampakan

Panelis	T0S100	T20S80	T40S60	T60S40	T80S20	T100S0
1	5	7	6	3	2	1
2	3	6	5	3	7	6
3	5	4	5	6	5	6
4	5	6	6	6	7	6
5	3	2	6	4	4	4
6	6	2	2	6	6	6
7	5	5	4	5	3	3
8	5	4	4	7	5	6
9	5	6	5	4	4	3
10	4	5	5	4	4	3
11	3	2	3	2	3	6
12	4	5	4	6	6	2
13	2	7	5	1	3	2
14	6	7	7	3	4	1
15	3	6	7	3	6	4
16	6	6	6	4	6	6
17	7	7	5	6	3	2
18	5	4	6	2	6	5
19	5	6	6	6	6	6
20	5	6	5	5	6	5
21	5	6	5	4	3	4
22	2	7	6	3	4	3
23	5	6	6	6	7	7
24	6	6	4	2	3	3
25	5	6	4	2	2	3
26	5	4	4	5	5	5
27	4	5	3	2	2	5
28	1	6	4	1	4	3
29	4	6	4	3	4	5
30	6	4	6	2	5	6
31	5	4	4	5	5	4
32	6	7	3	4	3	2
33	6	4	5	6	5	4
34	5	4	4	3	2	2
35	4	3	4	2	4	5
36	4	7	6	4	4	3
37	4	6	5	3	4	4
38	4	5	6	3	4	2
39	3	3	3	2	5	6
40	4	4	5	5	6	6
41	4	4	4	3	4	4
42	6	6	3	3	5	4
43	4	4	5	3	7	2

44	6	6	3	3	6	4
45	1	1	5	4	1	2
46	4	4	6	4	6	5
47	5	5	3	4	5	4
48	7	7	5	3	2	1
49	7	2	6	1	5	3
50	7	1	5	6	7	3
51	5	2	2	4	6	4
52	6	5	7	4	2	3
53	6	7	5	4	3	2
54	6	7	6	5	2	3
55	4	4	7	6	5	4
56	6	6	4	4	4	4
57	6	6	5	5	3	2
58	5	7	2	4	3	1
59	5	7	2	4	3	1
60	4	5	4	6	4	5
61	2	7	6	5	5	3
62	5	5	6	6	5	6
63	4	6	6	3	4	5
64	5	6	5	6	6	4
65	5	6	3	7	3	3
66	6	7	6	6	5	4
67	4	7	5	6	5	2
68	4	6	3	4	2	2
69	5	6	5	4	3	4
70	4	3	5	4	4	3
71	5	6	4	4	5	3
72	6	7	3	3	6	2
73	6	7	4	2	2	1
74	3	3	2	4	4	1
75	5	4	4	4	3	4
76	5	5	5	5	5	3
77	3	4	4	5	4	3
78	3	3	4	3	5	3
79	6	5	5	5	6	5
80	5	4	7	4	3	2
81	6	2	5	3	5	6
82	6	6	4	7	3	2
83	6	5	2	3	4	1
84	5	6	6	6	5	3
85	5	4	4	4	5	6
86	4	5	7	5	6	4
87	7	7	5	5	5	5
88	2	1	3	5	6	7
89	5	2	6	2	4	5
90	5	6	4	4	3	2
91	6	4	6	4	4	3
92	5	6	6	4	4	5

93	3	7	6	3	4	3
94	6	5	3	6	4	7
95	6	6	4	3	2	1
96	6	5	3	3	2	2
97	3	6	5	6	4	4
98	3	4	2	7	5	3
99	4	6	6	7	3	2
100	1	4	6	6	6	3
101	2	3	6	1	5	4
102	3	4	5	4	6	3
103	7	6	4	4	3	2
104	7	4	5	3	3	2
105	7	2	5	2	5	2
106	7	4	4	4	6	2
107	6	6	4	7	4	2
108	6	6	6	5	3	2
109	6	5	7	2	3	1
110	4	5	6	5	4	4
111	7	6	6	4	3	3
112	6	6	6	6	5	3
113	5	3	4	6	6	5
114	5	5	6	3	4	3
115	5	6	5	2	3	3
116	7	5	6	5	6	4
117	2	2	6	4	6	2
118	7	4	3	3	3	3
119	4	4	4	4	6	4
120	7	6	5	3	4	1
121	6	5	7	3	2	1
122	2	4	7	5	4	5
123	6	5	4	3	1	2
124	6	4	4	3	2	2
125	5	6	5	4	3	4
126	5	5	5	5	5	3
127	3	3	5	3	3	3
128	6	3	3	3	3	4
129	6	4	5	4	4	3
130	6	4	7	2	6	2
131	3	3	6	5	3	3
132	7	6	3	6	5	4
133	4	6	5	3	2	1
134	6	6	7	4	5	6
135	4	2	5	5	4	4
136	4	5	7	3	6	5
137	5	2	6	5	2	3
138	7	6	6	6	6	6
139	2	3	4	5	7	6
140	5	4	5	4	5	4
141	6	6	7	2	4	5

