

Lampiran Ia.

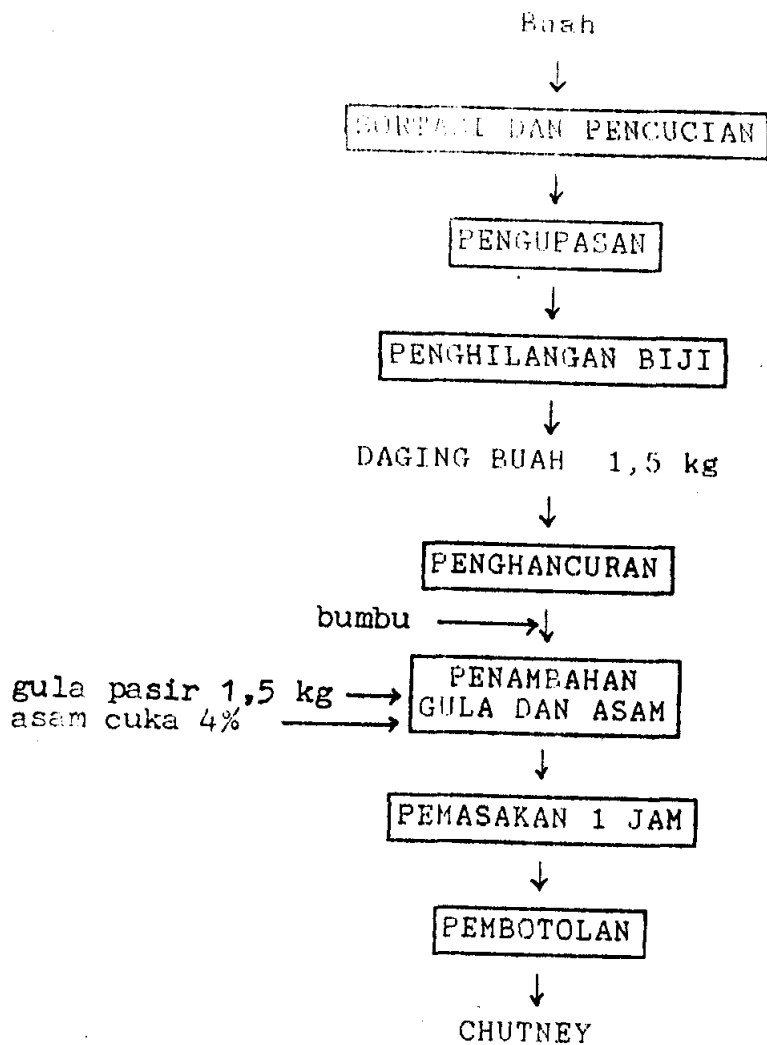


Diagram Alir Proses Pembuatan Chutney

Lampiran 1b.

