

## Lampiran I. Analisis Statistik Kandungan Protein Kecap Kacang Tolo

Tabel 16. Hasil Pengukuran Kandungan Protein Pada Akhir Fermentasi Kecap Kacang Tolo (%).

Perlakuan	Ulangan (R)			Total Perlakuan	Rerata
	1	2	3		
A <sub>0</sub> B <sub>0</sub>	28,8	28,8	27,9	85,5	28,5
A <sub>1</sub> B <sub>0</sub>	29,2	29,2	29,2	87,6	29,2
A <sub>2</sub> B <sub>0</sub>	29,2	29,2	29,2	87,6	29,2
A <sub>3</sub> B <sub>0</sub>	29,2	29,2	29,2	87,6	29,2
A <sub>0</sub> B <sub>1</sub>	27,9	28,8	28,8	85,5	28,5
A <sub>1</sub> B <sub>1</sub>	33,3	34,2	33,3	100,8	33,6
A <sub>2</sub> B <sub>1</sub>	31,5	33,3	30,6	95,4	31,8
A <sub>3</sub> B <sub>1</sub>	34,2	31,5	33,3	99,0	33,0
A <sub>0</sub> B <sub>2</sub>	28,8	28,8	27,9	85,5	28,5
A <sub>1</sub> B <sub>2</sub>	42,3	42,3	44,1	128,7	42,9
A <sub>2</sub> B <sub>2</sub>	35,1	36,0	36,9	108,0	36,0
A <sub>3</sub> B <sub>2</sub>	34,2	34,2	35,1	103,5	34,5
A <sub>0</sub> B <sub>3</sub>	28,8	27,9	28,8	85,5	28,5
A <sub>1</sub> B <sub>3</sub>	49,5	44,1	44,1	137,7	45,9
A <sub>2</sub> B <sub>3</sub>	42,3	43,2	42,3	127,8	42,6
A <sub>3</sub> B <sub>3</sub>	38,7	39,6	39,6	117,9	39,3
A <sub>0</sub> B <sub>4</sub>	28,8	28,8	27,9	85,5	28,5
A <sub>1</sub> B <sub>4</sub>	56,7	58,5	59,4	174,6	58,2
A <sub>2</sub> B <sub>4</sub>	49,5	49,5	48,6	147,6	49,2
A <sub>3</sub> B <sub>4</sub>	42,3	44,1	44,1	130,5	43,5
A <sub>0</sub> B <sub>5</sub>	28,8	27,9	28,8	85,5	28,5
A <sub>1</sub> B <sub>5</sub>	63,9	65,7	65,7	195,3	65,1
A <sub>2</sub> B <sub>5</sub>	50,4	51,3	49,5	151,2	50,4
A <sub>3</sub> B <sub>5</sub>	46,8	47,7	46,8	141,3	47,1
TOTAL				2723,1	

$$\begin{aligned}
 \text{Faktor Koreksi (FK)} &= \frac{(\text{Total})^2}{R \times A \times B} \\
 &= \frac{(2735,1)^2}{3 \times 4 \times 6} \\
 &= 103.899,61
 \end{aligned}$$

$$\begin{aligned}
 \text{JK (Total)} &= \sum X^2 - \text{FK} \\
 &= [(28,8)^2 + \dots + (46,8)^2] - 103.899,61 \\
 &= 8.725,85
 \end{aligned}$$

$$\begin{aligned} \text{JK (Perlakuan)} &= \frac{\sum T^2}{R} - \text{FK} \\ &= \frac{[(85,5)^2 + \dots + (141,3)^2]}{3} - 103.899,61 \\ &= 7550,53 \end{aligned}$$

$$\begin{aligned} \text{JK (Galat)} &= \text{JK (Total)} - \text{JK (Perlakuan)} \\ &= 8.725,85 - 7.550,53 \\ &= 1.175,32 \end{aligned}$$

