

Lampiran 3. Analisa RAL Kadar PROTEIN Kerupuk Puli Ikan Kuniran

Analisa Kadar Protein (Daging Ikan)

Perlakuan	Ulangan			Total	Rerata
	I	II	III		
A1	10,41	10,89	10,60	31,90	10,63
A2	11,31	11,08	11,90	34,29	11,43
A3	12,76	12,86	12,90	38,52	12,84
TOTAL	34,83	35,40	35,40	104,71	34,90

$$FK = 1218,24$$

Sidik Ragam

SK	db	JK	KT	F Hitung	F5%	F1%
Perlakuan	2	7,49	3,75	54,03**	4,74	9,55
Galat	7	0,49	0,07			
Total	9	7,98	0,89			

$$SED = 0,214994$$

$$BNT 5\% = 0,495775$$

$$BNT 1\% = 0,721303$$

Analisa Kadar Protein (Sari Ikan)

Perlakuan	Ulangan			Total	Rerata
	I	II	III		
B1	8,410	8,890	8,600	25,900	8,633
B2	9,310	9,080	9,900	28,290	9,430
B3	10,190	10,670	10,100	30,960	10,320
TOTAL	27,910	27,640	27,600	85,150	27,383

$$FK = 1182,21$$

Sidik Ragam

SK	db	JK	KT	F Hitung	F5%	F1%
Perlakuan	2	44,50	22,25	22,5682**	4,74	9,55
Galat	7	38,91	5,56			
Total	9	5,59	0,62			

$$SED = 0,251$$

$$BNT 5\% = 1,191$$

$$BNT 1\% = 2,399$$

Uji BNT Kadar Protein

Penambahan Daging	A1 =10,45	A2 =11,343	A3 =12,320	
A1 =10,45	-	-	-	a
A2 =11,343	0.893	-	-	ab
A3 = 12,32	1.87	0.977	-	b
Penambahan Sari Ikan	B1 = 8,633	B2 = 9,430	B3 = 10,320	
B1 =8,633	-	-	-	a
B2 =9,430	0,797	-	-	Ab
B3 = 10,320	1,687	0,89	-	b



Lampiran 4. Analisa RAL Kadar Air Kerupuk Puli Ikan Kuniran

Analisa Kadar Air (Daging Ikan)

Perlakuan	Ulangan			Total	Rerata
	I	II	III		
A1	2,5	2,75	2,6	7,85	2,62
A2	2,8	2,95	2,75	8,50	2,83
A3	3,15	3,4	3,3	9,85	3,28
TOTAL	8,45	9,10	8,65	26,20	8,73

FK = 76,27

Sidik Ragam

SK	db	JK	KT	F Hitung	F5%	F1%
Perlakuan	2	0,69	0,35	28,36**	4,74	9,55
Galat	7	0,09	0,01			
Total	9	0,78	0,09			

SED 0,090

BNT 5% 0,208

BNT 1% 0,303

Analisa Kadar Air (Sari Ikan)

Perlakuan	Ulangan			Total	Rerata
	I	II	III		
B1	2,6	2,45	2,7	7,75	2,58
B2	2,95	2,7	2,8	8,45	2,82
B3	3,27	3,08	3,1	9,45	3,15
TOTAL	8,82	8,23	8,60	25,65	8,55

FK = 73,10

Sidik Ragam

SK	db	JK	KT	F Hitung	F5%	F1%
Perlakuan	2	0,49	0,24	19,98**	4,74	9,55
Galat	7	0,09	0,01			
Total	9	0,57	0,06			

SED 0,090

BNT 5% 0,208

BNT 1% 0,302

BNT Pengaruh Penambahan Daging Dan Sari Ikan Kuniran Terhadap Kadar Air

Penambahan Daging	A1 =2,617	A2 = 2,833	A3 = 3,283	Notasi
A1 = 2,617	-	-	-	a
A2 = 2,833	0,216	-	-	ab
A3 =3,283	0,666	0,450	-	b
Penambahan Sari Ikan	B1 =2,583	B2 = 2,817	B3 =3,150	
B1 = 2,583	-	-	-	a
B2 = 2,817	0,234	-	-	ab
B3 =3,150	0.567	0,317	-	b

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Lampiran 5. Analisa RAL Kadar Abu Kerupuk Puli Ikan Kuniran

Analisa Kadar Abu (Daging)

Perlakuan	Ulangan			Total	Rerata
	I	II	III		
A1	0,870	0,950	0,910	2,730	0,910
A2	1,150	1,030	1,090	3,270	1,090
A3	1,430	1,300	1,360	4,090	1,363
TOTAL	3,450	3,280	3,360	10,090	3,363

FK = 11,31

Sidik Ragam

SK	db	JK	KT	F Hitung	F5%	F1%
Perlakuan	2	0,31	0,15631	57,9953**	4,74	9,55
Galat	7	0,02	0,0027			
Total	9	0,33	0,15901			

SED 0,043

BNT 5% 0,203

BNT 1% 0,410

Analisa Kadar Abu (Sari ikan)