142	5	6	5	4	6	7
143	4	3	5	5	4	3
144	6	6	6	5	3	2
145	5	4	5	5	3	2
146	5	6	6	6	6	6
147	6	6	6	2	6	6
148	4	3	5	4	5	4
149	4	5	3	6	6	3
150	7	6	2	5	6	5
151	6	7	3	5	4	2
152	6	5	4	5	5	5
153	7	7	7	7	5	6
154	3	2	1	7	6	4
155	2	7	5	7	7	4
156	6	5	5	6	6	5
157	6	6	4	7	5	4
158	3	4	4	4	6	5
159	5	6	4	6	5	4
160	4	5	5	4	4	3
161	2	3	2	6	4	3
162	5	6	5	5	3	3
163	5	7	3	7	3	2
164	2	7	4	2	4	4
165	5	5	5	6	4	6
166	4	6	5	6	6	6
167	6	7	5	7	3	6
168	3	7	4	6	5	5
169	3	5	5	6	5	5
170	6	3	4	5	4	5
171	4	7	4	6	5	3
172	5	6	4	6	6	3
173	3	3	2	5	3	3
174	5	4	5	5	5	5
175	6	6	4	6	3	6
176	6	1	2	4	5	2
177	4	4	3	6	3	5
178	4	6	4	7	5	5
179	5	7	5	6	5	4
180	6	6	5	6	5	5
181	2	3	5	7	6	4
182	5	7	4	6	3	2
183	5	7	6	4	6	6
184	5	6	6	6	6	5
185	3	7	2	4	5	6
186	4	6	6	3	6	3
187	6	6	6	6	6	6
188	1	7	3	7	4	6
189	1	7	2	6	4	4
190	4	7	4	7	4	5

191	4	6	2	4	3	4
192	4	5	5	4	4	3
193	3	5	2	6	4	3
194	6	4	6	6	6	7
195	5	6	6	6	6	6
196	4	6	4	5	4	3
197	3	3	6	5	5	4
198	6	3	4	1	5	2
199	7	6	3	5	7	2
200	5	5	5	6	3	7
Rata2	4,7450	5,0350	4,6750	4,4650	4,4000	3,7400

B. Tabel Anova Organoleptik Kenampakan

Sumber Variasi	db	JK	KT	F hitung	F tabel
Perlakuan	5	193,0200	38,6040	17,6544*	2,2216
Galat	1194	2610,8600	2,18665		
Jumlah	1199	2803,8800			

Keterangan: * menunjukkan perbedaan nyata (α 5%)

C. Hasil Uji DMRT (Duncan's Multiple Range Test) pada α 5%

$$S_y = \sqrt{\frac{KTG}{r}} = \sqrt{\frac{2,18665}{200}} = 0,1046$$

Perlakuan	Rata-rata	p					Notasi*
		2	3	4	5	6	
T100S0	3,7450						a
T80S20	4,4000	0,6550					b
T60S40	4,4650	0,0650	0,7200				bc
T40S60	4,6750	0,2100	0,2750	0,9300			bc
T0S100	4,7450	0,0700	0,2800	0,3450	1,0000		cd
T20S80	5,0350	0,2900	0,3600	0,5700	0,6350	1,2900	d
rp		2,77	2,92	3,02	3,09	3,15	
rp x Sy		0,2897	0,3054	0,3159	0,3232	0,3295	
Sy		0,1046					

Lampiran 9. Data Hasil Organoleptik Kekenyalan Sosis Ayam

A. Data Pengamatan Kekenyalan

Panelis	T0S100	T20S80	T40S60	T60S40	T80S20	T100S0
1	1	2	6	3	1	2
2	4	2	3	4	6	6
3	3	2	5	4	6	5
4	5	4	6	3	7	2
5	3	6	4	3	6	6
6	5	5	6	2	4	3
7	5	6	5	4	5	5
8	5	6	3	5	3	5
9	4	3	5	7	6	1
10	4	4	5	3	2	3
11	7	6	4	5	2	3
12	7	7	6	5	2	2
13	3	3	3	6	6	7
14	1	1	6	1	3	4
15	2	3	2	4	3	3
16	3	1	2	4	6	1
17	5	4	4	3	3	4
18	3	5	6	4	6	2
19	1	5	2	6	3	3
20	3	6	6	7	5	6
21	6	6	6	6	6	6
22	6	6	7	6	6	7
23	6	6	5	3	4	3
24	5	4	3	4	4	3
25	2	5	6	4	2	2
26	5	4	3	4	4	3
27	4	5	4	1	4	4
28	5	6	7	6	3	2
29	6	4	3	3	6	5
30	2	1	3	6	7	4
31	4	4	3	4	4	4
32	3	3	2	5	3	4
33	6	5	4	4	6	3
34	2	1	3	6	2	4
35	5	1	6	3	7	7
36	4	4	5	3	4	5
37	4	4	5	5	6	5
38	5	4	4	4	5	6
39	4	4	5	5	6	4
40	4	5	6	3	2	4
41	5	5	4	4	5	5
42	5	5	7	4	5	2
43	4	5	6	6	5	2

