LAMPIRAN 1. *Worksheet* dan *Scoresheet* Uji Optimalisasi *Blanching*

1.1. *Worksheet* Uji Ranking Hedonik

Tanggal uji :
Jenis sampel : Brokoli

Identifikasi sampel:	**Kode**
Brokoli *Steam blanching* 2’	A
Brokoli *Steam blanching* 3’	B
Brokoli *Hot Water blanching* 2’	C
Brokoli *Hot Water blanching* 3’	D
Brokoli kontrol	E

Kode kombinasi urutan penyajian:

ACBDE = 1,6,11,16,21,26
BCDEA = 2,7,12,17,22,27
CBEAD = 3,8,13,18,23,28
DEABC = 4,9,14,19,24,29
EACBD = 5,10,15,20,25,30

Penyajian:

Panelis	*Kode sampel* *urutan penyajian*				
#1,6,11,16,21,26	742	226	421	553	116 [1]
#2,7,12,17,22,27	712	859	138	187	117 [2]
#3,8,13,18,23,28	975	663	397	264	135 [3]
#4,9,14,19,24,29	555	896	478	622	752 [4]
#5,10,15,20,25,30	314	667	295	245	671 [5]

Rekap kode sampel:

Sampel A	742	117	264	478	667
Sampel B	421	712	663	622	245
Sampel C	226	859	975	752	295
Sampel D	553	138	135	555	671
Sampel E	116	187	397	896	314

1.2. Uji Ranking Hedonik Warna

UJI RANKING HEDONIK

Nama : Tanggal:

Produk : Brokoli setelah *blanching*

Atribut : *Overall* Warna

Instruksi :

Di hadapan Anda terdapat 5 sampel brokoli yang telah di*blanching*. Bandingkan dan amati sampel secara berturutan dari kiri ke kanan, lihatlah masing–masing. Setelah melihat semua sampel, Anda boleh mengulang mengamati sesering yang Anda perlukan. Tuliskan kode sampel sesuai angka dibawah ini :

1= sangat tidak suka

2= tidak suka

3= cukup suka

4= suka

5= sangat suka

Sampel	**Ranking (jangan ada yang dobel)**
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Terima Kasih

1.3. Uji Ranking Hedonik Tekstur

UJI RANKING HEDONIK

Nama : Tanggal:

Produk : Brokoli setelah *blanching*

Atribut : *Overall* Tekstur

Instruksi :

Di hadapan Anda terdapat 5 sampel brokoli yang telah di*blanching*. Bandingkan dan amati sampel secara berturutan dari kiri ke kanan, gigitlah setiap batang brokoli dengan menggunakan gigi seri. Setelah menggigit semua sampel, Anda boleh mengulang sesering yang Anda perlukan. Tuliskan kode sampel sesuai angka dibawah ini :

1= sangat tidak suka

2= tidak suka

3= cukup suka

4= suka

5= sangat suka

Sampel	**Ranking (jangan ada yang dobel)**
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Terima Kasih

1.4. Uji Ranking Hedonik *Overall*

UJI RANKING HEDONIK

Nama : Tanggal:

Produk : Brokoli setelah *blanching*

Atribut : *Overall*

Instruksi :

Di hadapan Anda terdapat 5 sampel brokoli yang telah di*blanching*. Bandingkan dan amati sampel secara berturutan dari kiri ke kanan, lihatlah masing–masing. Setelah melihat semua sampel, Anda boleh mengulang mengamati sesering yang Anda perlukan. Tuliskan kode sampel sesuai angka dibawah ini :

1= sangat tidak suka

2= tidak suka

3= cukup suka

4= suka

5= sangat suka

Sampel	**Ranking (jangan ada yang dobel)**
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Terima Kasih

LAMPIRAN 2. Friedman Test Dan LSD Rank Hedonik Optimalisasi Blanching

2.1. Friedman Test

WARNA

Ranks

	Mean Rank
sample_A	3,78
sample_B	3,44
sample_C	2,74
sample_D	2,56
sample_E	2,48

Test Statistics[a]