Perlakuan	Ulangan			Total	Rerata
	I	II	III		
B1	0,750	0,800	0,770	2,320	0,773
B2	1,020	1,080	1,050	3,150	1,050
B3	1,250	1,200	1,220	3,670	1,223
TOTAL	3,020	3,080	3,040	9,140	3,047

FK = 9,28

Sidik Ragam

SK	db	JK	KT	F Hitung	F5%	F1%
Perlakuan	2	0,31	0,15454	249,6487**	4,74	9,55
Galat	7	0,00	0,00062			
Total	9	0,31	0,15516			

SED 0,021

BNT 5% 0,100

BNT 1% 0,201

Uji BNT Kadar Abu

Penambahan Daging	A1= 0,91	A2 =1,09	A3 = 1,363	Notasi
A1 =0,91	-	-	-	a
A2 =1,09	0,18	-	-	ab
A3 =1,363	0,453	0,273	-	b
Penambahan Sari Ikan	B1 =0,773	B2 = 1,05	B3 =1,223	
B1 =0,773	-	-	-	a
B2 =1,05	0,277	-	-	ab
B3 =1,223	0,45	0,173	-	b

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Lampiran 6. Analisa RAL Kadar Lemak Kerupuk Puli Ikan Kuniran

Analisa kadar lemak (Daging)

Perlakuan	Ulangan			Total	Rerata
	I	II	III		
A1	2,630	2,450	2,540	7,620	2,540
A2	3,250	3,400	3,320	9,970	3,323
A3	3,700	3,850	3,770	11,320	3,773
TOTAL	9,580	9,700	9,630	28,910	9,637

$$FK = 92,87$$

Sidik Ragam

SK	db	JK	KT	F Hitung	F5%	F1%
Perlakuan	2	2,34	1,16861111	211,1948**	4,74	9,55
Galat	7	0,04	0,00553333			
Total	9	2,38	1,17414444			

$$SED = 0,060$$

$$BNT 5\% = 0,286$$

$$BNT 1\% = 0,577$$

Analisa kadar lemak (Sari ikan)

Perlakuan	Ulangan			Total	Rerata
	I	II	III		
B1	2,250	2,100	2,170	6,520	2,173
B2	2,630	2,750	2,690	8,070	2,690
B3	3,150	3,050	3,100	9,300	3,100
TOTAL	8,030	7,900	7,960	23,890	7,963

$$FK = 63,41$$

Sidik Ragam

SK	db	JK	KT	F Hitung	F5%	F1%
Perlakuan	2	1,29	0,64687778	192,9607**	4,74	9,55
Galat	7	0,02	0,00335238			
Total	9	1,32	0,65023016			

$$SED = 0,047$$

$$BNT 5\% = 0,224$$

$$BNT 1\% = 0,451$$

BNT Pengaruh Penambahan Daging Ikan Mentah Dan Daging Ikan Rebus Terhadap Kadar Lemak

Penambahan Daging	A1 = 2,54	A2 = 3,323	A3 = 3,773	Notasi
A1 = 2,54	-	-	-	a
A2 = 3,323	0,783	-	-	ab
A3 = 3,773	1,233	0,45	-	b
Penambahan Sari ikan	A1 = 2,173	B2 = 2,69	B3 = 3,1	
B1 = 2,173	-	-	-	a
B2 = 2,69	0,517	-	-	ab
B3 = 3,1	0,927	0,41	-	b

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Lampiran 7. Analisa RAL Nilai Aw Kerupuk Puli Ikan Kuniran

Analisa aw

Perlakuan (Daging)	Ulangan			Total	Rerata
	I	II	III		
A1	0,801	0,8	0,794	2,395	0,798
A2	0,802	0,803	0,804	2,409	0,803
A3	0,808	0,805	0,806	2,419	0,806
Total	2,411	2,408	2,404	7,223	2,408

$$FK = 5,79686$$

Sidik Ragam

SK	db	JK	KT	F Hitung	F5%	F1%
Perlakuan	2	0,00010	0,00005	9,59748**	2,66	4,03
Galat	7	0,00004	0,00001			
Total	9	0,00013	0,00001			

$$SED = 0,001834$$

$$F 5\% = 0,00423$$

$$F 1\% = 0,006154$$

Analisa aw

Perlakuan (Sari Ikan)	Ulangan			Total	Rerata
	I	II	III		
B1	0,793	0,795	0,794	2,382	0,794
B2	0,804	0,803	0,802	2,409	0,803
B3	0,808	0,807	0,806	2,421	0,807
Total	2,405	2,405	2,402	7,212	2,404

$$FK = 5,77922$$

Sidik Ragam

SK	db	JK	KT	F Hitung	F5%	F1%
Perlakuan	2	0,00027	0,00013	155,16667**	2,66	4,03
Galat	7	0,00001	0,00000			
Total	9	0,00027	0,00003			

$$SED = 0,0007559$$

$$F 5\% = 0,0017432$$

$$F 1\% = 0,0025361$$

BNT Pengaruh Penambahan Daging Ikan Dan Sari Ikan Terhadap Aw

Penambahan Daging	A1 = 0,798	A2 = 0,803	A3 = 0,806	Notasi
A1 = 0,798	-	-	-	a
A2 = 0,803	0,005	-	-	ab
A3 = 0,806	0,008	0,003	-	b
Penambahan Sari Ikan	B1 = 0,794	B2 = 0,803	B3 = 0,807	
B1 = 0,794	-	-	-	a
B2 = 0,803	0,009	-	-	ab
B3 = 0,807	0,013	0,004	-	b



