

LAMPIRAN

Lampiran 1. Hasil Analisis Rendemen Kecap Ikan Kuniran

Konsentrasi Garam	Lama Fermentasi	Ulangan			Jumlah	Rata-Rata	SD
		1	2	3			
2%	7 Hari	12,22	12,24	12,17	36,630	12,21	0,04
	9 Hari	19,7	19,44	19,31	58,450	19,48	0,20
	11 Hari	38,01	38,66	39,59	116,260	38,75	0,79
2,5%	7 Hari	16,04	16,12	16,88	49,040	16,35	0,46
	9 Hari	29,41	29,03	30,11	88,550	29,52	0,55
	11 Hari	51,22	51,04	52	154,260	51,42	0,51
3%	7 Hari	21,24	21,79	21,82	64,850	21,62	0,33
	9 Hari	37,44	37,67	37,62	112,730	37,58	0,12
	11 Hari	62,02	62,43	62,21	186,660	62,22	0,21

Tests of Between-Subjects Effects

Dependent Variable: % Rendemen

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	6822.794 ^a	8	852.849	4.767E3	.000
Intercept	27867.956	1	27867.956	1.558E5	.000
Garam	1300.022	2	650.011	3.633E3	.000
Lama_Fermentasi	5368.655	2	2684.327	1.500E4	.000
Garam * Lama_Fermentasi	154.118	4	38.529	215.355	.000
Error	3.220	18	.179		
Total	34693.970	27			
Corrected Total	6826.015	26			

ANOVA

% Rendemen

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6822.794	8	852.849	4.767E3	.000
Within Groups	3.220	18	.179		
Total	6826.015	26			

% Rendemen

Tukey HSD

	N	Subset		
		1	2	3
% Garam				
2%	9	23.48		
2.5%	9		32.43	
3%	9			40.47
Sig.		1.000	1.000	1.000

% Rendemen

Tukey HSD

	N	Subset		
		1	2	3
Lama Fermentasi				
7 Hari	9	16.72		
9 Hari	9		28.86	
11 Hari	9			50.80
Sig.		1.000	1.000	1.000

% Rendemen

Tukey HSD

Hasil Interaksi	N	Subset for alpha = 0.05							
		1	2	3	4	5	6	7	8
2% - 7 Hari	3	12.21							
2.5% - 7 Hari	3		16.35						
2% - 9 Hari	3			19.48					
3% - 7 Hari	3				21.62				
2.5% - 9 Hari	3					29.52			
3% - 9 Hari	3						37.58		
2% - 11 Hari	3						38.75		
2.5% - 11 Hari	3							51.42	
3% - 11 Hari	3								62.22
Sig.		1.000	1.000	1.000	1.000	1.000	.060	1.000	1.000

Lampiran 2. Hasil Analisis Protein Kecap Ikan Kuniran

Konsentrasi Garam	Lama Fermentasi	Ulangan			Jumlah	Rata-Rata	SD
		1	2	3			
2%	7 Hari	11,98	11,96	11,99	35,930	11,98	0,02
	9 Hari	12,38	12,36	12,37	37,110	12,37	0,01
	11 Hari	12,59	12,57	12,55	37,710	12,57	0,02
2,5%	7 Hari	11,14	11,13	11,16	33,430	11,14	0,02
	9 Hari	11,95	11,91	11,93	35,790	11,93	0,02
	11 Hari	12,23	12,25	12,29	36,770	12,26	0,03
3%	7 Hari	10,14	10,12	10,16	30,420	10,14	0,02
	9 Hari	10,46	10,48	10,47	31,410	10,47	0,01
	11 Hari	10,63	10,67	10,68	31,980	10,66	0,03

Tests of Between-Subjects Effects

Dependent Variable:% Protein

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	19.889 ^a	8	2.486	6.393E3	.000
Intercept	3571.900	1	3571.900	9.185E6	.000
Garam	16.962	2	8.481	2.181E4	.000
Lama_Fermentasi	2.584	2	1.292	3.322E3	.000
Garam * Lama_Fermentasi	.343	4	.086	220.695	.000
Error	.007	18	.000		
Total	3591.796	27			
Corrected Total	19.896	26			

ANOVA

% Protein

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	19.889	8	2.486	6.393E3	.000
Within Groups	.007	18	.000		
Total	19.896	26			

% Protein

Tukey HSD

% Garam	N	Subset		
		1	2	3
3%	9	10.42		
2.5%	9		11.78	
2%	9			12.31
Sig.		1.000	1.000	1.000

% Protein

Tukey HSD

Lama Fermentasi	N	Subset		
		1	2	3
7 Hari	9	11.09		
9 Hari	9		11.59	
11 Hari	9			11.83
Sig.		1.000	1.000	1.000