N	50
Chi-Square	26,672
df	4
Asymp. Sig.	,000

a. Friedman Test

TEKSTUR

Ranks

	Mean Rank
sampel_A	3,24
sampel_B	3,32
sampel_C	3,16
sampel_D	2,90
sampel_E	2,38

Test Statistics[a]

N	50
Chi-Square	11,600
df	4
Asymp. Sig.	,021

a. Friedman Test

OVERALL

Ranks

	Mean Rank
sampel_A	3,68
sampel_B	3,22
sampel_C	3,24
sampel_D	2,64
sampel_E	2,22

Test Statistics[a]

N	50
Chi-Square	26,128
df	4
Asymp. Sig.	,000

a. Friedman Test

2.2. LSD Rank

Sampel	Warna	Tekstur	overall
A	189	163	184
B	172	167	161
C	137	159	162
D	128	146	132
E	124	128	111

LSD rank = 1,96 * √(50*5*6)/6
LSD rank = 30,99

Warna A B C D E
$R_A - R_B = 17 <$ LSD *rank* =
$R_A - R_C = 52 >$ LSD *rank* ≠
$R_A - R_D = 61 >$ LSD *rank* ≠
$R_A - R_E = 65 >$ LSD *rank* ≠
$R_C - R_B = 35 >$ LSD *rank* ≠
$R_D - R_B = 44 >$ LSD *rank* ≠
$R_E - R_B = 48 >$ LSD *rank* ≠
$R_D - R_C = 9 <$ LSD *rank* =
$R_E - R_C = 13 <$ LSD *rank* =
$R_D - R_E = 4 <$ LSD *rank* =

Tekstur A B C D E
$R_A - R_B = 4 <$ LSD *rank* =
$R_A - R_C = 4 <$ LSD *rank* =
$R_A - R_D = 17 <$ LSD *rank* =
$R_A - R_E = 35 >$ LSD *rank* ≠
$R_C - R_B = 8 <$ LSD *rank* =
$R_D - R_B = 18 <$ LSD *rank* =
$R_E - R_B = 38 >$ LSD *rank* ≠
$R_D - R_C = 13 <$ LSD *rank* =
$R_E - R_C = 31 >$ LSD *rank* ≠
$R_D - R_E = 18 <$ LSD *rank* =

Overall A B C D E
$R_A - R_B = 23 <$ LSD *rank* =
$R_A - R_C = 22 <$ LSD *rank* =
$R_A - R_D = 52 >$ LSD *rank* ≠
$R_A - R_E = 73 >$ LSD *rank* ≠
$R_C - R_B = 1 <$ LSD *rank* =
$R_D - R_B = 29 <$ LSD *rank* =
$R_E - R_B = 50 >$ LSD *rank* ≠
$R_D - R_C = 30 <$ LSD *rank* =
$R_E - R_C = 51 >$ LSD *rank* ≠
$R_D - R_E = 21 <$ LSD *rank* =

LAMPIRAN 3.Hasil Uji Optimalisasi Pengemas

Batch 1
Hari ke-0

(foto dok. pribadi)

Analisa Warna

1. Segar

Sampel	Ulangan 1	Ulangan 2	Ulangan 3
1	L = 52,95 a = -7,26 b = 12,26	L = 53,31 a = -8,62 b = 12,55	L = 49,00 a = -6,70 b = 10,46
2	L = 51,83 a = -7,38 b = 11,48	L = 54,65 a = -10,46 b = 17,10	L = 51,12 a = -7,10 b = 10,73
3	L = 52,36 a = -9,02 b = 13,29	L = 51,63 a = -7,59 b = 12,49	L = 53,72 a = -10,14 b = 16,02