44	1	1	6	6	3	4
45	6	3	5	4	5	2
46	3	3	5	5	5	4
47	3	4	5	6	4	3
48	3	5	3	3	5	4
49	7	5	6	5	3	6
50	3	5	5	5	6	5
51	3	3	2	3	3	6
52	6	2	4	1	5	5
53	2	2	4	1	2	1
54	4	5	5	3	6	3
55	3	4	3	4	5	5
56	5	5	5	6	6	4
57	6	4	3	6	4	4
58	3	5	2	5	5	6
59	7	5	6	6	5	3
60	5	6	6	6	6	4
61	6	5	5	3	4	6
62	4	5	7	6	6	5
63	5	6	6	7	6	6
64	4	4	6	6	5	2
65	4	4	7	6	5	4
66	3	6	7	2	6	3
67	2	2	2	5	6	6
68	5	6	5	6	7	5
69	3	2	5	2	6	7
70	4	3	4	3	5	7
71	3	4	4	4	3	4
72	3	2	4	2	5	2
73	3	6	5	4	6	4
74	2	3	5	5	6	6
75	4	4	4	5	4	5
76	4	4	5	5	5	6
77	5	6	6	5	5	5
78	6	4	2	6	6	6
79	6	7	5	3	1	2
80	5	6	5	4	5	4
81	6	5	3	4	4	4
82	5	4	5	4	5	5
83	3	4	3	6	5	2
84	3	7	4	5	6	3
85	6	5	4	2	3	4
86	7	6	1	5	2	4
87	5	3	4	4	6	5
88	2	2	3	4	3	2
89	5	4	5	5	5	4
90	3	4	4	3	5	2
91	7	5	3	4	4	4
92	1	6	4	3	5	3

93	3	4	2	2	4	4
94	5	4	3	4	5	3
95	7	6	6	4	4	3
96	3	4	5	5	5	3
97	4	5	4	2	2	4
98	6	4	4	4	4	3
99	2	4	5	5	6	6
100	3	4	4	3	3	4
101	5	1	3	5	6	2
102	2	4	4	4	4	4
103	2	4	4	4	4	4
104	3	4	2	6	5	4
105	4	4	5	6	6	3
106	4	5	5	5	6	2
107	4	3	4	4	4	4
108	5	3	4	5	4	6
109	1	2	6	6	4	2
110	2	5	3	4	5	4
111	2	5	2	3	3	3
112	3	2	4	6	5	5
113	4	3	4	3	4	4
114	4	5	6	5	4	4
115	3	3	4	4	5	4
116	4	3	3	4	3	4
117	2	2	2	5	6	6
118	6	5	7	4	6	2
119	4	5	5	4	3	2
120	2	2	3	3	2	3
121	6	3	4	4	6	5
122	3	5	5	3	5	6
123	5	3	3	3	5	6
124	2	3	4	3	7	3
125	6	6	6	5	5	6
126	3	7	6	6	4	3
127	3	4	5	5	5	6
128	3	5	5	6	4	4
129	5	5	6	7	6	6
130	4	3	7	6	5	6
131	4	5	6	6	7	3
132	4	6	6	5	6	5
133	6	5	4	3	2	2
134	6	6	6	4	5	4
135	6	6	3	6	7	5
136	5	6	6	5	6	5
137	4	3	4	2	4	5
138	5	4	4	5	4	6
139	5	6	5	4	6	5
140	5	3	7	4	6	2
141	3	2	3	6	4	1