Lampiran 8. Analisa RAL Daya Kembang Kerupuk Puli Ikan Kuniran

Analisa Daya Kembang (Daging)

Perlakuan	Ulangan			Total	Rerata
	I	II	III		
A1	230,230	210,250	200,150	640,630	213,543
A2	254,450	183,250	234,810	672,510	224,170
A3	294,140	345,080	313,650	952,870	317,623
TOTAL	778,820	738,580	748,610	2266,010	755,337

$$FK = 570533,48$$

Sidik Ragam

SK	db	JK	KT	F Hitung	F5%	F1%
Perlakuan	2	19679,10	9839,54898	15,32528**	4,74	9,55
Galat	7	4494,33	642,047076			
Total	9	24173,43	10481,5961			

SED 20,69

F 5% 47,71

F 1% 69,41

Analisa Daya Kembang (Sari Ikan)

Perlakuan	Ulangan			Total	Rerata
	I	II	III		
B1	289,760	321,250	350,390	961,400	320,467
B2	368,710	402,670	469,910	1241,290	413,763
B3	472,150	431,210	479,520	1382,880	460,960
TOTAL	1130,620	1155,130	1299,820	3585,570	1195,190

$$FK = 1428479,14$$

Sidik Ragam

SK	db	JK	KT	F Hitung	F5%	F1%
Perlakuan	2	30670,17	15335,085	12,6304**	4,74	9,55
Galat	7	8498,98	1214,14059			
Total	9	39169,15	16549,2256			

SED 28,45

F 5% 65,61

F 1% 95,45

Uji BNT Daya Kembang

Penambahan Daging	A1= 213,543	A2 =224,17	A3 = 317,623	Notasi
A1 =213,543	-	-	-	a
A2 =224,17	10,627	-	-	ab
A3 =317,623	104,08	93,453	-	b
Penambahan Sari Ikan	B1 = 320,467	B2 = 413,763	B3 =460,96	
B1 =320,467	-	-	-	a
B2 =413,763	93,296	-	-	ab
B3 =460,96	140,493	47,197	-	b

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Lampiran 9. Analisa RAL Daya Patah Kerupuk Puli Ikan Kuniran

Analisa Daya Patah

Perlakuan	Ulangan			Total	Rerata
	I	II	III		
A1	0,815	0,812	0,813	2,44	0,813
A2	0,826	0,912	0,925	2,663	0,888
A3	0,941	0,951	1,032	2,924	0,975
Total	2,582	2,675	2,77	8,027	2,676

$$FK = 7,15919$$

Sidik Ragam

SK	db	JK	KT	F Hitung	F5%	F1%
Perlakuan	2	0,03912	0,01956	12,70931**	2,66	4,03
Galat	7	0,01077	0,00154			
Total	9	0,04990	0,00554			

$$SED = 0,032033$$

$$F 5\% = 0,073867$$

$$F 1\% = 0,10747$$

Analisa Daya Patah

Perlakuan	Ulangan			Total	Rerata
	I	II	III		
B1	0,85	0,82	0,83	2,5	0,833
B2	0,95	0,86	0,94	2,75	0,917
B3	0,95	0,92	1,03	2,9	0,967
Total	2,75	2,6	2,8	8,15	2,717

$$FK = 7,38028$$

Sidik Ragam

SK	db	JK	KT	F Hitung	F5%	F1%
Perlakuan	2	0,02722	0,01361	8,07439**	2,66	4,03
Galat	7	0,01180	0,00169			
Total	9	0,03902	0,00434			

$$SED = 0,033523$$

$$F 5\% = 0,077305$$

$$F 1\% = 0,112471$$

Uji BNT Daya Patah

Penambahan Daging	A1 = 0,813	A2 = 0,888	A3 = 0,975	Notasi
A1 = 0,813	-	-	-	a
A2 = 0,888	0,075	-	-	ab
A3 = 0,975	0,162	0,087	-	b
Penambahan Sari Ikan	B1 = 0,833	B2 = 0,917	B3 = 0,967	
B1 = 0,833	-	-	-	a
B2 = 0,917	0,104	-	-	ab
B3 = 0,967	0,134	0,079	-	b

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Lampiran 10. Analisa Uji Organoleptik Rasa