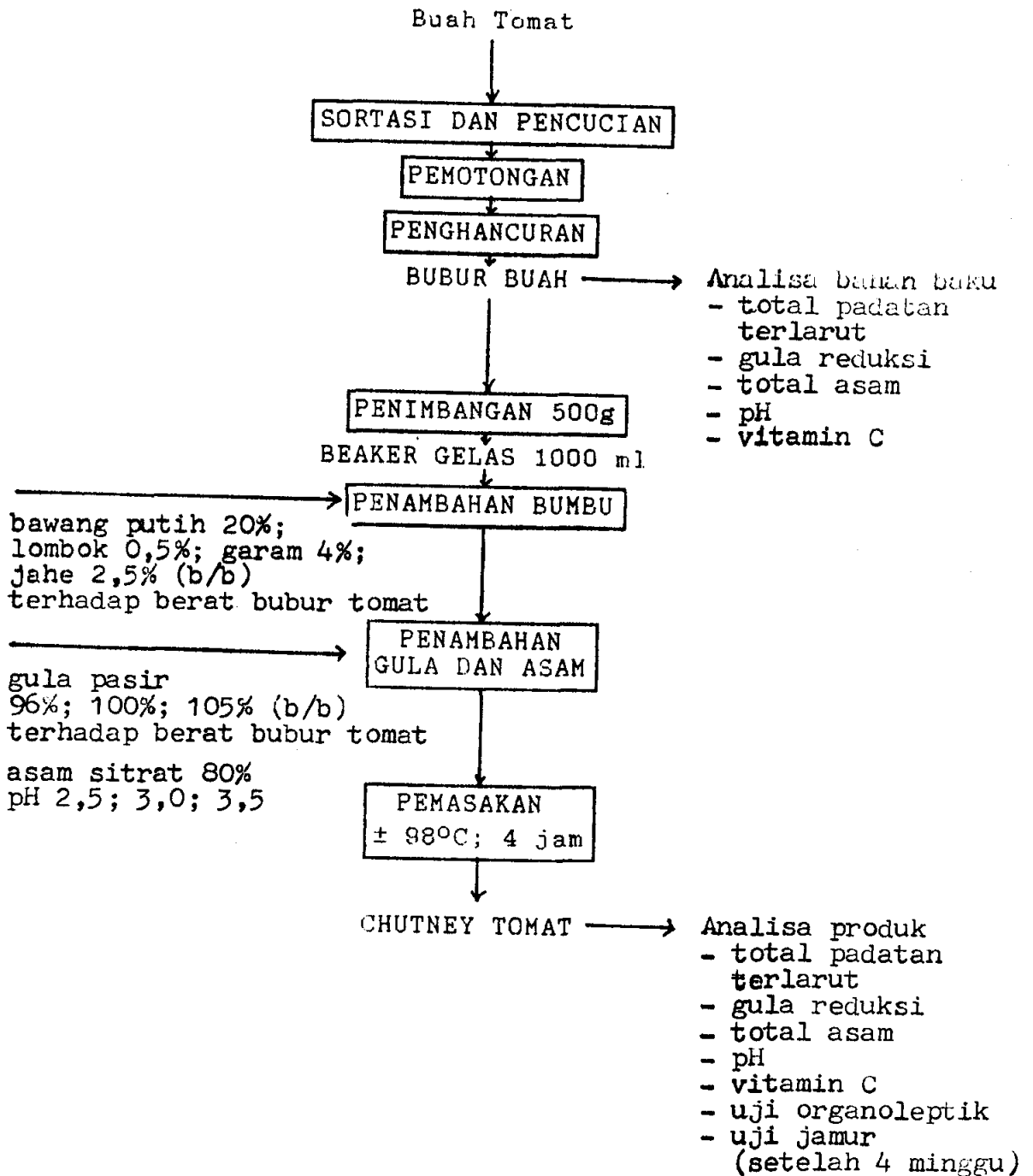


Diagram Alir Pembuatan Chutney Tomat

Lampiran 2.

Bahan-Bahan Yang Digunakan Sebagai Bumbu
Dalam Pembuatan Chutney Tomat

No.	Bahan	Banyaknya % (b/b) *
1.	Bawang putih	20
2.	Lombok	0,5
3.	Garam	4
4.	Jahe	2,5
	Total	27,0

* Terhadap berat bubur buah tomat

Sumber : Anonymous (1970)

Lampiran 3a. Hasil Pengamatan Total Padatan Terlarut (%Brix)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
S1P1	62,0	63,0	62,0	186,999	62,333
S1P2	63,0	62,0	62,0	186,999	62,333
S1P3	63,2	63,0	63,3	189,501	63,167
S2P1	65,5	65,0	65,0	195,501	65,167
S2P2	64,5	65,0	65,0	194,499	64,833
S2P3	65,0	66,0	65,0	195,999	65,333
S3P1	67,5	67,0	67,3	201,801	67,267
S3P2	68,0	68,2	68,0	204,201	68,067
S3P3	67,0	67,0	67,0	201,000	67,000
Jumlah	585,7	586,2	584,6	1756,500	585,500