142	5	6	6	6	5	6
143	5	6	5	5	6	4
144	3	4	6	4	2	4
145	5	6	4	4	5	3
146	5	6	6	6	5	5
147	3	4	4	5	4	6
148	4	2	6	3	6	6
149	5	4	5	3	4	5
150	2	3	5	4	6	7
151	6	5	5	5	5	5
152	2	3	4	7	4	3
153	4	3	4	3	3	4
154	4	3	6	3	5	6
155	2	3	4	5	7	6
156	5	3	4	7	4	2
157	3	6	6	3	6	4
158	4	5	6	5	4	4
159	6	6	7	6	7	5
160	4	4	5	5	6	6
161	3	5	4	5	4	4
162	4	4	5	5	7	6
163	3	3	3	5	6	5
164	5	4	5	4	4	5
165	4	4	3	3	5	3
166	5	6	6	4	4	5
167	5	6	5	6	6	7
168	6	4	5	4	3	3
169	5	4	6	7	3	7
170	5	5	6	6	7	5
171	4	4	3	6	4	5
172	3	5	3	6	4	2
173	3	5	3	6	7	3
174	3	6	7	6	7	6
175	5	5	5	4	4	4
176	5	6	6	7	7	6
177	5	2	6	5	1	4
178	2	3	5	5	6	3
179	5	4	5	6	6	4
180	5	2	3	5	6	4
181	4	3	3	2	2	2
182	5	4	4	5	4	5
183	4	4	4	4	4	4
184	4	4	6	4	4	3
185	5	3	4	4	5	4
186	3	4	5	3	5	5
187	3	5	6	2	5	4
188	4	4	4	5	4	3
189	4	3	7	6	3	4
190	3	5	2	5	4	4

191	5	5	3	3	4	4
192	2	3	4	6	5	2
193	6	2	6	5	7	4
194	4	3	6	5	1	6
195	4	6	4	5	5	4
196	1	2	5	3	6	5
197	6	7	5	7	5	7
198	5	6	4	6	4	5
199	3	4	3	4	6	5
200	4	5	6	4	5	6
Rata2	4,0650	4,2050	4,5700	4,4700	4,6900	4,1850

B. Tabel Anova Organoleptik Kekenyalan

Sumber Variasi	db	JK	KT	F hitung	F tabel
Perlakuan	5	61,3342	12,2668	6,1786*	2,2216
Galat	1194	2370,5250	1,9854		
Jumlah	1199	2431,8590			

Keterangan: * menunjukkan perbedaan nyata (α 5%)

C. Uji DMRT (Duncan's Multiple Range Test) pada α 5%

$$S_y = \sqrt{\frac{KTG}{r}} = \sqrt{\frac{1,9854}{200}} = 0,0996$$

Perlakuan	Rata-rata	p					Notasi
		2	3	4	5	6	
T0S100	4,0650						a
T100S0	4,1850	0,1200					ab
T20S80	4,2050	0,0200	0,1400				ab
T60S40	4,4700	0,265	0,2850	0,4050			bc
T40S60	4,5700	0,100	0,3650	0,3850	0,5050		c
T80S20	4,6900	0,1200	0,2200	0,4850	0,5050	0,6250	c
rp		2,77	2,92	3,02	3,09	3,15	
rp x Sy		0,2759	0,2908	0,3008	0,3078	0,3137	
Sy		0,0996					

Lampiran 10. Data Hasil Organoleptik *Juiceness* Sosis Ayam

A. Data Pengamatan *Juiceness*

Panelis	T0S100	T20S80	T40S60	T60S40	T80S20	T100S0
1	4	3	5	6	4	3
2	5	6	5	5	6	5
3	5	4	6	6	6	6
4	6	4	6	6	7	7
5	4	3	4	2	5	4
6	6	4	4	3	4	3
7	4	5	6	5	2	2
8	2	5	3	6	4	5
9	4	5	6	4	6	4
10	4	5	6	4	6	4
11	4	4	4	4	4	4
12	3	3	2	4	3	3
13	7	5	5	5	6	4
14	6	3	4	4	7	2
15	3	3	2	1	4	3
16	3	3	4	6	2	3
17	6	4	4	4	5	4
18	5	3	6	6	5	3
19	6	5	4	3	6	4
20	4	6	5	4	6	4
21	5	3	5	5	4	4
22	5	5	4	5	3	4
23	6	5	4	2	3	3
24	4	5	6	5	6	5
25	5	6	6	3	2	4
26	5	4	3	5	6	2
27	5	3	2	4	4	3
28	3	4	5	3	2	1
29	4	4	4	3	4	4
30	2	3	5	6	6	5
31	5	3	4	5	6	5
32	4	5	5	5	6	5
33	4	5	6	6	5	4
34	6	4	4	3	2	2
35	6	3	4	3	4	5
36	3	2	3	6	6	1
37	6	5	3	4	6	5
38	5	5	4	4	4	5
39	5	4	5	4	5	2
40	5	6	6	6	6	6
41	4	5	4	4	3	4
42	4	4	5	4	4	3
43	4	3	5	2	6	7