% Protein

Tukey HSD

Hasil Interaksi	N	Subset for alpha = 0.05							
		1	2	3	4	5	6	7	8
3% - 7 Hari	3	10.14							
3% - 9 Hari	3		10.47						
3% - 11 Hari	3			10.66					
2,5% - 7 Hari	3				11.14				
2,5% - 9 Hari	3					11.93			
2% - 7 Hari	3					11.98			
2,5% - 11 Hari	3						12.26		
2% - 9 Hari	3							12.37	
2% - 11 Hari	3								12.57
Sig.		1.000	1.000	1.000	1.000	.154	1.000	1.000	1.000

Lampiran 3. Hasil Analisis Air Kecap Ikan Kuniran

Konsentrasi Garam	Lama Fermentasi	Ulangan			Jumlah	Rata-Rata	SD
		1	2	3			
2%	7 Hari	80,23	80,26	80,29	240,780	80,26	0,03
	9 Hari	80,75	80,78	80,79	242,320	80,77	0,02
	11 Hari	81,26	81,23	81,24	243,730	81,24	0,02
2,5%	7 Hari	80,75	80,71	80,76	242,220	80,74	0,03
	9 Hari	81,88	81,89	81,86	245,630	81,88	0,02
	11 Hari	82,53	82,57	82,6	247,700	82,57	0,04
3%	7 Hari	81,99	81,97	81,96	245,920	81,97	0,02
	9 Hari	82,31	82,33	82,34	246,980	82,33	0,02
	11 Hari	82,77	82,78	82,79	248,340	82,78	0,01

Tests of Between-Subjects Effects

Dependent Variable: % Air

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	19.243 ^a	8	2.405	5.035E3	.000
Intercept	179849.671	1	179849.671	3.764E8	.000
Garam	11.706	2	5.853	1.225E4	.000
Lama_Fermentasi	6.565	2	3.283	6.871E3	.000
Garam * Lama_Fermentasi	.972	4	.243	508.477	.000
Error	.009	18	.000		
Total	179868.922	27			
Corrected Total	19.252	26			

ANOVA

% Air

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	19.243	8	2.405	5.035E3	.000
Within Groups	.009	18	.000		
Total	19.252	26			

% Air

Tukey HSD

% Garam	N	Subset		
		1	2	3
2%	9	80.76		
2,5%	9		81.73	
3%	9			82.36
Sig.		1.000	1.000	1.000

% Air

Tukey HSD

Lama Fermentasi	N	Subset		
		1	2	3
7 Hari	9	80.99		
9 Hari	9		81.66	
11 Hari	9			82.20
Sig.		1.000	1.000	1.000

% Air

Tukey HSD

Hasil Interaksi	N	Subset for alpha = 0.05							
		1	2	3	4	5	6	7	8
2% - 7 Hari	3	80.26							
2,5% - 7 Hari	3		80.74						
2% - 9 Hari	3		80.77						
2% - 11 Hari	3			81.24					
2,5% - 9 Hari	3				81.88				
3% - 7 Hari	3					81.97			
3% - 9 Hari	3						82.33		
2,5% - 11 Hari	3							82.57	
3% - 11 Hari	3								82.78
Sig.		1.000	.642	1.000	1.000	1.000	1.000	1.000	1.000

Lampiran 4. Hasil Analisis Abu Kecap Ikan Kuniran

Konsentrasi Garam	Lama Fermentasi	Ulangan			Jumlah	Rata-Rata	SD
		1	2	3			
2%	7 Hari	2,52	2,55	2,51	7,580	2,53	0,02
	9 Hari	2,31	2,38	2,33	7,020	2,34	0,04
	11 Hari	2,24	2,23	2,25	6,720	2,24	0,01
2,5%	7 Hari	2,93	2,91	2,96	8,800	2,93	0,03
	9 Hari	2,85	2,81	2,86	8,520	2,84	0,03
	11 Hari	2,63	2,63	2,61	7,870	2,62	0,01
3%	7 Hari	2,95	2,98	2,96	8,890	2,96	0,02
	9 Hari	2,89	2,87	2,88	8,640	2,88	0,01
	11 Hari	2,75	2,78	2,74	8,270	2,76	0,02

Tests of Between-Subjects Effects

Dependent Variable: % Abu

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.655 ^a	8	.207	457.969	.000
Intercept	193.657	1	193.657	4.286E5	.000
Garam	1.312	2	.656	1.452E3	.000
Lama_Fermentasi	.324	2	.162	358.139	.000
Garam * Lama_Fermentasi	.020	4	.005	11.061	.000
Error	.008	18	.000		
Total	195.320	27			
Corrected Total	1.664	26			

ANOVA

% Abu

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.655	8	.207	457.969	.000
Within Groups	.008	18	.000		
Total	1.664	26			

% Abu

Tukey HSD

% Garam	N	Subset		
		1	2	3
2%	9	2.37		
2,5%	9		2.80	
3%	9			2.87
Sig.		1.000	1.000	1.000