$$\begin{aligned} \text{JK(A)} &= \frac{\sum A^2}{R \times B} - \text{FK} \\ &= \frac{[(513)^2 + \dots + (679,8)^2]}{3 \times 6} - 103.899,61 \\ &= 2.788,0 \end{aligned}$$

$$\begin{aligned} \text{JK(B)} &= \frac{\sum B^2}{R \times A} - \text{FK} \\ &= \frac{[(348,3)^2 + \dots + (573,3)^2]}{3 \times 4} - 103.899,61 \\ &= 3.239,16 \end{aligned}$$

$$\begin{aligned} \text{JK(AB)} &= \text{JK(Perlakuan)} - \text{JK(A)} - \text{JK(B)} \\ &= 7.550,53 - 2.788,0 - 3.239,16 \\ &= 1.523,37 \end{aligned}$$

Tabel 17. Hasil Analisis of Varians Kandungan Protein Kecap Kacang Tolo

SK	DB	JK	KT	F hitung	F tabel 1%
Perlakuan	23	7.550,53	328,28	13,40**	2,20
- Jenis Kapang (A)	3	2.788,00	929,33	37,95**	4,22
- Lama Inkubasi (B)	5	3.239,16	647,83	26,45**	3,42
- Interaksi (AB)	15	1.523,37	101,56	4,15**	2,48
Galat	48	1.175,32	24,29		
Total	71	8.725,85			

Keterangan : \*\* berbeda sangat nyata  
\* berbeda nyata

Perhitungan Uji Beda Nyata Terkecil pada Taraf 1%.

$$BNT = t_{\alpha(v)} \times S_d$$

$$\begin{aligned} Q_A &= t_{0,01(48)} \times \sqrt{\frac{2 \text{KTG}}{R \times B}} \\ &= 2,678 \times \sqrt{\frac{2 \times 24,49}{3 \times 6}} \\ &= 4,42 \end{aligned}$$

$$\begin{aligned} Q_B &= t_{0,01(48)} \times \sqrt{\frac{2 \text{KTG}}{R \times A}} \\ &= 2,678 \times \sqrt{\frac{2 \times 24,49}{3 \times 4}} \\ &= 5,41 \end{aligned}$$

$$\begin{aligned} Q_{AB} &= t_{0,01(48)} \times \sqrt{\frac{2 \text{KTG}}{R}} \\ &= 2,678 \times \sqrt{\frac{2 \times 24,49}{3}} \\ &= 10,82 \end{aligned}$$

Tabel 18. Beda antar mean lama inkubasi kandungan protein kecap.

	B <sub>0</sub>	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>
B <sub>0</sub>	29,03	31,7	35,5	39,1	44,9	47,8
B <sub>1</sub>	29,03	-				
B <sub>2</sub>	31,7	2,7 <sup>tn</sup>	-			
B <sub>3</sub>	35,5	6,5**	3,8 <sup>tn</sup>	-		
B <sub>4</sub>	39,1	10,1**	7,4**	3,6 <sup>tn</sup>	-	
B <sub>5</sub>	44,9	15,9**	13,2**	9,4**	5,8**	-
B <sub>5</sub>	47,8	18,8**	16,1**	12,3**	8,7**	2,9 <sup>tn</sup>

Keterangan : \*\* berbeda sangat nyata      tn tidak berbeda nyata  
\* berbeda nyata

Tabel 19. Beda antar mean kandungan protein pengaruh jenis kapang.

	A <sub>0</sub>	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>
A <sub>0</sub>	28,5	37,8	39,9	45,8
A <sub>1</sub>	28,5	-		
A <sub>2</sub>	37,8	9,3**	-	
A <sub>3</sub>	39,9	11,4**	2,1 <sup>tn</sup>	-
A <sub>3</sub>	45,8	17,3**	8,0**	5,9**

Keterangan : \*\* berbeda sangat nyata  
tn tidak berbeda nyata

## Lampiran 2. Analisis Statistik Kandungan Gula Reduksi.

Tabel 20. Hasil Pengukuran Kandungan Gula Reduksi Pada Akhir Fermentasi Kecap Kacang Tolo (%).