44	5	4	4	3	6	4
45	6	4	3	2	5	4
46	4	4	4	2	3	3
47	5	3	4	4	5	4
48	3	5	2	6	4	2
49	6	2	7	5	7	4
50	7	6	7	5	7	7
51	4	3	3	4	6	3
52	2	3	3	4	3	5
53	2	3	4	4	4	5
54	4	6	5	5	5	6
55	4	4	5	4	4	5
56	5	3	3	3	3	3
57	6	5	4	4	3	5
58	7	3	1	5	6	2
59	7	3	1	5	6	2
60	5	4	4	5	5	5
61	3	6	6	6	4	7
62	3	3	5	5	6	4
63	3	5	6	5	6	5
64	4	5	5	3	6	3
65	3	5	5	3	5	6
66	4	6	7	6	6	5
67	3	5	5	4	5	6
68	3	4	5	5	6	7
69	2	3	4	5	5	6
70	4	4	4	4	3	4
71	4	3	3	2	4	4
72	2	1	3	5	6	5
73	2	5	3	4	6	1
74	4	4	2	6	6	6
75	6	4	4	3	2	2
76	2	3	4	4	4	4
77	5	4	3	6	7	2
78	2	4	3	2	4	4
79	4	4	5	4	5	4
80	5	6	7	5	7	4
81	2	3	5	3	6	5
82	6	3	6	2	3	5
83	7	6	3	5	4	2
84	6	5	7	5	5	4
85	6	4	4	5	4	5
86	3	4	6	5	4	4
87	6	5	4	6	4	4
88	5	5	5	6	4	2
89	3	5	6	5	4	6
90	5	4	5	3	5	4
91	4	3	5	6	6	6
92	5	6	6	4	4	5

93	5	5	6	6	6	5
94	4	4	7	7	5	6
95	3	5	6	4	4	4
96	5	5	4	5	4	5
97	3	4	5	4	5	3
98	6	3	5	1	4	2
99	4	6	3	7	3	2
100	1	3	4	6	4	3
101	2	4	3	3	6	5
102	4	5	3	4	4	6
103	6	7	3	5	4	4
104	2	2	3	4	5	5
105	6	5	2	2	5	4
106	3	5	4	4	4	4
107	2	2	3	2	2	3
108	4	5	3	3	6	6
109	7	4	5	2	1	6
110	5	5	6	4	4	6
111	4	5	5	6	5	3
112	4	5	5	5	4	4
113	3	5	3	3	4	6
114	4	3	4	5	6	5
115	5	5	6	5	5	3
116	4	5	6	7	6	6
117	5	5	6	6	6	6
118	2	2	2	2	2	7
119	6	6	6	7	6	6
120	7	6	5	4	2	1
121	2	4	3	4	3	2
122	4	4	6	4	5	6
123	5	2	3	5	4	4
124	5	4	4	4	4	4
125	2	3	4	5	6	6
126	2	3	4	4	4	4
127	5	4	3	6	7	2
128	2	3	5	4	5	5
129	4	3	4	5	5	6
130	6	5	6	5	3	5
131	5	5	3	3	5	5
132	3	5	2	6	3	6
133	7	6	4	4	3	5
134	4	6	4	4	6	4
135	4	5	4	4	5	6
136	3	5	4	4	5	4
137	4	6	4	5	5	5
138	3	4	5	5	5	5
139	3	2	5	4	7	6
140	5	6	7	5	5	6
141	3	3	4	4	5	5

142	5	6	5	6	6	7
143	3	4	4	5	5	6
144	3	3	3	2	2	2
145	3	4	3	4	4	4
146	4	4	4	4	4	4
147	3	4	6	3	5	5
148	2	6	5	6	4	5
149	4	6	4	5	5	4
150	1	4	2	5	6	6
151	2	4	3	1	6	5
152	2	5	5	6	3	3
153	2	7	7	7	7	7
154	3	1	2	4	6	1
155	4	6	5	4	5	6
156	6	5	4	4	4	3
157	6	7	6	6	4	4
158	3	2	4	5	3	3
159	5	4	6	5	6	5
160	2	4	5	4	3	3
161	1	1	6	6	3	4
162	4	6	4	3	5	4
163	3	3	4	3	5	3
164	5	5	4	5	5	3
165	6	6	6	6	5	5
166	5	6	5	4	6	5
167	5	6	6	7	7	5
168	2	3	6	4	6	2
169	3	4	5	5	6	6
170	4	5	6	5	6	3
171	4	6	5	3	3	2
172	4	5	5	4	3	4
173	2	5	6	3	2	3
174	5	4	5	5	5	3
175	3	4	4	4	2	3
176	4	6	2	5	1	3
177	6	5	4	4	4	7
178	3	3	4	6	5	6
179	5	5	3	5	5	3
180	6	5	5	4	1	2
181	4	3	5	5	7	5
182	3	3	3	5	4	3
183	3	4	6	5	3	4
184	5	6	6	5	6	6
185	3	2	7	4	6	5
186	4	5	5	4	2	3
187	4	2	4	3	4	6
188	1	6	5	7	5	1
189	6	5	5	5	6	5
190	4	4	5	5	4	4