% Abu

Tukey HSD

Lama Fermentasi	N	Subset		
		1	2	3
11 Hari	9	2.54		
9 Hari	9		2.69	
7 Hari	9			2.81
Sig.		1.000	1.000	1.000

% Abu

Tukey HSD

Hasil Interaksi	N	Subset for alpha = 0.05							
		1	2	3	4	5	6	7	8
2% - 11 Hari	3	2.24							
2% - 9 Hari	3		2.34						
2% - 7 Hari	3			2.53					
2,5% - 11 Hari	3				2.62				
3% - 11 Hari	3					2.76			
2,5% - 9 Hari	3						2.84		
3% - 9 Hari	3						2.88	2.88	
2,5% - 7 Hari	3							2.93	2.93
3% - 7 Hari	3								2.96
Sig.		1.000	1.000	1.000	1.000	1.000	.388	.113	.723

Lampiran 5. Hasil Analisis Lemak Kecap Ikan Kuniran

Konsentrasi Garam	Lama Fermentasi	Ulangan			Jumlah	Rata-Rata	SD
		1	2	3			
2%	7 Hari	1,59	1,58	1,57	4,740	1,58	0,01
	9 Hari	1,43	1,42	1,44	4,290	1,43	0,01
	11 Hari	1,31	1,35	1,39	4,050	1,35	0,04
2,5%	7 Hari	1,32	1,35	1,33	4,000	1,33	0,02
	9 Hari	1,15	1,16	1,17	3,480	1,16	0,01
	11 Hari	1,02	1,02	1,04	3,080	1,03	0,01
3%	7 Hari	1,12	1,11	1,1	3,330	1,11	0,01
	9 Hari	0,98	0,95	0,92	2,850	0,95	0,03
	11 Hari	0,84	0,88	0,85	2,570	0,86	0,02

Tests of Between-Subjects Effects

Dependent Variable: % Lemak

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.373 ^a	8	.172	417.495	.000
Intercept	38.856	1	38.856	9.451E4	.000
Garam	1.051	2	.525	1.278E3	.000
Lama_Fermentasi	.317	2	.159	385.847	.000
Garam * Lama_Fermentasi	.005	4	.001	2.982	.047
Error	.007	18	.000		
Total	40.237	27			
Corrected Total	1.380	26			

ANOVA

% Lemak

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.373	8	.172	417.495	.000
Within Groups	.007	18	.000		
Total	1.380	26			

% Lemak

Tukey HSD

% Garam	N	Subset		
		1	2	3
3%	9	.97		
2,5%	9		1.17	
2%	9			1.45
Sig.		1.000	1.000	1.000

% Lemak

Tukey HSD

Lama Fermentasi	N	Subset		
		1	2	3
11 Hari	9	1.08		
9 Hari	9		1.18	
7 Hari	9			1.34
Sig.		1.000	1.000	1.000

% Lemak

Tukey HSD

Hasil Interaksi	N	Subset for alpha = 0.05						
		1	2	3	4	5	6	7
3% - 11 Hari	3	.86						
3% - 9 Hari	3		.95					
2,5% - 11 Hari	3			1.03				
3% - 7 Hari	3				1.11			
2,5% - 9 Hari	3				1.16			
2,5% - 7 Hari	3					1.33		
2% - 11 Hari	3					1.35		
2% - 9 Hari	3						1.43	
2% - 7 Hari	3							1.58
Sig.		1.000	1.000	1.000	.124	.980	1.000	1.000

Lampiran 6. Hasil Analisis Karbohidrat Kecap Ikan Kuniran

Konsentrasi Garam	Lama Fermentasi	Ulangan			Jumlah	Rata-Rata	SD
		1	2	3			
2%	7 Hari	3,68	3,65	3,64	10,970	3,66	0,02
	9 Hari	3,13	3,06	3,07	9,260	3,09	0,04
	11 Hari	2,6	2,62	2,57	7,790	2,60	0,03
2,5%	7 Hari	3,84	3,83	3,79	11,460	3,82	0,03
	9 Hari	2,13	2,17	2,16	6,460	2,15	0,02
	11 Hari	1,47	1,38	1,33	4,180	1,39	0,07
3%	7 Hari	3,82	3,89	3,82	11,530	3,84	0,04
	9 Hari	3,4	3,43	3,41	10,240	3,41	0,02
	11 Hari	3,13	3,04	3,07	9,240	3,08	0,05

Tests of Between-Subjects Effects

Dependent Variable: % Karbohidrat

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	16.511 ^a	8	2.064	1.161E3	.000
Intercept	244.201	1	244.201	1.374E5	.000
Garam	4.611	2	2.306	1.297E3	.000
Lama_Fermentasi	9.371	2	4.685	2.636E3	.000
Garam * Lama_Fermentasi	2.529	4	.632	355.649	.000
Error	.032	18	.002		
Total	260.745	27			
Corrected Total	16.543	26			