Perlakuan	Ulangan (R)			Total Perlakuan	Rerata
	1	2	3		
A0B0	1,54	1,54	1,55	4,63	1,54
A1B0	2,56	2,57	2,58	7,80	2,60
A2B0	2,56	2,57	2,58	7,80	2,60
A3B0	2,56	2,57	2,58	7,80	2,60
A0B1	1,54	1,54	1,54	4,63	1,54
A1B1	4,54	4,55	4,54	13,60	4,54
A2B1	3,02	3,01	3,01	9,04	3,01
A3B1	2,87	2,89	2,89	8,65	2,88
A0B2	1,54	1,54	1,54	4,63	1,54
A1B2	6,31	6,31	6,33	18,95	6,32
A2B2	3,72	3,73	3,73	11,18	3,73
A3B2	3,55	3,56	3,56	10,67	3,56
A0B3	1,54	1,55	1,54	4,63	1,54
A1B3	7,47	7,45	7,46	22,38	7,46
A2B3	5,85	5,78	5,87	17,59	5,86
A3B3	5,72	5,71	5,72	17,15	5,72
A0B4	1,54	1,55	1,54	4,63	1,54
A1B4	9,01	9,04	9,03	27,08	9,03
A2B4	7,77	7,75	7,76	23,28	7,78
A3B4	6,25	6,27	6,27	18,79	6,26
A0B5	1,54	1,55	1,54	4,63	1,54
A1B5	10,54	10,52	10,52	31,58	10,53
A2B5	8,63	8,63	8,63	23,89	8,63
A3B5	7,76	7,76	7,75	23,27	7,76
Total				330,3	

$$\begin{aligned}
 \text{Faktor Koreksi (FK)} &= \frac{(\text{Total})^2}{R \times A \times B} \\
 &= \frac{(330,3)^2}{3 \times 4 \times 6} \\
 &= 1515,25
 \end{aligned}$$

$$\begin{aligned}
 \text{JK (Total)} &= \Sigma X^2 - \text{FK} \\
 &= [(1,54)^2 + \dots + (7,75)^2] - 1515,25 \\
 &= 549,162
 \end{aligned}$$

$$\begin{aligned}
 \text{JK (Perlakuan)} &= \frac{\sum T^2}{R} - \text{FK} \\
 &= \frac{[(4,63)^2 + \dots + (23,27)^2]}{3} - 1515,25 \\
 &= 547,782
 \end{aligned}$$

$$\begin{aligned}
 \text{JK (Galat)} &= \text{JK (Total)} - \text{JK (Perlakuan)} \\
 &= 549,162 - 547,782 \\
 &= 1,38
 \end{aligned}$$

$$\begin{aligned}
 \text{JK (A)} &= \frac{\sum A^2}{R \times B} - \text{FK} \\
 &= \frac{[(27,77)^2 + \dots + (86,33)^2]}{3 \times 6} - 1515,25 \\
 &= 259,756
 \end{aligned}$$

$$\begin{aligned}
 \text{JK (B)} &= \frac{\sum B^2}{R \times A} - \text{FK} \\
 &= \frac{[(28,03)^2 + \dots + (85,37)^2]}{3 \times 4} - 1515,25 \\
 &= 208,63
 \end{aligned}$$

$$\begin{aligned}
 \text{JK (AB)} &= \text{JK (Perlakuan)} - \text{JK (A)} - \text{JK (B)} \\
 &= 547,782 - 259,756 - 208,63 \\
 &= 79,39
 \end{aligned}$$

Tabel 21. Hasil Analisis of Varians Kandungan Gula Reduksi Kecap Kacang Tolo.