Lampiran 3b. Hasil Sidik Ragam Total Padatan Terlarut

Sumber Variasi	db	JK	KT	F hitung	F tabel (5%)
Kelompok Perlakuan	2	0,930	0,465	4,65 *	3,63
S	2	105,167	52,583	525,83 *	3,63
P	2	0,276	0,138	1,38	3,63
SP	4	3,351	0,838	8,38 *	3,01
Galat	16	1,603	0,100		
Total	26	111,327			

* ada beda nyata

Lampiran 4a. Hasil Pengamatan Kadar Gula Reduksi (%)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
S1P1	40,14	40,13	40,15	120,42	40,140
S1P2	38,70	38,65	38,60	115,95	38,650
S1P3	39,52	37,48	38,42	115,42	38,473
S2P1	45,43	45,40	45,95	136,78	45,593
S2P2	45,70	45,49	45,63	136,82	45,607
S2P3	46,12	46,15	46,20	138,47	46,157
S3P1	52,60	53,65	55,61	161,86	53,953
S3P2	53,72	53,68	59,01	166,41	55,470
S3P3	52,85	54,82	57,95	165,62	55,207
Jumlah	414,78	415,45	427,52	3773,28	1257,759

Lampiran 4b. Hasil Sidik Ragam Kadar Gula Reduksi

Sumber Variasi	db	JK	KT	F hitung	F tabel (5%)
Kelompok Perlakuan	2	10,585	5,293	2,98	3,63
S	2	1130,393	565,196	318,24 *	3,63
P	2	0,012	6,0333E-03	3,40E-03	3,63
SP	4	9,578	2,394	1,35	3,01
Galat	16	28,417	1,776		
Total	26	1178,985			

* ada beda nyata

Lampiran 4c. Rerata Kadar Gula Reduksi (%)

Konsentrasi Sukrosa (%)	pH Awal	Rerata Kadar Gula Reduksi
96	3,5	38,473
96	3,0	38,650
96	2,5	40,140
100	2,5	45,593
100	2,0	45,607
100	3,5	46,157
105	2,5	53,953
105	3,5	55,207
105	2,0	55,470

Lampiran 5a. Hasil Pengamatan Total Asam (%)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
S1P1	3,35	3,40	3,38	10,131	3,377
S1P2	2,41	2,45	2,47	7,329	2,443
S1P3	0,26	0,29	0,27	0,818	0,273
S2P1	4,36	4,39	4,38	13,131	4,377
S2P2	2,55	2,60	2,58	7,731	2,577
S2P3	0,38	0,30	0,37	1,050	0,350
S3P1	4,70	4,50	4,45	13,650	4,550
S3P2	2,59	2,57	2,59	7,749	2,583
S3P3	0,50	0,53	0,58	1,611	0,537
Jumlah	21,10	21,03	21,07	63,200	21,067

Lampiran 5b. Hasil Sidik Ragam Total Asam

Sumber Variasi	db	JK	KT	F hitung	F tabel (5%)
Kelompok	2	9,589E-05	4,794E-05	0,020	3,63
Perlakuan	2	1,361	0,681	286,737 *	3,63
S	2	62,593	31,297	13177,684 *	3,63
P	4	1,193	0,298	125,474 *	3,01
SP	16	0,038	2,375E-03		
Galat					
Total	26	65,195			

* ada beda nyata

Lampiran 6a. Hasil Pengamatan pH Akhir

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
S1P1	2,49	2,47	2,45	7,410	2,470
S1P2	2,52	2,93	3,07	8,520	2,840
S1P3	3,05	3,31	3,40	9,759	3,253
S2P1	2,41	2,38	2,50	7,290	2,430
S2P2	3,01	2,82	2,78	8,610	2,870
S2P3	3,58	3,43	3,47	10,479	3,493
S3P1	2,42	2,40	2,45	7,269	2,423
S3P2	3,09	2,79	2,75	8,631	2,877
S3P3	3,25	3,32	3,47	10,041	3,347
Jumlah	25,82	25,85	26,34	78,009	26,003

Lampiran 6b. Hasil Sidik Ragam pH Akhir

Sumber Variasi	db	JK	KT	F hitung	F tabel (5%)
Kelompok Perlakuan	2	0,059	0,030	1,50	3,63
S	2	0,027	0,014	0,70	3,63
P	2	3,846	1,923	96,15 *	3,63
SP	4	0,067	0,017	0,85	3,01
Galat	16	0,317	0,020		
Total	26	4,316			