ANOVA

% Karbohidrat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.511	8	2.064	1.161E3	.000
Within Groups	.032	18	.002		
Total	16.543	26			

% Karbohidrat

Tukey HSD

% Garam	N	Subset		
		1	2	3
2,5%	9	2.46		
2%	9		3.12	
3%	9			3.45
Sig.		1.000	1.000	1.000

% Karbohidrat

Tukey HSD

Lama Fermentasi	N	Subset		
		1	2	3
11 Hari	9	2.36		
9 Hari	9		2.88	
7 Hari	9			3.78
Sig.		1.000	1.000	1.000

% Karbohidrat

Tukey HSD

Hasil Interaksi	N	Subset for alpha = 0.05						
		1	2	3	4	5	6	7
2,5% - 11 Hari	3	1.39						
2,5% - 9 Hari	3		2.15					
2% - 11 Hari	3			2.60				
2% - 9 Hari	3				3.08			
3% - 11 Hari	3				3.08			
3% - 9 Hari	3					3.41		
2% - 7 Hari	3						3.67	
2,5% - 7 Hari	3							3.82
3% - 7 Hari	3							3.86
Sig.		1.000	1.000	1.000	1.000	1.000	1.000	.972

Lampiran 7. Hasil Analisis Garam Kecap Ikan Kuniran

Konsentrasi Garam	Lama Fermentasi	Ulangan			Jumlah	Rata-Rata	SD
		1	2	3			
2%	7 Hari	6,72	6,43	6,72	19,88	6,63	0,002
	9 Hari	7,60	8,18	7,89	23,68	7,89	0,003
	11 Hari	9,35	9,06	9,35	27,77	9,26	0,002
2,5%	7 Hari	7,89	7,60	7,31	22,80	7,60	0,003
	9 Hari	9,35	9,65	9,65	28,65	9,55	0,002
	11 Hari	11,98	12,28	11,98	36,25	12,08	0,002
3%	7 Hari	12,57	12,57	12,86	38,00	12,67	0,002
	9 Hari	14,32	14,03	14,62	42,97	14,32	0,003
	11 Hari	15,78	15,49	15,20	46,48	15,49	0,003

Tests of Between-Subjects Effects

Dependent Variable:% NaCl

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	237.930 ^a	8	29.741	553.689	.000
Intercept	3038.598	1	3038.598	5.657E4	.000
Garam	185.200	2	92.600	1.724E3	.000
Lama_Fermentasi	49.341	2	24.671	459.290	.000
Garam * Lama_Fermentasi	3.389	4	.847	15.775	.000
Error	.967	18	.054		
Total	3277.495	27			
Corrected Total	238.897	26			

ANOVA

% NaCl

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	237.930	8	29.741	553.689	.000
Within Groups	.967	18	.054		
Total	238.897	26			

% NaCl

Tukey HSD

% Garam	N	Subset		
		1	2	3
2%	9	7.92		
2.5%	9		9.74	
3%	9			14.16
Sig.		1.000	1.000	1.000

% NaCl

Tukey HSD

Lama Fermentasi	N	Subset		
		1	2	3
7 Hari	9	8.96		
9 Hari	9		10.59	
11 Hari	9			12.27
Sig.		1.000	1.000	1.000

% NaCl

Tukey HSD

Hasil Interaksi	N	Subset for alpha = 0.05					
		1	2	3	4	5	6
2% - 7 Hari	3	6.62					
2.5% - 7 Hari	3		7.60				
2% - 9 Hari	3		7.89				
2% - 11 Hari	3			9.25			
2.5% - 9 Hari	3			9.55			
2.5% - 11 Hari	3				12.08		
3% - 7 Hari	3				12.67		
3% - 9 Hari	3					14.32	
3% - 11 Hari	3						15.49
Sig.		1.000	.827	.809	.107	1.000	1.000

Lampiran 8. Hasil Analisis Hedonik Aroma Kecap Ikan Kuniran

Konsentrasi Garam	Lama Fermentasi	Ulangan			Jumlah	Rata-Rata	SD
		1	2	3			
Kontrol (Sun Brand)	-	4	4,1	4	12,100	4,03	0,00
2%	7 Hari	2,9	3	3	8,900	2,97	0,06
	9 Hari	4,2	4,1	4,2	12,500	4,17	0,06
	11 Hari	5,1	5,2	5,3	15,600	5,20	0,10
2,5%	7 Hari	3,2	3,4	3,1	9,700	3,23	0,15
	9 Hari	4,1	4,3	4,2	12,600	4,20	0,10
	11 Hari	5,2	5,7	5,4	16,300	5,43	0,25
3%	7 Hari	3,4	3,1	3,3	9,800	3,27	0,15
	9 Hari	4,6	4,5	4,3	13,400	4,47	0,15
	11 Hari	5,3	5,5	5,6	16,400	5,47	0,15