SK	DB	JK	KT	F hitung	F tabel 1%
Perlakuan	23	547,78	23,82	821,38**	2,20
- Jenis Kapang (A)	3	259,76	86,59	298,86**	4,22
- Lama Inkubasi (B)	5	208,63	41,73	144,96**	3,42
- Interaksi (AB)	15	79,40	5,29	182,41**	2,48
Galat	48	1,38	0,029		
Total	71	549,16			

Keterangan : \*\* = berbeda sangat nyata  
\* = berbeda nyata

## Perhitungan Uji Beda Nyata Terkecil pada Taraf 1%

$$BNT = t_{\alpha(v)} \times S_d$$

$$Q_A = t_{0,01(48)} \times \sqrt{\frac{2KTG}{R \times B}}$$

$$= 2,678 \times \sqrt{\frac{2 \times 0,029}{3 \times 6}}$$

$$= 0,152$$

$$Q_B = t_{0,01(48)} \times \sqrt{\frac{2KTG}{R \times A}}$$

$$= 2,678 \times \sqrt{\frac{2 \times 0,029}{3 \times 4}}$$

$$= 0,186$$

$$Q_{AB} = t_{0,01(48)} \times \sqrt{\frac{2KTG}{R}}$$

$$= 2,678 \times \sqrt{\frac{2 \times 0,029}{3}}$$

$$= 0,372$$

Tabel 22. Beda Antar Mean Kandungan Gula Reduksi Pengaruh Jenis Kapang.

	A <sub>0</sub>	A <sub>3</sub>	A <sub>1</sub>	A <sub>2</sub>
	1,54	4,797	5,27	6,75
A <sub>0</sub>	1,54			
A <sub>3</sub>	4,797	3,26**	-	
A <sub>2</sub>	5,27	3,73**	0,47**	-
A <sub>1</sub>	6,75	5,21**	1,95**	1,48**

Keterangan : \*\* berbeda sangat nyata

\* berbeda nyata

Tabel 23. Beda Antar Mean Kandungan Gula Reduksi Pengaruh Lama Inkubasi.

	B <sub>0</sub>	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>
	2,34	2,99	3,79	5,15	6,15	7,12
B <sub>0</sub>	2,34					
B <sub>1</sub>	2,99	0,65**	-			
B <sub>2</sub>	3,79	1,45**	0,8**	-		
B <sub>3</sub>	5,15	2,81**	2,16**	1,36**	-	
B <sub>4</sub>	6,15	3,81**	3,16**	2,36**	1,0**	-
B <sub>5</sub>	7,12	4,78**	4,13**	3,33**	1,97**	0,97**

Keterangan : \*\* berbeda sangat nyata

## Lampiran 3. Analisis Statistik Total Asam Kecap Kacang Tolo

Tabel 24. Hasil Pengukuran Total Asam Pada Akhir Fermentasi Kecap Kacang Tolo (%)

Perlakuan	Ulangan (R)			Total Perlakuan	Rerata
	1	2	3		
A0B0	0,20	0,20	0,25	0,65	0,22
A1B0	0,45	0,40	0,45	1,30	0,43
A2B0	0,75	0,50	0,60	1,85	0,62
A3B0	0,60	0,55	0,55	1,70	0,57
A0B1	0,20	0,25	0,20	0,65	0,22
A1B1	0,60	0,65	0,60	1,85	0,62
A2B1	0,60	0,75	0,75	2,10	0,70
A3B1	0,75	0,70	0,70	2,15	0,72
A0B2	0,25	0,20	0,20	0,65	0,22
A1B2	0,85	0,95	0,95	2,75	0,92
A2B2	1,00	1,10	1,25	3,35	1,12
A3B2	0,85	0,85	0,89	2,59	0,86
A0B3	0,20	0,20	0,25	0,65	0,22
A1B3	1,00	1,00	0,95	2,95	0,98
A2B3	1,35	1,45	1,50	4,30	1,43
A3B3	1,10	1,15	1,15	3,40	1,13
A0B4	0,25	0,20	0,20	0,65	0,22
A1B4	1,25	1,15	1,20	3,60	1,20
A2B4	1,55	1,65	1,65	4,85	1,62
A3B4	1,55	1,20	1,25	3,70	1,23
A0B5	0,25	0,25	0,20	0,70	0,23
A1B5	1,35	1,45	1,35	4,15	1,38
A2B5	1,95	1,95	2,00	5,90	1,97
A3B5	1,55	1,55	1,55	4,65	1,55
Total				61,09	