* ada beda nyata

Lampiran 7a. Hasil Pengamatan Kadar Vitamin C (mg/100g)

Perlakuan	Kelompok			Jumlah	Rata-rata
	I	II	III		
S1P1	4,45	4,60	4,55	13,599	4,533
S1P2	4,40	4,39	4,48	13,269	4,423
S1P3	4,40	4,35	4,44	13,191	4,397
S2P1	4,98	4,10	4,86	13,941	4,647
S2P2	4,35	4,00	4,92	13,269	4,423
S2P3	4,30	4,30	5,00	13,599	4,533
S3P1	4,30	4,25	4,42	12,969	4,323
S3P2	4,32	4,12	4,49	12,930	4,310
S3P3	4,30	4,34	4,47	13,110	4,370
Jumlah	39,80	38,45	41,63	119,880	39,960

Lampiran 7b. Hasil Sidik Ragam Kadar Vitamin C

Sumber Variasi	db	JK	KT	F hitung	F tabel (5%)
Kelompok Perlakuan	2	0,646	0,323	7,51 *	3,63
S	2	0,182	0,091	2,11	3,63
P	2	0,061	0,030	0,70	3,63
SP	4	0,052	0,013	0,30	3,01
Galat	16	0,687	0,043		
Total	26	1,628			

* ada beda nyata

Lampiran 7c. Rerata Kadar Vitamin C (mg/100g)

Konsentrasi Sukrosa (%)	pH Awal	Rerata Kadar Vitamin C
105	3,0	4,310
105	2,5	4,323
105	3,5	4,370
96	3,5	4,397
96	3,0	4,423
100	3,0	4,423
96	2,5	4,533
100	3,5	4,533
100	2,5	4,647

Lampiran 8a. Hasil Pengamatan Kesukaan Rasa Chutney

Panelis	S1P1	S1P2	S1P3	S2P1	S2P2	S2P3	S3P1	S3P2	S3P3	Total
1	5	3	5	3	3	6	5	3	5	38
2	6	3	3	6	4	5	6	3	5	41
3	5	4	3	5	5	3	4	3	5	37
4	6	4	3	5	3	5	4	7	6	43
5	7	3	6	7	2	3	5	5	5	43
6	6	2	5	5	2	6	3	7	5	41
7	5	2	2	6	2	4	4	7	7	39
8	6	2	5	5	3	5	4	4	5	39
9	4	2	5	5	3	4	4	4	5	36
10	5	3	6	6	4	5	3	3	5	40
11	6	5	2	5	2	2	7	5	5	39
12	7	3	5	5	2	3	7	5	5	42
13	5	3	5	4	2	4	7	3	6	39
14	6	3	5	6	2	3	5	5	5	40
15	5	2	3	5	2	5	3	4	5	34
16	6	3	5	5	2	4	5	3	5	38
17	6	3	4	7	3	3	5	6	5	42
18	5	4	2	3	4	3	6	5	3	35
19	6	3	3	3	6	4	6	5	3	39
20	5	2	2	3	2	5	3	4	5	31
21	5	3	3	7	5	6	3	7	7	46
22	6	5	6	6	3	6	7	3	3	45
23	6	2	3	5	2	3	5	3	3	32
24	7	3	6	7	5	5	6	3	5	47
25	5	2	2	4	3	5	3	4	3	31
26	6	3	2	4	3	4	3	2	3	30
27	7	2	2	7	3	4	6	5	6	42
28	5	3	2	4	3	3	4	4	3	31
29	6	3	6	5	3	5	7	2	2	38
30	7	5	3	7	3	3	6	5	4	43
31	5	2	3	5	2	5	7	6	7	42
32	7	3	3	7	3	3	7	7	6	46
33	5	4	4	6	4	5	6	6	6	46
34	5	4	3	6	3	5	6	6	4	42
35	6	5	6	5	2	6	5	5	3	43
36	5	2	2	3	2	4	5	2	3	28
37	6	3	3	7	5	5	6	5	3	43
38	5	5	3	5	3	4	5	2	3	35
39	7	5	5	7	2	3	7	5	5	46
40	6	2	2	6	2	4	4	7	7	40
41	5	2	4	5	3	3	6	3	3	34
42	5	3	5	5	2	5	5	4	3	37
43	6	2	5	5	2	4	5	3	3	35
44	6	3	2	4	3	3	4	4	3	32
45	5	3	3	7	3	3	7	7	6	44
Total	256	138	167	238	132	188	231	201	204	1755