Tests of Between-Subjects Effects

Dependent Variable: % Aroma

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	22.453 ^a	8	2.807	137.782	.000
Intercept	491.520	1	491.520	2.413E4	.000
Garam	.382	2	.191	9.382	.002
Lama_Fermentasi	22.002	2	11.001	540.055	.000
Garam * Lama_Fermentasi	.069	4	.017	.845	.515
Error	.367	18	.020		
Total	514.340	27			
Corrected Total	22.820	26			

ANOVA

% Aroma					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22.453	8	2.807	137.782	.000
Within Groups	.367	18	.020		
Total	22.820	26			

% Aroma

Tukey HSD

% Garam	N	Subset	
		1	2
2%	9	4.11	
2,5%	9		4.29
3%	9		4.40
Sig.		1.000	.251

% Aroma

Tukey HSD

Lama Fermentasi	N	Subset		
		1	2	3
7 Hari	9	3.16		
9 Hari	9		4.28	
11 Hari	9			5.37
Sig.		1.000	1.000	1.000

% Aroma

Tukey HSD

Hasil Interaksi	N	Subset for alpha = 0.05		
		1	2	3
2% - 7 Hari	3	2.97		
2,5% - 7 Hari	3	3.23		
3% - 7 Hari	3	3.27		
2% - 9 Hari	3		4.17	
2,5% - 9 Hari	3		4.20	
3% - 9 Hari	3		4.47	
2% - 11 Hari	3			5.20
2,5% - 11 Hari	3			5.43
3% - 11 Hari	3			5.47
Sig.		.262	.262	.397

Lampiran 9. Hasil Analisis Hedonik Warna Kecap Ikan Kuniran

Konsentrasi Garam	Lama Fermentasi	Ulangan			Jumlah	Rata-Rata	SD
		1	2	3			
Kontrol (Sun Brand)	-	4,3	4,5	4,5	13,300	4,43	0,00
2%	7 Hari	4,2	4,3	4,2	12,700	4,23	0,06
	9 Hari	4,1	4	4,1	12,200	4,07	0,06
	11 Hari	3,9	4	4	11,900	3,97	0,06
2,5%	7 Hari	4,3	4,2	4,2	12,700	4,23	0,06
	9 Hari	4,1	4,2	4	12,300	4,10	0,10
	11 Hari	3,9	4	4	11,900	3,97	0,06
3%	7 Hari	4,2	4,2	4,3	12,700	4,23	0,06
	9 Hari	4,1	4,2	4,2	12,500	4,17	0,06
	11 Hari	4	4,1	4	12,100	4,03	0,06

Tests of Between-Subjects Effects

Dependent Variable:% Warna

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.293 ^a	8	.037	9.000	.000
Intercept	456.333	1	456.333	1.120E5	.000
Garam	.016	2	.008	1.909	.177
Lama_Fermentasi	.269	2	.134	33.000	.000
Garam * Lama_Fermentasi	.009	4	.002	.545	.705
Error	.073	18	.004		
Total	456.700	27			
Corrected Total	.367	26			

ANOVA

% Warna

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.293	8	.037	9.000	.000
Within Groups	.073	18	.004		
Total	.367	26			

% Warna

Tukey HSD

% Garam	N	Subset
		1
2%	9	4.09
2,5%	9	4.10
3%	9	4.14
Sig.		.183

% Warna

Tukey HSD

Lama Fermentasi	N	Subset		
		1	2	3
11 Hari	9	3.99		
9 Hari	9		4.11	
7 Hari	9			4.23
Sig.		1.000	1.000	1.000

% Warna

Tukey HSD

Hasil Interaksi	N	Subset for alpha = 0.05		
		1	2	3
2% - 11 Hari	3	3.97		
2,5% - 11 Hari	3	3.97		
3% - 11 Hari	3	4.03	4.03	
2% - 9 Hari	3	4.07	4.07	4.07
2,5% - 9 Hari	3	4.10	4.10	4.10
3% - 9 Hari	3		4.17	4.17
2% - 7 Hari	3			4.23
2,5% - 7 Hari	3			4.23
3% - 7 Hari	3			4.23
Sig.		.269	.269	.090

Lampiran 10. Hasil Analisis Asam Amino Kecap Ikan Kuniran



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Phone/Fax. 0251-8319894, 8323571, Email : admin@ilab-ipb.org ISO/IEC 17025 Certificate No : LP-156-IDN

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Certificate No. : LT-10-17-0906
Laboratory No. : BM/IX/17/2158
Sample Matrix : Material (Kecap Ikan Kuniran)*
Sample Id : Penambahan Garam
Packaging : Bottle


Received Date : 10-09-2017
Finished Date : 25-09-2017

Parameter	Result	Unit	Method
Amino Acid			
Aspartic acid	0.69	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Glutamic acid	1.53	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Serine	0.16	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Histidine	0.11	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Glycine	0.47	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Threonine	0.20	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Arginine	0.19	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Alanine	0.63	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Tyrosine	0.13	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Methionine	0.24	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Valine	0.38	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Phenylalanine	0.19	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
I-leucine	0.31	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Leucine	0.44	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Lysine	0.73	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Amino Acid Total	6.41	% w/w	IK.LP-04.7-LT-1.0 (HPLC)