2. *Steam Blanching*

Sampel	Ulangan 1	Ulangan 2	Ulangan 3
1	L = 47,36 a = -9,11 b = 11,43	L = 45,92 a = -10,20 b = 13,22	L = 27,15 a = -9,63 b = 12,14
2	L = 46,32 a = -8,90 b = 13,00	L = 48,83 a = -11,70 b = 19,45	L = 48,33 a = -8,56 b = 12,67
3	L = 45,13 a = -11,93 b = 14,44	L = 46,74 a = -12,28 b = 18,14	L = 43,93 a = -11,40 b = 13,61

Analisa Tekstur (*hardness*)

Sampel	Segar	*Steam Blanching*
1	9980,9 gf	8229,6 gf
2	9847,1 gf	8542,6 gf
3	9563,5 gf	8047,3 gf

Hari ke-1

(foto dok. pribadi)

Analisa Warna

1. Segar

Sampel	Ulangan 1	Ulangan 2	Ulangan 3
1	L = 51,27 a = -7,83 b = 13,18	L = 49,31 a = -5,54 b = 10,63	L = 54,04 a = -10,78 b = 18,35
2	L = 50,62 a = -6,93 b = 10,97	L = 49,44 a = -8,03 b = 12,19	L = 50,03 a = -4,43 b = 8,87
3	L = 49,94 a = -5,25 b = 8,96	L = 51,00 a = -5,57 b = 9,04	L = 49,40 a = -6,02 b = 10,66

2. *Steam Blanching*

Sampel	Ulangan 1	Ulangan 2	Ulangan 3
1	L = 44,82 a = -10,63 b = 12,95	L = 46,59 a = -9,99 b = 12,09	L = 46,55 a = -10,46 b = 14,48
2	L = 45,80 a = -8,93 b = 10,47	L = 44,58 a = -8,20 b = 9,64	L = 45,36 a = -10,75 b = 13,00
3	L = 44,06 a = -10,88 b = 13,24	L = 46,23 a = -11,46 b = 14,42	L = 44,39 a = -10,35 b = 12,23

3. Segar/PE

Sampel	Ulangan 1	Ulangan 2	Ulangan 3
1	L =48,12 a = -7,01 b = 9,38	L = 48,48 a = -8,48 b = 11,48	L = 50,10 a = -6,99 b = 9,07
2	L = 50,86 a = -6,78 b = 11,30	L = 48,60 a = -6,23 b = 10,87	L = 48,08 a = -6,29 b = 9,13
3	L = 49,15 a = -5,87 b = 8,00	L = 48,14 a = -7,91 b = 12,56	L = 50,49 a = -9,54 b = 14,66

4. *Steam Blanching*/PE

Sampel	Ulangan 1	Ulangan 2	Ulangan 3
1	L = 45,98 a = -9,62 b = 12,24	L = 47,74 a = -9,26 b = 13,13	L = 48,61 a = -9,70 b = 12,90
2	L = 50,60 a = -11,29 b = 16,98	L = 47,43 a = -11,13 b = 15,22	L = 46,03 a = -9,55 b = 11,93
3	L = 47,04 a = -8,71 b = 10,81	L = 46,07 a = -10,28 b = 13,71	L = 45,46 a = -11,27 b = 15,95

5. *Steam Blanching*/PP

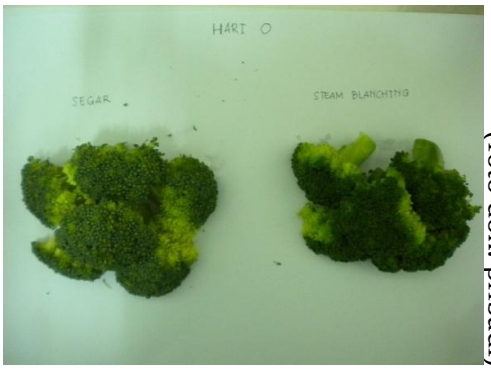
Sampel	Ulangan 1	Ulangan 2	Ulangan 3
1	L = 46,80 a = -5,85 b = 14,41	L = 47,45 a = -5,15 b = 12,00	L = 46,01 a = -5,82 b = 14,16
2	L = 44,30 a = -5,44 b = 11,64	L = 44,53 a = -6,21 b = 13,10	L = 43,71 a = -6,17 b = 11,98
3	L = 43,64 a = -5,32 b = 13,35	L = 42,36 a = -5,00 b = 10,36	L = 43,62 a = -5,16 b = 12,14