191	6	3	4	4	3	3
192	6	5	5	4	3	3
193	2	5	3	6	4	2
194	6	6	7	6	6	6
195	7	2	4	6	6	4
196	4	3	6	5	5	4
197	3	3	4	7	3	4
198	3	4	6	6	5	5
199	2	3	6	2	4	4
200	7	4	5	5	4	3
Rata2	4,1350	4,2600	4,4900	4,4500	4,6200	4,2100

B. Tabel Anova Organoleptik *Juiceness*

Sumber Variasi	db	JK	KT	F hitung	F tabel
Perlakuan	5	35,1442	7,0288	3,7742*	2,2216
Galat	1194	2223,6150	1,8623		
Jumlah	1199	2258,7590			

Keterangan: * menunjukkan perbedaan nyata (α 5%)

C. Uji DMRT (Duncan's Multiple Range Test) pada α 5%

$$S_y = \sqrt{\frac{KTG}{r}} = \sqrt{\frac{1,8623}{200}} = 0,0965$$

Perlakuan	Rata-rata	p					Notasi
		2	3	4	5	6	
T0S100	4,1350						a
T100S0	4,2100	0,0750					ab
T20S80	4,2600	0,0500	0,1250				ab
T60S40	4,4500	0,1900	0,2400	0,3150			bc
T40S60	4,4900	0,0400	0,2300	0,2800	0,3550		bc
T80S20	4,6200	0,1300	0,1700	0,3600	0,4100	0,4850	c
rp		2,77	2,92	3,02	3,09	3,15	
rp x Sy		0,2673	0,2818	0,2914	0,2982	0,3040	
Sy		0,0965					

Lampiran 11. Data Hasil Organoleptik Rasa Sosis Ayam

A. Data Pengamatan Rasa

1	6	2	5	6	6	1
2	5	6	5	3	5	6
3	5	5	7	4	5	6
4	6	6	6	4	2	7
5	4	4	5	4	6	5
6	4	4	4	5	5	6
7	3	5	6	4	4	4
8	2	5	3	3	5	3
9	7	3	6	8	6	6
10	4	4	4	3	3	2
11	6	4	5	3	5	3
12	6	4	5	1	1	7
13	3	5	5	6	6	6
14	3	3	7	5	3	2
15	6	4	6	3	2	2
16	6	5	6	5	6	4
17	7	6	5	4	3	4
18	5	6	7	4	6	4
19	4	6	6	3	5	2
20	6	6	6	6	4	6
21	6	3	5	4	4	4
22	5	5	4	4	4	6
23	7	7	6	3	2	2
24	5	2	4	3	3	2
25	5	4	3	5	2	2
26	5	4	3	4	4	3
27	6	4	3	3	4	4
28	2	3	5	6	5	5
29	4	5	3	6	3	4
30	2	2	3	2	3	1
31	5	3	4	6	4	6
32	6	7	4	5	5	4
33	4	6	4	5	3	3
34	6	6	6	2	3	1
35	5	4	5	2	1	7
36	6	1	1	4	5	6
37	6	5	5	6	6	4
38	5	6	5	5	6	2
39	5	3	5	6	6	5
40	4	6	6	4	4	4
41	5	5	5	3	1	1
42	4	3	2	5	5	2
43	4	6	3	4	5	4
44	5	6	5	2	1	1
45	5	2	7	4	4	4

46	6	4	5	4	7	3
47	5	3	4	7	7	3
48	7	6	5	6	5	5
49	6	4	7	7	5	4
50	7	1	7	3	6	5
51	4	3	2	5	4	6
52	2	4	7	5	3	1
53	6	5	4	4	3	2
54	4	6	7	3	5	4
55	3	4	5	6	5	4
56	5	4	5	4	4	3
57	6	4	4	5	4	3
58	4	2	5	2	6	6
59	6	4	7	7	3	3
60	4	7	3	5	6	5
61	5	6	5	5	4	4
62	6	7	7	6	5	4
63	5	6	5	6	4	6
64	4	5	5	4	5	6
65	3	5	6	6	5	5
66	4	6	7	6	6	4
67	4	6	6	6	5	7
68	6	6	6	5	6	5
69	5	6	6	5	6	5
70	2	4	7	7	6	6
71	4	5	4	4	4	4
72	7	6	4	5	5	5
73	7	4	3	4	6	5
74	6	4	2	7	5	6
75	5	6	4	5	5	4
76	6	5	6	5	5	6
77	5	3	4	6	6	3
78	5	5	5	6	2	5
79	4	5	6	5	1	4
80	5	6	5	4	4	5
81	3	5	5	3	4	3
82	5	4	4	4	5	4
83	7	6	5	3	6	4
84	6	4	4	4	6	5
85	6	3	5	4	2	2
86	5	6	6	5	3	2
87	6	6	6	5	6	4
88	6	1	4	4	5	3
89	4	5	6	2	2	2
90	3	4	5	5	6	1
91	5	5	6	2	1	4
92	5	6	6	6	2	2
93	6	6	6	2	5	5
94	6	4	7	5	4	3