REMARKS:

*) Outside the scope of accreditation
Lab Kimia Terpadu IPB is not responsible for the sampling process

September 28, 2017
Head of Research and Development Division,


Dr. Zainal Alim Mas'ud, DEA
NIP: 19560622 198601 1 001

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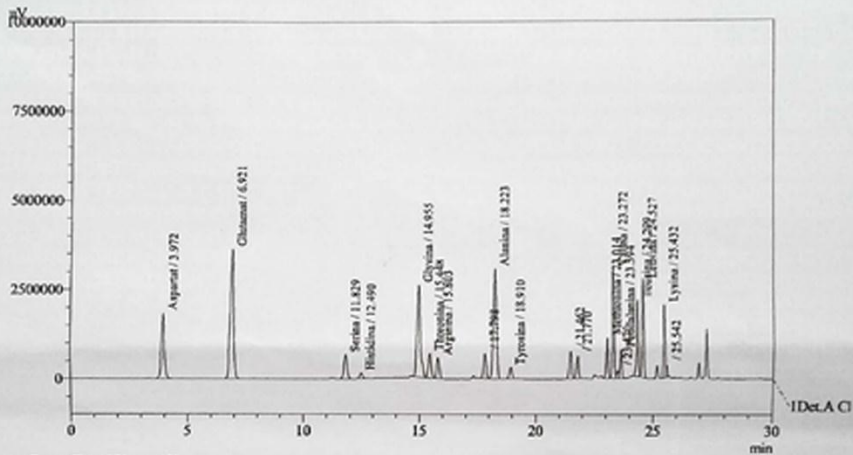
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LABORATORY TEST REPORT

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Analysis Date & time : 9/17/2017 10:42:14 AM
User Name : LT-10-17-0906 (BM-IX-17-2158) KECAP IKAN KUNIRAN
Sample Id : PENAMBAHAN GARAM



1 Det.A Ch1 / 350nm - 450nm

Detector A Ch1 350nm - 450nm

Peak#	Name	Ret. Time	Area	Area %	Resolution
1	Aspartat	3.972	17227535	8.505	0.000
2	Glutamat	6.921	35050098	17.304	11.520
3	Serina	11.829	6109332	3.016	19.439
4	Histidina	12.490	1380196	0.681	2.751
5	Glysina	14.955	25009942	12.347	10.250
6	Threonina	15.448	5654325	2.791	2.085
7	Arginina	15.803	4759243	2.350	1.546
8		17.798	5404598	2.668	8.843
9	Alanina	18.223	28057722	13.852	1.811
10	Tyrosina	18.910	2756223	1.361	2.807
11		21.462	5266748	2.600	11.736
12		21.770	4114725	2.031	1.638
13	Methionina	23.014	6016729	2.970	7.399
14	Valina	23.272	15993659	7.896	1.708
15		23.470	1116465	0.551	1.128
16	Fenilalanina	23.594	4146863	2.047	0.720
17	Ileusina	24.299	11180339	5.520	4.831
18	Leusina	24.527	13088291	6.461	1.611
19	Lysina	25.432	8999794	4.443	6.724
20		25.542	1225819	0.605	0.369
Total			202558646	100.000	

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Lampiran 11. Hasil Analisis Asam Amino Daging Ikan Kuniran



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Phone/Fax. 0251-8319894, 8323571, Email : admin@ilab-ipb.org ISO/IEC 17025 Certificate No : LP-156-IDN

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Certificate No. : LT-10-17-0831
Laboratory No. : BM/IX/17/2157
Sample Matrix : Material
Sample Id : Daging Ikan Kuniran
Packaging : Plastic Bottle

Received Date : 07-09-2017
Finished Date : 19-09-2017

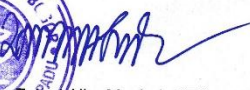
Parameter	Result	Unit	Method
Amino Acid			
Aspartic acid	1.23	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Glutamic acid	1.80	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Serine	0.50	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Histidine	0.24	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Glycine	0.54	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Threonine	0.58	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Arginine	0.66	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Alanine	0.91	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Tyrosine	0.47	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Methionine	0.45	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Valine	0.63	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Phenylalanine	0.57	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
I-leucine	0.65	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Leucine	1.01	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Lysine	1.39	% w/w	IK.LP-04.7-LT-1.0 (HPLC)
Amino Acid Total	11.62	% w/w	IK.LP-04.7-LT-1.0 (HPLC)

REMARKS:

*) Outside the scope of accreditation

Lab Kimia Terpadu IPB is not responsible for the sampling process

September 22, 2017
Head of Research and Development Division,



Dr. Zahra Alim Mas'ud, DEA
NIP: 19560622 198601 1 001

Pengaduan tidak akan kami layani setelah 2 (dua) minggu penerbitan sertifikat. Hasil pengujian ini tidak untuk digandakan dan hanya berlaku untuk contoh-contoh tersebut di atas.
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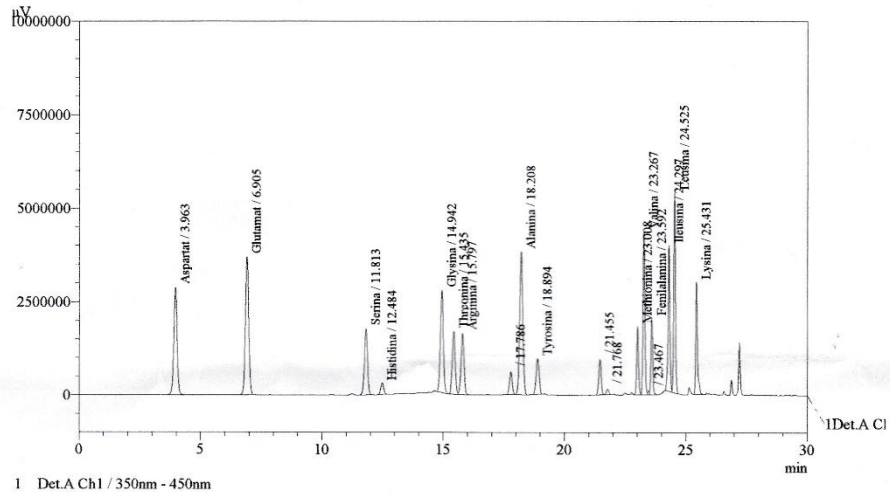
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LABORATORY TEST REPORT

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Analysis Date & time : 9/15/2017 1:18:58 PM
User Name : LT-10-17-0831 (BM-IX-17-2157) DAGING IKAN KUNIRAN
Sample Id : DAGING IKAN KUNIRAN



Detector A Ch1 350nm - 450nm

Peak#	Name	Ret. Time	Area	Area %	Resolution
1	Aspartat	3.963	26604611	9.064	0.000
2	Glutamat	6.905	35413001	12.065	11.569
3	Serina	11.813	15956419	5.436	19.456
4	Histidina	12.484	2698987	0.920	2.773
5	Glysina	14.942	24361790	8.300	10.225
6	Threonina	15.435	14326994	4.881	2.079
7	Arginina	15.797	13995187	4.768	1.546
8		17.786	4921380	1.677	8.758
9	Alanina	18.208	34829217	11.866	1.800
10	Tyrosina	18.894	8508344	2.899	2.783
11		21.455	6561255	2.235	11.756
12		21.768	1094658	0.373	1.555
13	Methionina	23.008	9802470	3.340	6.813
14	Valina	23.267	23072469	7.861	1.698
15		23.467	457233	0.156	0.504
16	Fenilalanina	23.592	10392570	3.541	0.319
17	Ileusina	24.297	20262461	6.903	4.834
18	Leusina	24.525	25577828	8.714	1.591
19	Lysina	25.431	14675773	5.000	6.670
Total			293512647	100.000	

Pengaduan tidak akan kami layani setelah 2 (dua) minggu penerbitan sertifikat. Hasil pengujian ini tidak untuk digandakan dan hanya berlaku untuk contoh-contoh tersebut di atas.
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Lampiran 12. Kurva Standar Asam Amino

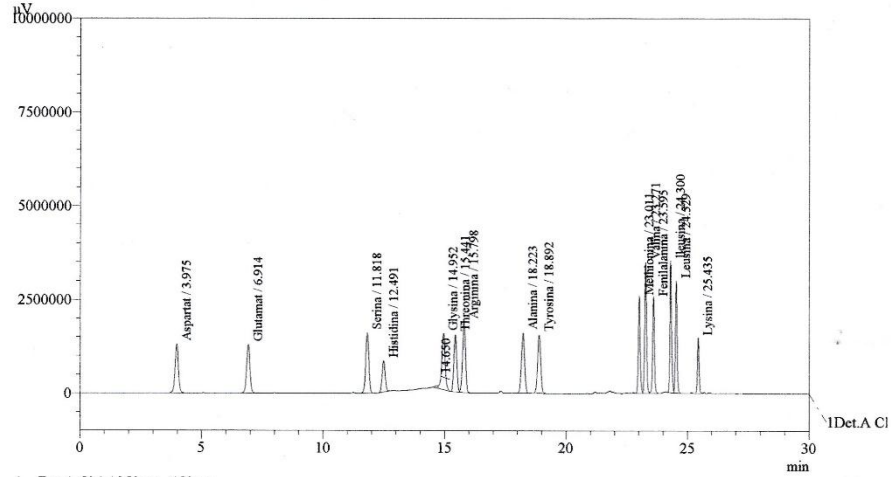


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Analysis Date & time : 9/15/2017 2:46:57 PM
User Name : STANDAR ASAM AMINO (150917)
Sample Id : STANDAR ASAM AMINO (150917)