Lampiran 8b. Hasil Sidik Ragam Kesukaan Rasa Chutney

Sumber Variasi	db	JK	KT	F hitung	F tabel (5%)
Kelompok Perlakuan	44	118,444	2,692	1,97 *	1,39
S	2	28,583	14,291	10,45 *	3,00
P	2	248,079	123,040	90,01 *	3,00
SP	4	58,202	14,551	10,64 *	2,37
Galat	16	481,023	1,367		
Total	404	932,331			

* ada beda nyata

Lampiran 9a, Hasil Pengamatan Kesukaan Warna Chutney

Panelis	S1P1	S1P2	S1P3	S2P1	S2P2	S2P3	S3P1	S3P2	S3P3	Total
1	3	4	3	4	3	3	3	2	5	30
2	2	4	2	5	3	4	2	3	6	31
3	4	2	2	4	2	5	3	3	4	29
4	4	3	1	2	4	2	4	5	5	30
5	2	3	5	1	5	5	2	5	6	34
6	3	4	4	3	5	4	5	5	5	38
7	2	3	2	3	3	3	2	4	3	25
8	4	5	2	2	4	1	4	5	6	33
9	2	3	5	3	3	5	4	3	5	33
10	5	3	5	3	3	3	4	3	2	31
11	4	4	2	4	3	4	2	3	5	31
12	2	3	3	3	2	2	2	4	3	24
13	3	2	4	4	4	5	3	4	5	34
14	6	4	3	6	5	3	5	5	5	40
15	2	4	3	2	4	3	2	3	2	25
16	4	4	5	4	4	4	4	2	3	34
17	2	2	3	3	3	4	3	5	3	28
18	4	4	4	3	5	5	3	7	5	40
19	4	2	5	3	3	6	2	3	2	30
20	2	3	1	3	2	6	4	1	2	24
21	3	4	3	3	3	2	2	3	3	26
22	2	4	4	2	4	2	5	3	2	28
23	4	4	2	3	3	5	5	3	1	30
24	4	2	3	5	3	3	5	3	5	33
25	5	3	3	5	2	3	4	2	3	30
26	5	5	5	4	5	4	5	4	4	41
27	3	2	3	4	2	3	5	3	2	28
28	4	4	4	4	4	5	2	4	4	35
29	2	4	5	3	3	3	2	4	4	30
30	3	4	4	4	4	4	2	5	3	33
31	4	3	2	4	3	3	4	5	3	31
32	3	1	1	3	2	2	3	2	2	19
33	7	4	4	6	4	6	6	3	2	42
34	3	2	4	4	3	3	6	2	3	30
35	4	4	3	3	5	3	4	5	5	36
36	5	5	4	4	4	5	5	4	2	38
37	5	4	5	4	3	4	5	2	2	34
38	5	4	2	8	3	4	6	3	3	36
39	5	2	5	6	4	3	5	5	5	40
40	3	3	4	3	4	4	5	4	4	34
41	3	2	3	4	3	4	5	5	3	32
42	3	4	1	3	3	3	4	2	2	25
43	4	2	4	5	2	1	6	3	2	29
44	4	3	4	5	3	3	6	5	5	38
45	5	4	2	6	5	3	5	5	3	38
Total	162	149	149	168	154	160	175	164	159	1440