Panelis	A1	rank1	A2	rank2	A3	rank3	B1	rank4	B2	rank5	B3	rank6
1	3	1,50	4	11,50	6	14,00	6	6,50	6	10,00	6	16,50
2	5	11,50	3	4,00	5	10,00	7	15,50	6	10,00	5	12,00
3	3	1,50	3	4,00	4	5,00	8	21,50	6	10,00	5	12,00
4	7	22,50	7	22,50	7	20,50	8	21,50	7	18,00	6	16,50
5	4	6,00	4	11,50	3	1,00	6	6,50	7	18,00	8	23,00
6	5	11,50	4	11,50	7	20,50	6	6,50	4	2,00	3	1,00
7	7	22,50	3	4,00	4	5,00	6	6,50	7	18,00	4	5,50
8	4	6,00	3	4,00	4	5,00	8	21,50	7	18,00	7	19,50
9	6	16,50	3	4,00	7	20,50	7	15,50	7	18,00	8	23,00
10	4	6,00	3	4,00	6	14,00	7	15,50	7	18,00	8	23,00
11	4	6,00	4	11,50	6	14,00	7	15,50	7	18,00	5	12,00
12	7	22,50	3	4,00	4	5,00	6	6,50	7	18,00	4	5,50
13	4	6,00	4	11,50	7	20,50	7	15,50	8	24,00	4	5,50
14	7	22,50	4	11,50	4	5,00	6	6,50	7	18,00	8	23,00
15	6	16,50	7	22,50	6	14,00	7	15,50	5	5,00	5	12,00
16	4	6,00	6	19,50	7	20,50	6	6,50	4	2,00	4	5,50
17	5	11,50	8	25,00	5	10,00	9	24,50	4	2,00	4	5,50
18	5	11,50	4	11,50	4	5,00	7	15,50	6	10,00	6	16,50
19	7	22,50	5	17,00	4	5,00	5	1,00	5	5,00	4	5,50
20	4	6,00	5	17,00	8	25,00	6	6,50	6	10,00	5	12,00
21	6	16,50	7	22,50	7	20,50	9	24,50	6	10,00	7	19,50
22	6	16,50	4	11,50	5	10,00	6	6,50	8	24,00	4	5,50
23	6	16,50	5	17,00	7	20,50	6	6,50	5	5,00	4	5,50
24	6	16,50	7	22,50	6	14,00	8	21,50	6	10,00	6	16,50
25	7	22,50	6	19,50	7	20,50	7	15,50	8	24,00	8	23,00
TOTAL	132	325	116	325	140	325	171	325	156	325	138	325
RERATA	5,28	13	4,64	13	5,6	13	6,84	13	6,24	13	5,52	13

Kruskal-Wallis Test: A1 versus rank1

Kruskal-Wallis Test on A1

rank1	N	Median	Ave Rank	Z
1,5	2	3,000	1,5	-2,30
6,0	7	4,000	6,0	-2,97
11,5	4	5,000	11,5	-0,44
16,5	6	6,000	16,5	1,34
22,5	6	7,000	22,5	3,63
Overall	25		13,0	

H = 22,74 DF = 4 P = 0,000

H = 24,00 DF = 4 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: A2 versus rank2

Kruskal-Wallis Test on A2

rank2	N	Median	Ave Rank	Z
4,0	7	3,000	4,0	-3,81
11,5	8	4,000	11,5	-0,70
17,0	3	5,000	17,0	1,00
19,5	2	6,000	19,5	1,30
22,5	4	7,000	22,5	2,82
25,0	1	8,000	25,0	1,66
Overall	25		13,0	

H = 22,57 DF = 5 P = 0,000

H = 24,00 DF = 5 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: A3 versus rank3

Kruskal-Wallis Test on A3

rank3	N	Median	Ave Rank	Z
1,0	1	3,000	1,0	-1,66
5,0	7	4,000	5,0	-3,39
10,0	3	5,000	10,0	-0,75
14,0	5	6,000	14,0	0,34
20,5	8	7,000	20,5	3,50
25,0	1	8,000	25,0	1,66
Overall	25		13,0	

H = 22,49 DF = 5 P = 0,000

H = 24,00 DF = 5 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: B1 versus rank4

Kruskal-Wallis Test on B1

rank4	N	Median	Ave Rank	Z
1,0	1	5,000	1,0	-1,66
6,5	10	6,000	6,5	-3,61
15,5	8	7,000	15,5	1,17
21,5	4	8,000	21,5	2,52
24,5	2	9,000	24,5	2,30
Overall	25		13,0	

H = 21,60 DF = 4 P = 0,000
 H = 24,00 DF = 4 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: B2 versus rank5

Kruskal-Wallis Test on B2

rank5	N	Median	Ave Rank	Z
2	3	4,000	2,0	-2,76
5	3	5,000	5,0	-2,01
10	7	6,000	10,0	-1,27
18	9	7,000	18,0	2,55
24	3	8,000	24,0	2,76
Overall	25		13,0	

H = 22,26 DF = 4 P = 0,000
 H = 24,00 DF = 4 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: B3 versus rank6

Kruskal-Wallis Test on B3

rank6	N	Median	Ave Rank	Z
1,0	1	3,000	1,0	-1,66
5,5	8	4,000	5,5	-3,50
12,0	5	5,000	12,0	-0,34
16,5	4	6,000	16,5	1,04
19,5	2	7,000	19,5	1,30
23,0	5	8,000	23,0	3,40
Overall	25		13,0	

H = 22,75 DF = 5 P = 0,000
 H = 24,00 DF = 5 P = 0,000 (adjusted for ties)