$$\begin{aligned}
 \text{Faktor Koreksi (FK)} &= \frac{(\text{Total})^2}{R \times A \times B} \\
 &= \frac{(61,09)^2}{72} \\
 &= 51,833
 \end{aligned}$$

$$\begin{aligned}
 \text{JK (Total)} &= \sum X^2 - \text{FK} \\
 &= [(0,2)^2 + (0,2)^2 + \dots + (1,55)^2] - 51,833 \\
 &= 18,546
 \end{aligned}$$

$$\begin{aligned}
 \text{JK (Perlakuan)} &= \frac{\sum T^2}{R} - \text{FK} \\
 &= \frac{[(0,65)^2 + \dots + (4,65)^2]}{3} - 51,833 \\
 &= 17,199
 \end{aligned}$$

$$\begin{aligned}
 \text{JK (Galat)} &= \text{JK (Total)} - \text{JK (Perlakuan)} \\
 &= 18,546 - 17,199 \\
 &= 1,347
 \end{aligned}$$

$$\begin{aligned}
 \text{JK (A)} &= \frac{\sum F^2}{R \times B} - \text{FK} \\
 &= \frac{[(3,95)^2 + \dots + (18,19)^2]}{3 \times 6} - 51,833 \\
 &= 10,309
 \end{aligned}$$

$$\begin{aligned}
 \text{JK (B)} &= \frac{\sum B^2}{R \times A} - \text{FK} \\
 &= \frac{[(5,5)^2 + \dots + (15,4)^2]}{3 \times 4} - 51,833
 \end{aligned}$$

$$\begin{aligned}
 \text{JK (AB)} &= \text{JK (Perlakuan)} - \text{JK (A)} - \text{JK (B)} \\
 &= 18,546 - 10,309 - 5,812 \\
 &= 2,425
 \end{aligned}$$

Tabel 25. Hasil Analisis of Varians Total Asam Kecap Kacang Tolo.

SK	DB	JK	KT	F hitung	F tabel 1%
Perlakuan	23	17,199	0,750	26,79**	2,20
- Jenis Kapang (A)	3	10,309	3,436	122,71**	4,22
- Lama Inkubasi (B)	5	5,812	1,162	41,59**	3,42
- Interaksi (AB)	15	2,425	0,162	5,79**	2,48
Galat	48	1,347	0,028		
Total	71	18,546			

Keterangan : \*\* - berbeda sangat nyata



Perhitungan Uji Beda Nyata Terkecil pada Taraf 1%

$$\text{BNT} = t_{\alpha(v)} \times S_d$$

$$\begin{aligned} Q_A &= t_{0,01(48)} \times \sqrt{\frac{2KTG}{R \times A}} \\ &= 2,678 \times \sqrt{\frac{2 \times 0,028}{3 \times 6}} \\ &= 0,041 \end{aligned}$$

$$\begin{aligned} Q_B &= t_{0,01(48)} \times \sqrt{\frac{2KTG}{R \times B}} \\ &= 2,678 \times \sqrt{\frac{2 \times 0,028}{3 \times 4}} \\ &= 0,053 \end{aligned}$$

$$\begin{aligned} Q_{AB} &= t_{0,01(48)} \times \sqrt{\frac{2KTG}{3}} \\ &= 2,678 \times \sqrt{\frac{2 \times 0,028}{3}} \\ &= 0,211 \end{aligned}$$