Lampiran 9b. Hasil Sidik Ragam Kesukaan Warna Chutney

Sumber Variasi	db	JK	KT	F hitung	F tabel (5%)
Kelompok Perlakuan	44	128,889	2,929	2,31 *	1,39
S	2	5,694	2,847	2,25	3,00
P	2	7,131	3,565	2,82	3,00
SP	4	0,751	0,188	0,15	2,37
Galat	352	445,844	1,266		
Total	404	598,109			

* ada beda nyata

Lampiran 9c. Rerata Kesukaan Warna Chutney Tomat

Konsentrasi Sukrosa (%)	pH Awal	Rerata Warna Chutney Tomat
96	3,0	3,311
96	3,5	3,289
100	3,0	3,422
105	3,5	3,533
100	3,5	3,556
105	3,0	3,644
96	2,5	3,600
100	2,5	3,733
105	2,5	3,889

Lampiran 10a. Hasil Pengamatan Kesukaan Aroma Chutney

Panelis	S1P1	S1P2	S1P3	S2P1	S2P2	S2P3	S3P1	S3P2	S3P3	Total
1	5	4	5	6	3	5	5	4	4	41
2	3	4	5	5	3	5	3	5	5	38
3	3	5	5	3	2	5	5	5	3	36
4	5	3	3	6	5	3	6	6	4	41
5	3	3	4	5	4	5	6	6	6	42
6	4	4	4	5	5	4	5	5	5	41
7	5	2	5	6	5	4	6	5	3	41
8	4	3	2	4	4	2	3	7	3	32
9	5	5	3	5	5	5	5	5	3	41
10	5	3	5	3	5	3	4	5	2	35
11	3	2	2	4	6	4	6	3	5	35
12	3	3	2	3	2	4	3	4	4	28
13	3	2	4	3	4	4	4	4	4	32
14	5	2	3	6	5	2	5	3	5	36
15	5	3	3	2	2	2	2	3	2	24
16	2	4	5	4	4	4	6	2	3	34
17	3	2	3	2	3	4	2	5	6	30
18	4	4	4	3	4	5	3	3	5	35
19	5	6	5	6	5	3	6	4	4	44
20	6	3	2	3	2	6	5	2	2	31
21	5	5	4	4	4	5	3	2	4	36
22	3	3	3	2	3	3	3	2	5	27
23	4	4	2	3	3	5	3	2	4	30
24	3	6	3	5	5	3	5	5	5	40
25	6	6	5	6	3	5	6	3	4	44
26	5	5	5	4	5	4	5	4	4	41
27	3	2	3	2	2	3	3	3	5	26
28	4	4	4	4	4	5	2	4	4	35
29	3	4	5	3	3	3	2	4	4	31
30	5	4	4	5	4	4	4	5	3	38
31	4	3	2	4	3	3	4	3	5	30
32	3	4	2	3	2	2	3	2	4	24
33	7	2	4	6	4	6	2	3	5	41
34	3	6	4	2	2	2	3	4	3	29
35	3	4	5	5	4	4	4	5	5	39
36	5	5	4	4	4	5	5	4	4	40
37	3	4	3	3	3	3	6	2	3	30
38	3	4	3	6	6	7	5	6	4	44
39	4	5	2	6	4	2	3	3	5	34
40	3	2	4	3	4	3	4	4	4	31
41	3	2	3	2	3	4	2	5	6	30
42	4	4	2	3	3	5	5	2	5	33
43	3	2	3	2	2	3	3	3	2	23
44	4	2	2	4	3	3	4	2	5	29
45	4	4	4	6	4	4	5	3	2	36
Total	178	163	159	181	165	175	184	171	182	1558

Lampiran 10b. Hasil Sidik Ragam Kesukaan Aroma Chutney

Sumber Variasi	db	JK	KT	F hitung	F tabel (5%)
Kelompok Perlakuan	44	163,842	3,724	3,06 *	1,39
S	2	5,101	2,551	2,10	3,00
P	2	7,294	3,647	3,00	3,00
SP	4	2,247	0,562	0,48	3,01
Galat	352	428,025	1,216		
Total	404	606,509			