Analisa Tekstur (*Hardness*)

Sampel	Segar	*Steam Blanch*	Segar/PE	*Steam Blanch*/PE	*Steam blanch*/PP
1	10199,0 gf	9932,0 gf	8965,3 gf	7748,8 gf	6993,0 gf
2	9110,9 gf	8648,2 gf	8461,3 gf	7952,1 gf	7918,4 gf
3	9734,8 gf	9954,2 gf	9090,5 gf	8597,3 gf	7371,7 gf
Rata-rata	9681,6 gf	9511,5 gf	8839,0 gf	8099,4 gf	7427,7 gf

Batch 2.

Hari ke-0



(foto dok. pribadi)

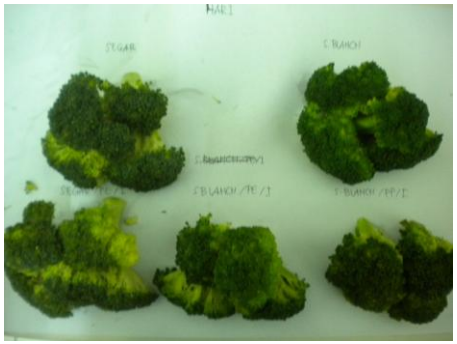
Tekstur

ulangan	segar/0	SB/0
1	8954,4	7784,9
2	8365,3	9033,7
3	9443,8	9830,2
4	9678,7	8874,5
5	9024,1	9451,9
Rata-rata	9093,26	8995,04
stdev	504,8785	772,4436

Warna

sampel	ulangan	segar/0			SB/0		
		L	a	b	L	a	b
1	1	50,15	-6,62	9,89	41,68	-9,56	11,07
	2	48,46	-6,92	9,80	44,41	-8,82	10,30
	3	49,84	-5,43	7,52	44,27	-11,61	14,45
2	1	49,86	-7,12	8,94	46,54	-9,88	12,46
	2	49,40	-6,50	8,23	44,00	-10,03	10,87
	3	47,86	-9,49	14,77	43,26	-11,98	14,28
3	1	49,67	-7,54	9,95	46,24	-12,80	15,42
	2	48,37	-8,64	11,37	43,35	-10,92	13,44
	3	47,34	-10,36	16,07	43,80	-9,24	10,10
4	1	47,39	-9,16	13,67	44,50	-12,69	14,41
	2	49,03	-8,03	10,46	44,82	-12,78	14,48
	3	46,76	-8,95	13,38	42,79	-11,23	12,29
5	1	48,03	-7,49	10,46	42,97	-7,90	9,24
	2	49,38	-8,01	11,05	44,06	-11,05	13,29
	3	51,33	-8,29	11,14	42,37	-9,91	11,55
Rata-rata		48,858	-7,90333	11,11333	43,93733	-10,6933	12,51
stdev		1,251931	1,297364	2,406274	1,313439	1,515754	1,917021

Hari ke-1



(foto dok. pribadi)