Tabel 26. Beda Antar Mean Total Asam Pengaruh Jenis Kapang

	A <sub>0</sub>	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>
A <sub>0</sub>	0,185	-	-	-
A <sub>1</sub>	0,92	0,74**	-	-
A <sub>2</sub>	1,24	1,06**	0,32**	-
A <sub>3</sub>	1,01	0,83**	0,09 <sup>tn</sup>	0,23*

Keterangan : \*\* berbeda sangat nyata  
\* berbeda nyata  
tn tidak berbeda nyata

Tabel 27. Beda Antar Mean Total Asam Pengaruh Lama Inkubasi

	B <sub>0</sub>	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>
B <sub>0</sub>	1,28	-	-	-	-	-
B <sub>1</sub>	1,07	0,21**	-	-	-	-
B <sub>2</sub>	0,94	0,34**	0,13**	-	-	-
B <sub>3</sub>	0,78	0,50**	0,29**	0,16**	-	-
B <sub>4</sub>	0,57	0,71**	0,50**	0,37**	0,21**	-
B <sub>5</sub>	0,46	0,82**	0,61**	0,48**	0,32**	0,11**

Keterangan : \*\* berbeda sangat nyata

## Lampiran 4.

Tabel 28. Data Rata-rata pH Koji dan Moromi Kecap Kacang Tolo

KOJI						MOROMI						
Kombinasi Perlakuan	Ulangan			Total	Rata-rata	Kombinasi Perlakuan	Ulangan			Total	Rata-rata	
	1	2	3				1	2	3			
A0 B0	B0	7.9	7.9	7.8	23.6	7.9	A0 B0	7.5	7.5	7.6	22.6	7.5
	B1	7.6	7.7	7.7	23.0	7.7	B1	7.6	7.4	7.4	22.4	7.5
	B2	7.5	7.4	7.5	22.4	7.5	B2	7.1	7.0	7.10	21.2	7.1
	B3	7.2	7.2	7.2	21.6	7.2	B3	6.8	6.8	6.7	20.3	6.8
	B4	6.8	6.8	6.8	20.4	6.8	B4	6.5	6.5	6.5	19.5	6.5
	B5	6.5	6.4	6.4	19.3	6.4	B5	6.4	6.5	6.4	19.3	6.4
A1 B0	B0	6.9	6.9	6.8	20.6	6.9	A1 B0	5.8	5.6	5.8	17.2	5.7
	B1	6.7	6.8	6.7	20.2	6.7	B1	5.0	5.1	5.3	15.4	5.1
	B2	5.8	5.9	6.0	17.7	5.9	B2	4.9	5.2	5.2	15.3	5.1
	B3	5.5	5.7	5.5	16.7	5.6	B3	4.7	4.5	4.6	13.8	4.6
	B4	5.4	5.4	5.4	16.2	5.4	B4	4.4	4.3	4.3	13.0	4.3
	B5	5.3	5.4	5.2	15.9	5.3	B5	4.0	4.3	4.1	12.4	4.1
A2 B0	B0	6.7	6.8	6.8	20.3	6.8	A2 B0	5.8	5.7	4.0	15.5	5.2
	B1	6.8	6.7	6.8	20.3	6.8	B1	5.7	5.9	4.7	16.3	5.4
	B2	6.5	6.4	6.6	19.5	6.5	B2	5.3	5.5	4.9	15.7	5.2
	B3	6.3	6.4	6.4	19.1	6.4	B3	4.8	4.9	5.4	15.1	5.0
	B4	5.9	6.0	5.9	17.8	5.9	B4	4.7	4.5	5.9	15.1	5.0
	B5	5.7	5.6	5.6	16.9	5.6	B5	4.3	4.3	6.0	14.6	4.9
A3 B0	B0	6.7	6.7	6.7	20.1	6.7	A3 B0	5.8	5.8	5.8	17.4	5.8
	B1	6.7	6.6	6.6	19.9	6.6	B1	5.5	5.7	5.5	16.7	5.6
	B2	6.5	6.5	6.3	19.3	6.4	B2	5.4	5.3	5.3	16.0	5.3
	B3	6.2	6.0	6.1	18.3	6.1	B3	4.8	4.8	5.0	14.6	4.9
	B4	5.7	5.5	5.5	16.7	5.6	B4	4.6	4.5	4.5	13.6	4.5
	B5	5.3	5.5	5.4	16.2	5.4	B5	4.4	4.2	4.3	12.9	4.3
TOTAL					462.0	TOTAL					395.9	