95	3	5	6	4	6	3
96	4	3	4	5	5	4
97	7	4	5	3	2	2
98	4	6	5	3	2	2
99	5	4	6	7	6	5
100	5	5	6	4	3	4
101	2	4	5	5	6	2
102	5	4	3	5	2	5
103	6	3	2	5	2	5
104	5	4	4	4	2	5
105	7	3	6	5	6	4
106	7	4	3	7	6	2
107	4	3	4	7	6	2
108	6	5	7	4	5	6
109	4	6	5	3	2	3
110	4	7	5	6	6	5
111	7	5	5	6	6	6
112	7	5	7	5	6	6
113	5	6	5	4	3	2
114	4	5	4	6	6	6
115	6	7	7	5	6	5
116	6	4	4	5	3	4
117	6	5	7	5	6	5
118	4	7	4	4	3	2
119	6	4	5	3	4	2
120	6	4	3	5	2	4
121	2	4	5	3	6	5
122	5	4	5	5	3	3
123	4	3	4	6	3	5
124	6	3	4	6	6	4
125	5	6	5	4	5	5
126	6	5	6	5	4	2
127	5	3	4	6	3	3
128	6	6	6	4	4	4
129	4	4	4	5	3	3
130	5	7	6	3	2	4
131	5	5	3	1	2	3
132	6	5	6	6	5	6
133	7	6	4	4	3	2
134	6	6	4	5	4	6
135	5	3	6	6	5	6
136	4	5	4	5	5	5
137	5	4	2	4	3	2
138	7	7	6	6	4	5
139	2	1	4	5	5	5
140	6	7	6	6	2	3
141	7	6	6	4	4	1
142	5	6	5	6	5	5
143	5	5	5	5	5	5

144	4	5	4	6	3	4
145	6	4	3	5	4	3
146	2	6	6	6	6	6
147	4	3	4	4	4	5
148	6	5	5	3	4	3
149	4	6	3	4	3	4
150	5	5	4	5	3	2
151	5	3	6	6	5	6
152	4	4	4	3	4	1
153	7	6	7	4	5	5
154	4	4	5	5	4	6
155	6	6	4	3	6	7
156	4	6	4	4	2	3
157	4	6	7	5	7	5
158	4	6	4	5	3	3
159	5	5	6	5	6	5
160	5	5	3	6	7	4
161	2	5	3	5	2	2
162	6	5	5	6	3	5
163	5	5	7	6	5	5
164	2	2	5	2	1	4
165	5	6	6	3	4	4
166	5	3	2	4	4	5
167	7	7	3	6	6	7
168	5	6	5	5	3	2
169	3	4	5	2	5	7
170	6	4	5	6	6	5
171	5	7	4	5	6	5
172	6	4	5	5	4	3
173	3	3	6	6	5	4
174	5	5	5	7	6	7
175	5	3	5	4	4	4
176	6	1	2	7	5	6
177	3	4	5	3	4	6
178	6	6	5	4	4	3
179	4	3	5	4	5	2
180	6	5	5	7	5	5
181	4	5	7	4	4	4
182	6	6	6	3	3	3
183	5	4	5	6	5	5
184	6	7	6	5	4	3
185	5	4	7	4	5	4
186	4	6	6	5	5	3
187	4	4	6	6	5	3
188	2	1	1	5	4	4
189	3	7	3	6	4	3
190	4	4	5	1	4	2
191	4	3	2	4	4	5
192	6	5	4	5	4	3

193	4	4	4	4	6	4
194	6	7	6	7	3	2
195	5	3	5	5	5	4
196	4	5	6	5	3	4
197	4	5	5	5	6	7
198	3	4	5	6	3	4
199	1	4	3	5	4	6
200	7	6	6	6	4	5
Rata2	4,9000	4,6650	4,8850	4,6450	4,2850	4,0350

B. Tabel Anova Organoleptik Rasa

Sumber Variasi	db	JK	KT	F hitung	F tabel
Perlakuan	5	118,0442	23,6088	11,9131*	2,2216
Galat	1194	2366,2150	1,9818		
Jumlah	1199	2484,2590			

Keterangan: * menunjukkan perbedaan nyata (α 5%)