sampel	ulangan	S/kontrol			SB/kontrol			S/PE/1			SB/PE/1			SB/PP/1		
		L	a	b	L	a	b	L	a	b	L	a	b	L	a	b
1	1	48,87	-7,03	9,09	45,45	-8,78	8,63	47,41	-6,20	8,66	45,27	-9,99	12,70	43,06	-7,33	9,16
	2	48,84	-8,86	11,89	44,76	-8,74	8,84	47,60	-6,04	8,27	44,41	-9,80	11,51	42,46	-8,81	10,82
	3	47,33	-7,96	10,51	40,96	-10,42	10,38	48,48	-6,11	8,76	43,67	-8,61	9,63	45,05	-7,67	9,83
2	1	48,49	-6,95	9,15	46,49	-10,18	10,31	46,22	-6,21	9,09	43,85	-8,10	8,37	43,41	-6,78	11,40
	2	48,40	-5,38	6,70	45,10	-8,75	9,62	44,88	-7,08	10,46	41,90	-7,75	8,83	45,38	-6,22	9,96
	3	46,66	-5,13	6,45	47,10	-11,69	12,51	49,14	-10,37	15,65	40,35	-7,46	7,53	45,89	-5,54	7,62
3	1	49,56	-6,20	7,72	41,36	-8,22	8,86	47,56	-5,11	7,53	42,73	-6,66	8,40	43,23	-6,50	8,56
	2	50,38	-7,19	9,32	44,40	-7,76	8,22	46,90	-4,52	6,31	44,87	-6,61	8,42	43,54	-5,62	8,05
	3	50,21	-8,00	12,83	42,96	-8,67	9,22	46,29	-3,93	6,06	42,69	-6,92	8,54	45,95	-8,57	15,03
4	1	46,42	-11,48	18,36	44,36	-13,72	14,51	48,59	-6,55	8,94	42,64	-6,20	8,33	41,69	-6,06	9,03
	2	49,16	-10,63	15,32	43,72	-11,78	12,04	47,81	-6,94	9,50	45,68	-8,32	9,87	44,75	-7,80	10,05
	3	45,99	-11,74	18,05	44,58	-11,77	12,30	49,54	-6,34	9,14	44,63	-5,83	7,34	43,58	-6,13	9,01
5	1	49,90	-7,15	9,05	43,25	-9,63	9,70	48,77	-6,55	8,52	44,89	-6,00	6,65	46,65	-8,89	12,14
	2	51,03	-6,60	8,38	45,84	-11,25	12,44	47,61	-7,28	10,50	40,69	-7,62	8,47	46,82	-9,42	12,86
	3	49,62	-5,92	7,76	44,05	-8,12	8,08	50,17	-7,17	9,48	45,04	-7,01	7,49	45,57	-8,78	12,08
Rata-rata		48,724	-7,748	10,705	44,292	-9,965	10,377	47,798	-6,427	9,125	43,554	-7,525	8,805	44,469	-7,341	10,373
stdev		1,524	2,085	3,842	1,698	1,753	1,934	1,385	1,452	2,202	1,661	1,271	1,589	1,581	1,319	2,020

Warna (Hari ke-2)

(foto dok. pribadi)