1 Det.A Ch1 / 350nm - 450nm

Detector A Ch1 350nm - 450nm

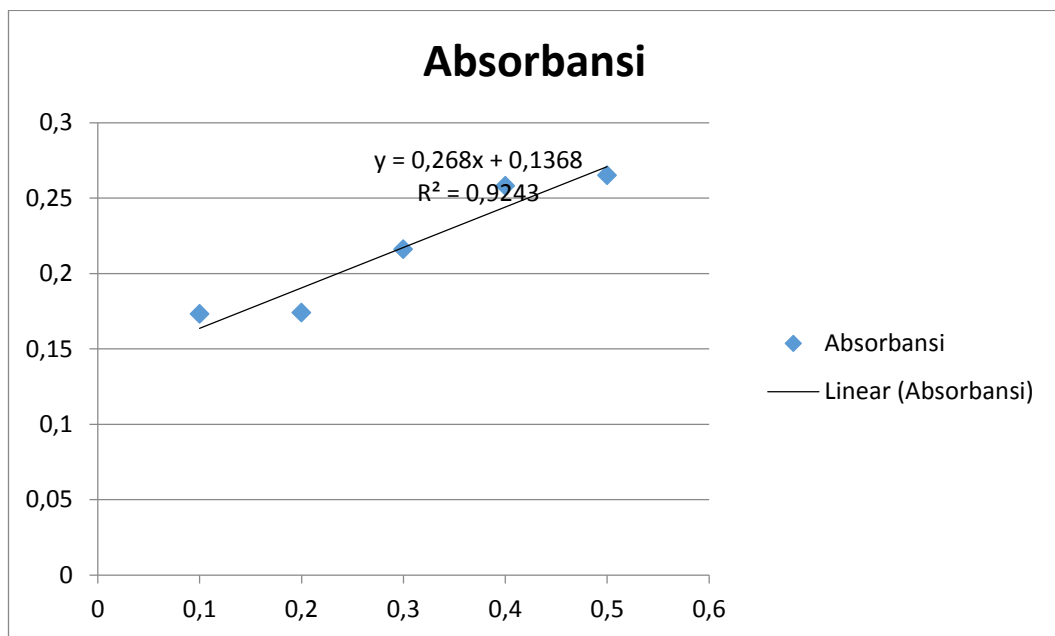
Peak#	Name	Ret. Time	Area	Area %	Resolution
1	Aspartat	3.975	12278936	6.063	0.000
2	Glutamat	6.914	12380335	6.113	11.532
3	Serina	11.818	14502057	7.161	19.464
4	Histidina	12.491	7394350	3.651	2.776
5		14.650	583954	0.288	0.000
6	Glysina	14.952	14584138	7.201	0.000
7	Threonina	15.441	12697793	6.270	2.014
8	Arginina	15.798	15931191	7.866	1.536
9	Alanina	18.223	14633205	7.225	10.064
10	Tyrosina	18.892	14067392	6.946	2.707
11	Methionina	23.011	13867949	6.847	20.666
12	Valina	23.271	18288553	9.030	1.715
13	Fenilalanina	23.595	12998217	6.418	2.219
14	Ileusina	24.300	17440454	8.611	4.972
15	Leusina	24.529	14263160	7.043	1.617
16	Lysina	25.435	6614597	3.266	6.749
Total			202526280	100.000	

Pengaduan tidak akan kami layani setelah 2 (dua) minggu penerbitan sertifikat. Hasil pengujian ini tidak untuk digandakan dan hanya berlaku untuk contoh-contoh tersebut di atas.
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Lampiran 13. Kurva Standar BSA (*Bovin Serum Albumin*)

Kurva standar BSA digunakan untuk menentukan kadar protein (metode Lowry). Untuk mendapatkan gambar kurva standar BSA digunakan persamaan regresi linier $Y = a + bx$, dengan :

$$b = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - (\sum x)^2}; a = \frac{\sum y - b\sum x}{n}$$



Konsentrasi	Absorbansi
0.1	0.173
0.2	0.174
0.3	0.216
0.4	0.258
0.5	0.265

Lampiran 14. Prosedur Pembuatan Kecap Ikan Kuniran



Ikan Kuniran



Ikan dibersihkan dan dihaluskan



Penimbangan daging ikan



Penambahan enzim papain



Ikan dan garam dimasukkan



Penimbangan garam



Botol ditutup rapat dan difermentasi



Disterilisasi



Disentrifus



Kecap Ikan Kuniran

Lampiran 15. Gambar Kecap Ikan



Kecap Ikan Komersial
(*Sun Brand*)



Kecap Ikan Kuniran

Lampiran 16. Hasil Uji Plagiasi