Lampiran 11. Analisa Uji Organoleptik Aroma

Panelis	A1	rank1	A2	rank2	A3	rank3	B1	rank4	B2	rank5	B3	rank6
1	3	4,00	3	5,00	5	12,00	7	14,00	6	11,00	6	13,00
2	4	11,50	4	11,00	5	12,00	7	14,00	6	11,00	5	6,00
3	3	4,00	3	5,00	4	5,50	8	23,50	7	19,50	7	21,00
4	5	17,50	6	21,50	6	19,00	7	14,00	6	11,00	6	13,00
5	4	11,50	3	5,00	6	19,00	5	2,00	4	2,00	6	13,00
6	3	4,00	3	5,00	4	5,50	7	14,00	7	19,50	6	13,00
7	4	11,50	4	11,00	4	5,50	6	4,50	6	11,00	4	2,50
8	3	4,00	3	5,00	5	12,00	7	14,00	7	19,50	7	21,00
9	4	11,50	3	5,00	3	1,50	7	14,00	7	19,50	8	24,50
10	3	4,00	3	5,00	3	1,50	7	14,00	6	11,00	8	24,50
11	4	11,50	3	5,00	5	12,00	7	14,00	7	19,50	5	6,00
12	3	4,00	5	15,50	4	5,50	4	1,00	5	5,00	4	2,50
13	4	11,50	3	5,00	6	19,00	7	14,00	4	2,00	6	13,00
14	4	11,50	6	21,50	6	19,00	6	4,50	4	2,00	6	13,00
15	4	11,50	7	25,00	5	12,00	6	4,50	6	11,00	4	2,50
16	7	23,00	4	11,00	7	23,50	7	14,00	6	11,00	6	13,00
17	7	23,00	5	15,50	4	5,50	8	23,50	7	19,50	6	13,00
18	5	17,50	5	15,50	6	19,00	6	4,50	6	11,00	6	13,00
19	5	17,50	5	15,50	4	5,50	7	14,00	7	19,50	5	6,00
20	7	23,00	5	15,50	5	12,00	7	14,00	5	5,00	4	2,50
21	3	4,00	5	15,50	7	23,50	8	23,50	5	5,00	6	13,00
22	5	17,50	6	21,50	6	19,00	7	14,00	6	11,00	6	13,00
23	6	20,00	6	21,50	5	12,00	7	14,00	7	19,50	7	21,00
24	7	23,00	6	21,50	8	25,00	7	14,00	8	24,50	7	21,00
25	7	23,00	6	21,50	6	19,00	8	23,50	8	24,50	7	21,00
TOTAL	114	325,00	112	325,00	129	325,00	170	325,00	153	325,00	148	325,00
RERATA	4,56	13,00	4,48	13,00	5,16	13,00	6,8	13,00	6,12	13,00	5,92	13,00

Kruskal-Wallis Test: A1 versus rank1

Kruskal-Wallis Test on A1

rank1	N	Median	Ave Rank	Z
4,0	7	3,000	4,0	-3,81
11,5	8	4,000	11,5	-0,70
17,5	4	5,000	17,5	1,33
20,0	1	6,000	20,0	0,97
23,0	5	7,000	23,0	3,40
Overall	25		13,0	

H = 22,43 DF = 4 P = 0,000

H = 24,00 DF = 4 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: A2 versus rank2

Kruskal-Wallis Test on A2

rank2	N	Median	Ave Rank	Z
5,0	9	3,000	5,0	-4,08
11,0	3	4,000	11,0	-0,50
15,5	6	5,000	15,5	0,95
21,5	6	6,000	21,5	3,25
25,0	1	7,000	25,0	1,66
Overall	25		13,0	

H = 22,21 DF = 4 P = 0,000

H = 24,00 DF = 4 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: A3 versus rank3

Kruskal-Wallis Test on A3

rank3	N	Median	Ave Rank	Z
1,5	2	3,000	1,5	-2,30
5,5	6	4,000	5,5	-2,86
12,0	7	5,000	12,0	-0,42
19,0	7	6,000	19,0	2,54
23,5	2	7,000	23,5	2,10
25,0	1	8,000	25,0	1,66
Overall	25		13,0	

H = 22,62 DF = 5 P = 0,000

H = 24,00 DF = 5 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: B1 versus rank4

Kruskal-Wallis Test on B1

rank4	N	Median	Ave Rank	Z
1,0	1	4,000	1,0	-1,66
2,0	1	5,000	2,0	-1,53
4,5	4	6,000	4,5	-2,52
14,0	15	7,000	14,0	0,83
23,5	4	8,000	23,5	3,11
Overall	25		13,0	

H = 18,65 DF = 4 P = 0,001

$H = 24,00$ $DF = 4$ $P = 0,000$ (adjusted for ties)

Kruskal-Wallis Test: B2 versus rank5

Kruskal-Wallis Test on B2

rank5	N	Median	Ave Rank	Z
2,0	3	4,000	2,0	-2,76
5,0	3	5,000	5,0	-2,01
11,0	9	6,000	11,0	-1,02
19,5	8	7,000	19,5	3,03
24,5	2	8,000	24,5	2,30
Overall	25		13,0	