sampel	ulangan	S/kontrol			SB/kontrol			S/PE/1			SB/PE/1			SB/PP/1		
		L	a	b	L	a	b	L	a	b	L	a	b	L	a	b
1	1	48,38	-6,38	10,37	43,78	-8,33	10,65	48,75	-8,95	15,05	44,94	-7,59	9,20	44,05	-8,79	10,50
	2	48,11	-5,19	7,81	46,33	-11,31	16,41	48,30	-5,92	8,14	42,46	-6,99	7,66	43,61	-12,16	16,71
	3	50,15	-6,84	10,38	43,09	-8,27	10,83	46,90	-6,68	9,04	42,10	-7,64	9,18	44,75	-8,62	10,87
2	1	47,42	-5,81	8,28	44,31	-9,49	11,83	50,69	-7,43	10,12	45,20	-6,13	6,91	45,39	-9,56	14,61
	2	51,89	-5,78	8,45	42,69	-8,63	10,53	48,22	-9,23	14,93	43,40	-7,49	8,77	43,45	-8,16	13,02
	3	49,37	-5,17	7,34	44,84	-10,15	12,29	47,48	-6,76	8,96	44,50	-8,49	10,37	42,89	-8,91	13,36
3	1	47,53	-8,18	12,80	44,87	-11,32	15,13	49,95	-7,39	10,82	41,06	-7,46	10,45	46,33	-7,10	14,07
	2	49,95	-7,76	11,12	43,05	-10,04	13,22	46,35	-8,09	10,93	45,48	-7,05	10,96	43,65	-7,19	12,26
	3	49,91	-8,73	13,32	44,92	-9,60	12,11	48,03	-7,55	10,16	43,29	-9,50	12,85	45,26	-5,58	8,65
4	1	49,29	-6,38	10,42	41,40	-10,34	13,10	44,15	-6,62	8,90	41,93	-8,73	10,17	47,32	-8,83	16,17
	2	47,17	-8,53	12,85	43,04	-11,33	14,59	47,62	-7,48	9,75	42,50	-7,14	8,38	41,82	-6,56	10,15
	3	48,14	-6,95	10,54	43,63	-10,15	12,56	46,46	-7,80	10,81	43,00	-10,66	13,52	43,34	-7,81	12,57
5	1	47,07	-6,50	10,23	41,65	-11,81	15,62	48,78	-6,80	8,96	44,56	-7,95	10,31	45,84	-8,50	10,76
	2	47,98	-6,54	9,88	44,25	-7,42	10,04	47,94	-6,46	8,74	44,36	-9,51	14,04	42,14	-9,77	13,63
	3	49,08	-7,41	11,29	45,69	-8,93	11,66	46,58	-7,41	10,23	42,53	-8,83	10,72	41,64	-8,85	13,19
rata2		48,763	-6,810	10,339	43,836	-9,808	12,705	47,747	-7,371	10,369	43,421	-8,077	10,233	44,099	-8,426	12,701
stdev		1,349	1,125	1,817	1,393	1,309	1,965	1,580	0,901	2,061	1,346	1,195	2,042	1,686	1,538	2,242

LAMPIRAN 4. Analisa SPSS

4.1. Vitamin C

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	gabungan	Statistic	df	Sig.	Statistic	df	Sig.
vitamin_C	segar,suhu ruang,H0	,268	9	,061	,910	9	,317
	segar,suhu ruang,h1	,162	9	,200*	,935	9	,531
	steam blancing,suhu ruang,h0	,187	9	,200*	,884	9	,172
	steam blanching,suhu refrigerator,h0	,232	9	,179	,768	9	,009
	steam blanching,suhu refrigerator,h-1	,221	9	,200*	,887	9	,185
	steam blanching,suhu refrigerator,h-3	,232	9	,176	,882	9	,163
	steam blanching,suhu refrigerator,h-6	,179	6	,200*	,962	6	,838
	steam blanching,suhu refrigerator,h-10	,197	6	,200*	,907	6	,415
	steam blanching,suhu freezer,h-0	,169	9	,200*	,931	9	,492
	steam blanching,suhu freezer,h-1	,185	9	,200*	,870	9	,122
	steam blanching,suhu freezer,h-3	,272	9	,054	,832	9	,047
	steam blanching,suhu freezer,h-6	,190	9	,200*	,927	9	,451
	steam blanching,suhu freezer,h-10	,185	9	,200*	,897	9	,236
	steam blanching,suhu freezer,h-14	,177	9	,200*	,913	9	,337

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

ANOVA

ANOVA

vitamin_C

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	47,024	13	3,617	152,421	,000
Within Groups	2,516	106	,024		
Total	49,540	119			

POST HOC TEST

vitamin_C

Duncan[a,b]

gabungan	N	Subset for alpha = .05					
		1	2	3	4	5	6
steam blanching, suhu refrigerator, h-6	6	,7133					
steam blanching, suhu refrigerator, h-10	6	,7583					
steam blanching, suhu refrigerator, h-3	9	,8033					
steam blanching, suhu refrigerator, h-1	9		1,3578				
steam blanching, suhu freezer, h-14	9		1,3722	1,3722			
steam blanching, suhu freezer, h-10	9		1,4756	1,4756			
steam blanching, suhu refrigerator, h0	9		1,4822	1,4822	1,4822		
steam blanching, suhu freezer, h-1	9		1,4878	1,4878	1,4878		
steam blancing, suhu ruang, h0	9		1,4878	1,4878	1,4878		
steam blanching, suhu freezer, h-6	9		1,5000	1,5000	1,5000		
steam blanching, suhu freezer, h-0	9			1,5389	1,5389		
steam blanching, suhu freezer, h-3	9				1,6489		
segar, suhu ruang, h1	9					1,9067	
segar, suhu ruang, H0	9						3,4367
Sig.		,263	,106	,057	,053	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 8,400.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