* ada beda nyata

Lampiran 10c. Rerata Kesukaan Aroma Chutney Tomat

Konsentrasi Sukrosa (%)	pH Awal	Rerata Aroma Chutney Tomat
96	3,5	3,533
96	3,0	3,622
100	3,0	3,667
105	3,0	3,800
100	3,5	3,889
96	2,5	3,956
100	2,5	4,022
105	3,5	4,044
105	2,5	4,089

Lampiran 11a. Hasil Pengamatan Kesukaan Sifat Oles Chutney

Panelis	S1P1	S1P2	S1P3	S2P1	S2P2	S2P3	S3P1	S3P2	S3P3	Total
1	7	4	3	5	3	2	3	4	6	37
2	7	3	3	5	2	2	4	3	5	34
3	5	3	4	3	2	2	3	3	5	30
4	6	3	4	3	3	2	3	3	6	33
5	7	5	3	3	3	3	4	3	4	35
6	6	4	4	3	2	3	4	3	4	33
7	5	4	4	5	2	4	4	3	5	36
8	7	5	3	3	2	3	5	3	5	36
9	7	4	4	3	2	4	4	3	4	35
10	6	3	3	3	2	2	3	3	5	30
11	6	5	3	3	4	3	5	3	4	36
12	6	3	4	3	2	4	5	3	4	34
13	5	3	3	3	3	4	3	3	5	32
14	6	3	4	4	2	3	4	4	5	35
15	6	3	3	4	2	4	4	3	5	34
16	5	5	3	5	3	4	4	4	4	37
17	5	5	3	3	3	3	4	4	5	35
18	4	5	3	3	2	2	4	3	5	29
19	5	3	3	3	3	2	5	4	4	32
20	6	3	4	4	2	4	6	3	5	37
21	7	3	3	3	3	4	3	5	5	38
22	7	4	3	3	3	3	5	5	4	37
23	6	5	3	4	3	3	3	5	4	34
24	6	3	4	5	3	4	3	5	5	40
25	6	4	3	5	3	4	3	4	5	37
26	5	3	3	2	2	3	4	5	5	32
27	5	3	4	4	3	3	4	3	5	34
28	5	5	3	4	3	2	5	3	5	35
29	4	3	3	3	3	2	5	5	5	33
30	7	5	4	4	2	3	4	5	4	38
31	7	5	3	3	2	3	3	4	4	34
32	7	3	3	4	3	3	5	3	5	36
33	6	4	3	4	3	4	4	3	4	35
34	5	3	5	4	2	4	4	5	4	36
35	6	3	3	4	2	5	5	5	4	37
36	5	3	2	3	3	4	5	5	4	34
37	6	3	2	3	3	4	5	4	4	34
38	5	5	2	3	2	5	5	4	3	34
39	5	3	3	3	3	5	4	3	3	32
40	5	3	2	3	2	4	4	5	4	32
41	5	3	2	4	3	4	5	5	4	35
42	5	5	4	4	2	4	5	5	3	37
43	5	3	3	4	2	4	5	5	3	34
44	6	4	4	3	2	3	4	3	3	32
45	6	3	4	3	3	3	5	4	2	33
Total	259	167	146	160	114	150	188	173	196	1553

Lampiran 11b. Hasil Sidik Ragam Kesukaan Sifat Oles
Chutney

Sumber Variasi	db	JK	KT	F hitung	F tabel (5%)
Kelompok Perlakuan	44	25,694	0,584	0,92	1,39
S	2	97,931	48,965	76,75 *	3,00
P	2	94,020	47,010	73,68 *	3,00
SP	4	99,699	24,925	39,07 *	2,37
Galat	352	224,572	0,638		
Total	404	541,916			

* ada beda nyata

Lampiran 12. Hasil Analisa Bahan Baku

Analisa	Ulangan			Rata - rata
	I	II	III	
Total Padatan Terlarut (%Brix)	4,30	4,00	4,10	4,13
Kadar Gula Reduksi (%)	0,75	1,25	1,43	1,14
Total Asam (%)	0,09	0,10	0,12	0,10
PH	4,41	4,25	4,21	4,29
Kadar Vitamin C (mg/100g)	9,57	9,70	9,65	9,64