$H = 22,03$ $DF = 4$ $P = 0,000$

$H = 24,00$ $DF = 4$ $P = 0,000$ (adjusted for ties)

Kruskal-Wallis Test: B3 versus rank6

Kruskal-Wallis Test on B3

rank6	N	Median	Ave Rank	Z
2,5	4	4,000	2,5	-3,11
6,0	3	5,000	6,0	-1,76
13,0	11	6,000	13,0	0,00
21,0	5	7,000	21,0	2,72
24,5	2	8,000	24,5	2,30
Overall	25		13,0	

$H = 21,65$ $DF = 4$ $P = 0,000$

$H = 24,00$ $DF = 4$ $P = 0,000$ (adjusted for ties)

Lampiran 12. Analisa Uji Organoleptik Kerenyahan Kerupuk Puli Ikan Kuniran

Panelis	A1	rank1	A2	rank2	A3	rank3	B1	rank4	B2	rank5	B3	rank6
1	5	13,50	5	14,00	5	8,50	7	9,00	6	9,00	5	7,50
2	4	4,50	3	3,50	4	3,00	8	20,50	7	19,00	6	14,50
3	5	13,50	3	3,50	4	3,00	7	9,00	7	19,00	6	14,50
4	5	13,50	5	14,00	5	8,50	8	20,50	6	9,00	6	14,50
5	4	4,50	4	8,00	4	3,00	6	1,50	5	5,00	7	21,50
6	6	21,00	4	8,00	5	8,50	6	1,50	7	19,00	5	7,50
7	5	13,50	3	3,50	4	3,00	7	9,00	4	3,00	4	3,00
8	5	13,50	5	14,00	7	21,00	7	9,00	7	19,00	7	21,50
9	4	4,50	3	3,50	7	21,00	7	9,00	6	9,00	8	25,00
10	5	13,50	5	14,00	5	8,50	7	9,00	6	9,00	7	21,50
11	4	4,50	5	14,00	6	15,00	7	9,00	7	19,00	6	14,50
12	4	4,50	7	22,50	6	15,00	8	20,50	6	9,00	4	3,00
13	5	13,50	5	14,00	5	8,50	8	20,50	6	9,00	5	7,50
14	4	4,50	7	22,50	5	8,50	7	9,00	3	1,00	7	21,50
15	6	21,00	7	22,50	7	21,00	7	9,00	7	19,00	3	1,00
16	5	13,50	3	3,50	4	3,00	7	9,00	7	19,00	6	14,50
17	4	4,50	3	3,50	6	15,00	7	9,00	7	19,00	6	14,50
18	6	21,00	6	19,00	6	15,00	8	20,50	7	19,00	7	21,50
19	6	21,00	5	14,00	6	15,00	8	20,50	4	3,00	5	7,50
20	5	13,50	5	14,00	8	24,50	7	9,00	4	3,00	5	7,50
21	5	13,50	4	8,00	6	15,00	8	20,50	7	19,00	4	3,00
22	4	4,50	7	22,50	6	15,00	8	20,50	6	9,00	5	7,50
23	7	24,50	5	14,00	8	24,50	8	20,50	7	19,00	6	14,50
24	6	21,00	7	22,50	7	21,00	8	20,50	7	19,00	6	14,50
25	7	24,50	7	22,50	7	21,00	7	9,00	7	19,00	7	21,50
TOTAL	126	325,00	123	325,00	143	325,00	183	325,00	153	325,00	143	325,00
RERATA	5,04	13,00	4,92	13,00	5,72	13,00	7,32	13,00	6,12	13,00	5,72	13,00

Kruskal-Wallis Test: A1 versus rank1

Kruskal-Wallis Test on A1

rank1	N	Median	Ave Rank	Z
4,5	8	4,000	4,5	-3,96
13,5	10	5,000	13,5	0,28
21,0	5	6,000	21,0	2,72
24,5	2	7,000	24,5	2,30
Overall	25		13,0	

H = 21,51 DF = 3 P = 0,000

H = 24,00 DF = 3 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: A2 versus rank2

Kruskal-Wallis Test on A2

rank2	N	Median	Ave Rank	Z
3,5	6	3,000	3,5	-3,63
8,0	3	4,000	8,0	-1,25
14,0	9	5,000	14,0	0,51
19,0	1	6,000	19,0	0,83
22,5	6	7,000	22,5	3,63
Overall	25		13,0	

H = 22,21 DF = 4 P = 0,000

H = 24,00 DF = 4 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: A3 versus rank3

Kruskal-Wallis Test on A3

rank3	N	Median	Ave Rank	Z
3,0	5	4,000	3,0	-3,40
8,5	6	5,000	8,5	-1,72
15,0	7	6,000	15,0	0,85
21,0	5	7,000	21,0	2,72
24,5	2	8,000	24,5	2,30
Overall	25		13,0	

H = 22,78 DF = 4 P = 0,000

H = 24,00 DF = 4 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: B1 versus rank4