4.2. Aktivitas Antioksidan

Tests of Normality

	gabungan	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
aktivitas_antioksidan	segar,suhu ruang,H0	,219	9	,200*	,915	9	,355
	segar,suhu ruang,h1	,263	9	,072	,699	9	,001
	steam blancing,suhu ruang,h0	,217	9	,200*	,928	9	,463
	steam blanching,suhu refrigerator,h0	,273	9	,052	,838	9	,054
	steam blanching,suhu refrigerator,h-1	,230	9	,184	,860	9	,096
	steam blanching,suhu refrigerator,h-3	,188	9	,200*	,951	9	,705
	steam blanching,suhu refrigerator,h-6	,158	6	,200*	,984	6	,970
	steam blanching,suhu refrigerator,h-10	,119	6	,200*	,993	6	,995
	steam blanching,suhu freezer,h-0	,220	9	,200*	,878	9	,151
	steam blanching,suhu freezer,h-1	,172	9	,200*	,934	9	,523
	steam blanching,suhu freezer,h-3	,264	9	,070	,818	9	,033
	steam blanching,suhu freezer,h-6	,216	9	,200*	,833	9	,048
	steam blanching,suhu freezer,h-10	,179	9	,200*	,911	9	,325
	steam blanching,suhu freezer,h-14	,191	9	,200*	,907	9	,295

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

ANOVA

ANOVA

aktivitas_antioksidan

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5481,525	13	421,656	75,640	,000
Within Groups	590,899	106	5,575		
Total	6072,423	119			

POST HOC TEST

aktivitas_antioksidan

Duncan[a,b]

gabungan	N	Subset for alpha = .05					
		1	2	3	4	5	6
steam blanching, suhu refrigerator, h-3	9	12,4733					
steam blanching, suhu refrigerator, h-10	6	12,7700					
steam blanching, suhu refrigerator, h-6	6	13,0117					
steam blanching, suhu freezer, h-14	9	13,3689	13,3689				
steam blanching, suhu freezer, h-6	9	14,0767	14,0767				
steam blanching, suhu freezer, h-3	9	14,1833	14,1833				
steam blanching, suhu freezer, h-10	9	14,5744	14,5744				
steam blanching, suhu refrigerator, h-1	9		15,8633	15,8633			
steam blanching, suhu freezer, h-1	9			17,6633			
segar, suhu ruang, h1	9				24,9478		
steam blancing, suhu ruang, h0	9				27,1756	27,1756	
steam blanching, suhu refrigerator, h0	9				27,3278	27,3278	
steam blanching, suhu freezer, h-0	9					27,4356	
segar, suhu ruang, H0	9						31,8578
Sig.		,120	,055	,121	,052	,834	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 8,400.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

4.3. Kadar Air

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	gabungan	Statistic	df	Sig.	Statistic	df	Sig.
kadar_air	segar,suhu ruang,H0	,191	9	,200*	,930	9	,481
	segar,suhu ruang,h1	,203	9	,200*	,880	9	,156
	steam blancing,suhu ruang,h0	,201	9	,200*	,889	9	,196
	steam blanching,suhu refrigerator,h0	,145	9	,200*	,930	9	,478
	steam blanching,suhu refrigerator,h-1	,157	9	,200*	,928	9	,467
	steam blanching,suhu refrigerator,h-3	,134	9	,200*	,957	9	,766
	steam blanching,suhu refrigerator,h-6	,321	6	,053	,805	6	,066
	steam blanching,suhu refrigerator,h-10	,307	6	,081	,788	6	,045
	steam blanching,suhu freezer,h-0	,192	9	,200*	,918	9	,377
	steam blanching,suhu freezer,h-1	,143	9	,200*	,982	9	,972
	steam blanching,suhu freezer,h-3	,206	9	,200*	,943	9	,615
	steam blanching,suhu freezer,h-6	,181	9	,200*	,932	9	,497
	steam blanching,suhu freezer,h-10	,196	9	,200*	,900	9	,253
	steam blanching,suhu freezer,h-14	,115	9	,200*	,980	9	,964