## Lampiran 5.

Tabel 29. Data rata-rata temperatur Koji dan Moromi kecap kacang tolo

KOJI						MOROMI							
Kombinasi Perlakuan	Ulangan			Total	Rata-rata	Kombinasi Perlakuan	Ulangan			Total	Rata-rata		
	1	2	3				1	2	3				
A0 B0 B1 B2 B3 B4 B5	26	27	27	80	26.7	A0 B0 B1 B2 B3 B4 B5	27	27	27	81	27.0		
	27	26	26				27	26	27			80	26.7
	27	28	28				80	26.7					
	28	27	28				82	27.3					
	28	28	27				83	27.7					
28	28	28	84	28.0									
A1 B0 B1 B2 B3 B4 B5	27	27	28	82	27.3	A1 B0 B1 B2 B3 B4 B5	27	28	28	83	27.7		
	28	28	27				28	28	28			84	28.0
	28	29	28				85	28.3					
	29	29	28				86	28.7					
	29	28	29				86	28.7					
29	29	28	86	28.7									
A2 B0 B1 B2 B3 B4 B5	26	26	25	77	25.7	A2 B0 B1 B2 B3 B4 B5	26	26	27	79	26.3		
	26	25	26				27	26	27			80	26.7
	26	27	26				79	26.3					
	27	27	28				82	27.3					
	27	28	27				82	27.3					
28	27	28	83	27.7									
A3 B0 B1 B2 B3 B4 B5	26	27	26	79	26.3	A3 B0 B1 B2 B3 B4 B5	27	27	26	80	26.7		
	26	25	25				26	27	27			80	26.7
	26	26	27				79	26.3					
	25	25	27				77	25.7					
	27	28	28				83	27.7					
28	29	28	85	28.3									
TOTAL				1959		TOTAL				1986			

## Lampiran 6. Analisis Statistik Regresi Kandungan Protein

Tabel 30. Data Regresi Kurva Standart Larutan Protein

X	Y	x	y	x <sup>2</sup>	xy	Y
0	0,020	-138	-0,0545	19044	7,52	0,0045
30	0,025	-108	-0,0495	11664	5,35	0,02
60	0,035	-78	-0,0395	6084	3,08	0,03
90	0,050	-48	-0,0245	2304	1,18	0,05
120	0,052	-18	-0,0225	324	0,41	0,06
150	0,075	12	0,0005	144	0,01	0,08
180	0,110	42	0,0355	1764	1,49	0,09
210	0,125	72	0,0505	5184	3,64	0,11
240	0,130	102	0,0555	10404	5,66	0,13
300	0,140	162	0,0655	26244	10,61	0,16
1380	0,745			83160	38,95	