Kruskal-Wallis Test on B1

rank4	N	Median	Ave Rank	Z
1,5	2	6,000	1,5	-2,30
9,0	13	7,000	9,0	-2,83
20,5	10	8,000	20,5	4,16
Overall	25		13,0	

H = 19,11 DF = 2 P = 0,000

H = 24,00 DF = 2 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: B2 versus rangk5

Kruskal-Wallis Test on B2

rank5	N	Median	Ave Rank	Z
1	1	3,000	1,0	-1,66
3	3	4,000	3,0	-2,51
5	1	5,000	5,0	-1,11
9	7	6,000	9,0	-1,69
19	13	7,000	19,0	4,24
Overall	25		13,0	

H = 20,09 DF = 4 P = 0,000

H = 24,00 DF = 4 P = 0,000 (adjusted for ties)

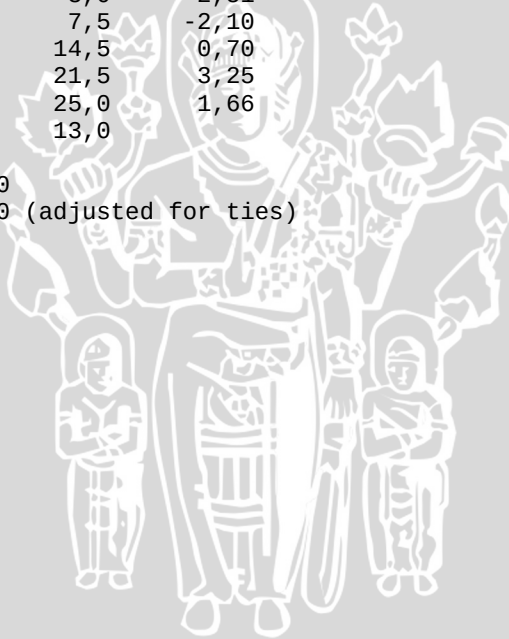
Kruskal-Wallis Test: B3 versus rank6

Kruskal-Wallis Test on B3

rank6	N	Median	Ave Rank	Z
1,0	1	3,000	1,0	-1,66
3,0	3	4,000	3,0	-2,51
7,5	6	5,000	7,5	-2,10
14,5	8	6,000	14,5	0,70
21,5	6	7,000	21,5	3,25
25,0	1	8,000	25,0	1,66
Overall	25		13,0	

H = 22,54 DF = 5 P = 0,000

H = 24,00 DF = 5 P = 0,000 (adjusted for ties)



Lampiran 13. Analisa Uji Organoleptik Kenampakan Kerupuk Puli Ikan Kuniran

Panelis	A1	rank1	A2	rank2	A3	rank3	B1	rank4	B2	rank5	B3	rank6
1	3	4,00	3	6,50	5	16,50	7	12,50	7	17,00	5	5,00
2	3	4,00	3	6,50	4	8,00	7	12,50	7	17,00	6	10,50
3	6	20,00	3	6,50	3	2,00	7	12,50	6	7,00	6	10,50
4	4	10,50	6	22,00	6	21,50	7	12,50	6	7,00	6	10,50
5	3	4,00	3	6,50	4	8,00	7	12,50	4	1,50	8	23,50
6	4	10,50	3	6,50	5	16,50	7	12,50	7	17,00	7	17,50
7	3	4,00	4	15,00	4	8,00	7	12,50	7	17,00	4	1,50
8	4	10,50	3	6,50	4	8,00	7	12,50	7	17,00	7	17,50
9	3	4,00	3	6,50	3	2,00	7	12,50	6	7,00	8	23,50
10	4	10,50	3	6,50	3	2,00	7	12,50	6	7,00	7	17,50
11	3	4,00	4	15,00	5	16,50	7	12,50	7	17,00	5	5,00
12	5	15,00	3	6,50	4	8,00	7	12,50	7	17,00	4	1,50
13	4	10,50	3	6,50	5	16,50	7	12,50	7	17,00	5	5,00
14	5	15,00	3	6,50	4	8,00	7	12,50	4	1,50	8	23,50
15	7	24,50	5	18,50	4	8,00	5	1,00	5	3,50	7	17,50
16	7	24,50	7	25,00	7	24,00	8	23,50	7	17,00	7	17,50
17	4	10,50	6	22,00	7	24,00	8	23,50	7	17,00	7	17,50
18	6	20,00	4	15,00	5	16,50	6	2,50	7	17,00	7	17,50
19	6	20,00	4	15,00	4	8,00	7	12,50	7	17,00	6	10,50
20	3	4,00	6	22,00	5	16,50	7	12,50	7	17,00	6	10,50
21	5	15,00	5	18,50	5	16,50	7	12,50	5	3,50	5	5,00
22	6	20,00	3	6,50	5	16,50	6	2,50	7	17,00	5	5,00
23	6	20,00	6	22,00	4	8,00	7	12,50	6	7,00	6	10,50
24	6	20,00	6	22,00	7	24,00	8	23,50	7	17,00	7	17,50
25	6	20,00	4	15,00	6	21,50	8	23,50	8	25,00	8	23,50
TOTAL	116	325	103	325	118	325	175	325	161	325	157	325
RERATA	4,64	13	4,12	13	4,72	13	7	13	6,44	13	6,28	13