C. Uji DMRT (Duncan's Multiple Range Test) pada α 5%

$$S_y = \sqrt{\frac{KTG}{r}} = \sqrt{\frac{1,9818}{200}} = 0,0995$$

Perlakuan	Rata-rata	p					Notasi*
		2	3	4	5	6	
T100S0	4,0350						a
T80S20	4,2850	0,2500					a
T60S40	4,6450	0,3600	0,6100				b
T20S40	4,6650	0,0200	0,3800	0,6300			b
T40S60	4,8850	0,2200	0,2400	0,6000	0,8500		b
T0S100	4,9000	0,0150	0,2350	0,2550	0,6150	0,8650	b
rp		2,77	2,92	3,02	3,09	3,15	
rp x Sy		0,2756	0,2905	0,3005	0,3075	0,3134	
Sy		0,0995					

Lampiran 12. Hasil Uji Pembobotan

No	Variabel	BV	BN	T0S100		T20S80		T40S60		T60S40		T80S20		T100S0	
				Ne	Nh	Ne	Nh	Ne	Nh	Ne	Nh	Ne	Nh	Ne	Nh
1	Organoleptik Kekenyalan	1	0,1613	0	0	0,2240	0,0361	0,8080	0,1303	0,6480	0,1045	1	0,1613	0,1920	0,0310
2	Organoleptik Juiceness	1	0,1613	0	0	0,2577	0,0416	0,7320	0,1181	0,6495	0,1048	1	0,1613	0,1546	0,0249
3	Organoleptik Rasa	1	0,1613	1	0,1613	0,7283	0,1175	0,9827	0,1585	0,7052	0,1137	0,2890	0,0466	0	0
4	Stabilitas emulsi	0,9	0,1452	0	0	0,1095	0,0159	0,5097	0,0741	0,7637	0,1109	0,9460	0,1374	1	0,1452
5	Organoleptik Kenampakan	0,8	0,1290	0,7761	0,1001	1	0,1290	0,7226	0,0931	0,5598	0,0722	0,5097	0,0658	0	0
6	Kekerasan	0,8	0,1290	0	0	0,0613	0,0791	0,2044	0,0264	0,2919	0,0377	0,4926	0,0635	1	0,1290
7	WHC	0,7	0,1129	0	0	0,2379	0,0268	0,3947	0,0446	0,5717	0,0645	0,5894	0,0665	1	0,1129
Total		6,2			0,2614		0,4460		0,6451		0,6083		0,7024		0,4430

Keterangan:

BV = Berat Variabel

ne = Nilai efektifitas

np = nilai perlakuan

nb = Nilai terbaik

BN = Bobot Normal

nh = Nilai hasil

nj = Nilai terjelek

$$BN = \frac{BV}{\text{Total BV}}$$

$$ne = \frac{np - nj}{nb - nj}$$

$$nh = ne \times BN$$

Contoh perhitungan uji pembobotan

Organoleptik kekenyalan

$$BN = \frac{BV}{\text{Total BV}} = \frac{1}{6.2000} = 0,1613$$

Untuk perlakuan T0S100

$$ne = \frac{np - nj}{nb - nj} = \frac{4,065 - 4,065}{4,690 - 4,065} = 0$$

$$nh = ne \times BN = 0 \times 0,1613 = 0$$

Untuk perlakuan T20S80

$$ne = \frac{np - nj}{nb - nj} = \frac{4,205 - 4,065}{4,690 - 4,065} = 0,2240$$

$$nh = ne \times BN = 0,2240 \times 0,1613 = 0,0361$$

Untuk perlakuan T40S60

$$ne = \frac{np - nj}{nb - nj} = \frac{4,570 - 4,065}{4,690 - 4,065} = 0,8080$$

$$nh = ne \times BN = 0,8080 \times 0,1613 = 0,1303$$

Untuk perlakuan T60S40

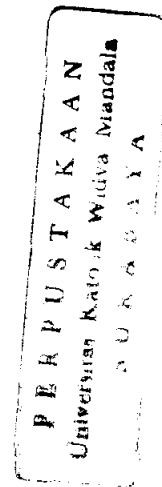
$$ne = \frac{np - nj}{nb - nj} = \frac{4,470 - 4,065}{4,690 - 4,065} = 0,6480$$

$$nh = ne \times BN = 0,6480 \times 0,1613 = 0,1045$$

Untuk perlakuan T80S20

$$ne = \frac{np - nj}{nb - nj} = \frac{4,690 - 4,065}{4,690 - 4,065} = 1$$

$$nh = ne \times BN = 1 \times 0,1613 = 0,1613$$



Untuk perlakuan T100S0

$$n_e = \frac{np - n_j}{nb - n_j} = \frac{4,185 - 4,065}{4,690 - 4,065} = 0,192$$

$$n_h = n_e \times BN = 0,1920 \times 0,1613 = 0,0310$$