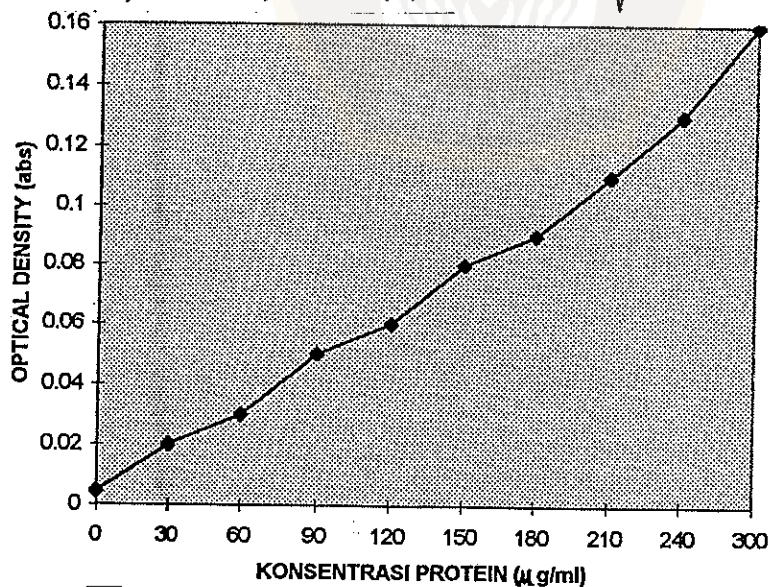
$$x = \frac{1380}{10} = 138 \quad y = \frac{0,745}{10} = 0,0745 \quad b = \frac{\sum xy}{\sum x^2} = \frac{38,95}{83,160} = 0,000521$$

$$a = Y - b(x) = 0,0745 - 0,000521(138) = 0,0045$$

$$Y = a + b(X)$$

$$Y = 0,0045 + 0,000521(X)$$

$$r = \frac{\sum xy}{\sqrt{\sum x^2 \times \sum y^2}}$$



GAMBAR 8. KURVA STANDART KADAR PROTEIN

## Lampiran 7. Analisis Statistik Regresi Kandungan Gula Reduksi

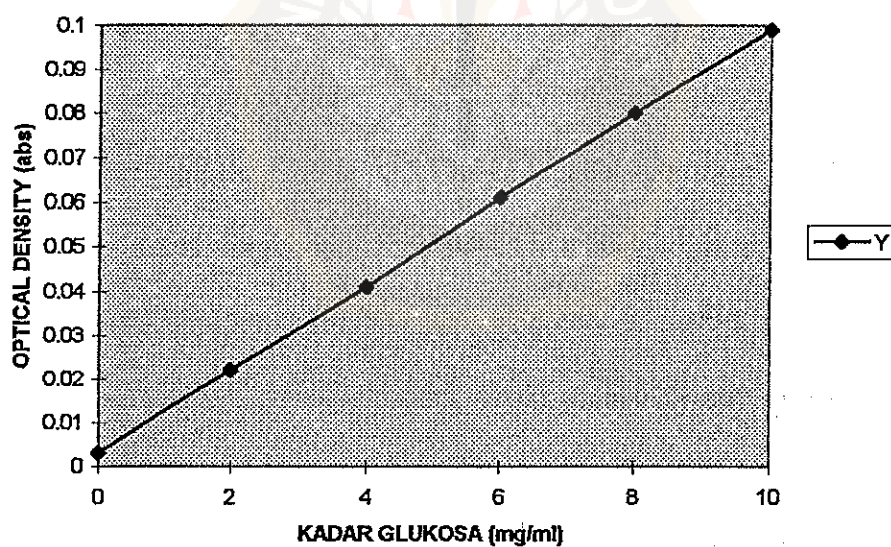
Tabel 31. Data Regresi Kurva Standart Kandungan Gula Reduksi

X	Y	x	y	x <sup>2</sup>	xy	Ȳ
0	0,004	-5	-0,047	25	0,235	0,003
2	0,022	-3	-0,029	9	0,087	0,022
4	0,041	-1	-0,010	1	0,01	0,041
6	0,061	1	0,01	1	0,01	0,061
8	0,076	3	0,025	9	0,075	0,080
10	0,102	5	0,051	25	0,255	0,099
30	0,306			70	0,672	

$$x = \frac{30}{6} = 5 \quad y = \frac{0,306}{6} = 0,051 \quad b = \frac{0,672}{70} = 0,0096$$

$$= 0,051 - 0,048 (5) \quad = 0,003 + 0,0096 (X)$$

$$= 0,003$$



Gambar 09. KURVA STANDART GULA REDUKSI