Kruskal-Wallis Test: A1 versus rank1

Kruskal-Wallis Test on A1

rank1	N	Median	Ave Rank	Z
4,5	8	3,000	4,5	-3,96
11,5	6	4,000	11,5	-0,57
16,0	3	5,000	16,0	0,75
20,5	6	6,000	20,5	2,86
24,5	2	7,000	24,5	2,30
Overall	25		13,0	

H = 22,53 DF = 4 P = 0,000

H = 24,00 DF = 4 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: A2 versus rank2

Kruskal-Wallis Test on A2

rank2	N	Median	Ave Rank	Z
6,5	12	3,000	6,5	-4,24
14,5	4	4,000	14,5	0,44
17,5	2	5,000	17,5	0,90
21,5	6	6,000	21,5	3,25
25,0	1	7,000	25,0	1,66
Overall	25		13,0	

H = 20,94 DF = 4 P = 0,000

H = 24,00 DF = 4 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: A3 versus rank3

Kruskal-Wallis Test on A3

rank3	N	Median	Ave Rank	Z
2,0	3	3,000	2,0	-2,76
8,0	9	4,000	8,0	-2,55
16,5	8	5,000	16,5	1,63
21,5	2	6,000	21,5	1,70
24,0	3	7,000	24,0	2,76
Overall	25		13,0	

H = 22,03 DF = 4 P = 0,000

H = 24,00 DF = 4 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: B1 versus rank4

Kruskal-Wallis Test on B1

rank4	N	Median	Ave Rank	Z
1,0	1	5,000	1,0	-1,66
2,5	2	6,000	2,5	-2,10
12,0	17	7,000	12,0	-0,99
23,0	5	8,000	23,0	3,40
Overall	25		13,0	

H = 16,27 DF = 3 P = 0,001

H = 24,00 DF = 3 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: B2 versus rank5

Kruskal-Wallis Test on B2

rank5	N	Median	Ave Rank	Z
1,5	2	4,000	1,5	-2,30
3,5	2	5,000	3,5	-1,90
7,0	5	6,000	7,0	-2,04
17,0	15	7,000	17,0	3,33
25,0	1	8,000	25,0	1,66
Overall	25		13,0	

H = 18,63 DF = 4 P = 0,001

H = 24,00 DF = 4 P = 0,000 (adjusted for ties)

Kruskal-Wallis Test: B3 versus rank6

Kruskal-Wallis Test on B3

rank6	N	Median	Ave Rank	Z
1,5	2	4,000	1,5	-2,30
5,0	5	5,000	5,0	-2,72
10,5	6	6,000	10,5	-0,95
17,5	8	7,000	17,5	2,10
23,5	4	8,000	23,5	3,11
Overall	25		13,0	

H = 22,62 DF = 4 P = 0,000

H = 24,00 DF = 4 P = 0,000 (adjusted for ties)



Lampiran 14. Penentuan Perlakuan Terbaik Kerupuk Puli Ikan Kuniran (DE GARMO, 1994)

Parameter	BV	BN	A1		A2		A3		B1		B2		B3	
			NE	NH	NE	NH	NE	NH	NE	NH	NE	NH	NE	NH
k.air	0,595	0,094	0,952	0,090	0,643	0,061	0,190	0,018	1,000	0,094	0,666	0,063	0,000	0,000
k.protein	1,000	0,158	0,000	0,000	0,374	0,059	1,000	0,158	0,077	0,012	0,410	0,065	0,782	0,124
k.lemak	0,582	0,092	0,229	0,021	0,719	0,066	1,000	0,092	0,000	0,000	0,323	0,030	0,579	0,053
k.abu	0,242	0,038	0,768	0,029	0,463	0,018	0,000	0,000	1,000	0,038	0,531	0,020	0,237	0,009
aw	0,516	0,082	0,462	0,038	0,692	0,057	0,846	0,069	0,000	0,000	0,692	0,057	1,000	0,082
daya kembang	0,889	0,141	0,000	0,000	0,043	0,006	0,421	0,059	0,433	0,061	0,809	0,114	1,000	0,141
daya patah	0,856	0,136	0,309	0,042	0,822	0,111	1,000	0,136	0,000	0,000	0,276	0,037	0,441	0,060
rasa	0,621	0,098	0,291	0,029	0,000	0,000	0,436	0,043	0,000	0,000	0,727	0,071	0,400	0,039
aroma	0,222	0,035	0,034	0,001	0,000	0,000	0,293	0,010	1,000	0,035	0,707	0,025	0,621	0,022
kenampakan	0,307	0,049	0,181	0,009	0,000	0,000	0,208	0,010	1,000	0,049	0,806	0,039	0,750	0,036
kerenyahan	0,484	0,077	0,050	0,004	0,000	0,000	0,333	0,026	1,000	0,077	0,500	0,038	0,330	0,025
Total	6,314			0,262		0,378		0,621		0,366		0,560		0,592

Keterangan : data yang berwarna biru adalah yang terbaik
data yang berwarna merah adalah yang jelek