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

ANOVA

ANOVA

kadar_air

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5,464	13	,420	3,294	,000
Within Groups	13,527	106	,128		
Total	18,991	119			

POST HOC TEST

kadar_air

Duncan[a,b]

gabungan	N	Subset for alpha = .05			
		1	2	3	4
segar,suhu ruang,H0	9	90,9056			
segar,suhu ruang,h1	9	90,9644	90,9644		
steam blanching,suhu freezer,h-3	9	91,1911	91,1911	91,1911	
steam blanching,suhu refrigerator,h-1	9		91,2911	91,2911	91,2911
steam blanching,suhu refrigerator,h-3	9		91,3378	91,3378	91,3378
steam blanching,suhu freezer,h-1	9			91,3644	91,3644
steam blanching,suhu freezer,h-6	9			91,3978	91,3978
steam blanching,suhu freezer,h-14	9			91,4067	91,4067
steam blanching,suhu freezer,h-10	9			91,4733	91,4733
steam blancing,suhu ruang,h0	9			91,5311	91,5311
steam blanching,suhu freezer,h-0	9			91,5356	91,5356
steam blanching,suhu refrigerator,h0	9			91,5600	91,5600
steam blanching,suhu refrigerator,h-10	6				91,6133
steam blanching,suhu refrigerator,h-6	6				91,6367
Sig.		,125	,052	,078	,103

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 8,400.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

4.4. Tekstur

Tests of Normality

	gabungan	Kolmogorov-Smirnov[a] Statistic	df	Sig.	Shapiro-Wilk Statistic	df	Sig.
tekstur	segar,H0	,156	15	,200*	,958	15	,653
	segar,suhu ruang,H-1	,142	15	,200*	,952	15	,555
	steam blanch,suhu ruang,H-0	,201	15	,103	,932	15	,290
	steam blanch,suhu regf rigerator,H-0	,139	15	,200*	,970	15	,857
	steam blanch,suhu ref rigerator,h-1	,115	15	,200*	,951	15	,541
	steam blanch,suhu ref rigerator,h-3	,113	15	,200*	,949	15	,512
	steam blanch,suhu ref rigerator,H-6	,189	10	,200*	,916	10	,326
	steam blanch,suhu ref rigerator, h-10	,212	5	,200*	,916	5	,505
	Steam blanch,suhu f reezer,H-0	,183	15	,187	,910	15	,135
	steam blanch,suhu f reezer,h-1	,114	15	,200*	,959	15	,673
	steam blanch,suhu f reezer,h-3	,211	15	,070	,785	15	,002
	steam blanch,suhu f reezer,h-6	,151	15	,200*	,926	15	,240
	steam blanch,suhu f reezer,h-10	,197	15	,121	,862	15	,026
	steam blanch,suhu f reezer,h-14	,147	15	,200*	,967	15	,810
	steam blanch,suhu f reezer,h-0,thawing	,129	15	,200*	,941	15	,393
	steam blanch,suhu f reezer,h-1,thawing	,130	15	,200*	,933	15	,306
	steam blanch,suhu f reezer,h-3,thawing	,126	15	,200*	,948	15	,490
	steam blanch,suhu f reezer,h-6,thawing	,191	15	,146	,956	15	,618
	steam blanch,suhu f reezer,h-10,thawing	,167	15	,200*	,896	15	,082
	Steam blanch,suhu f reezer,h-14,thawing	,132	15	,200*	,947	15	,483

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

ANOVA

tekstur

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2E+008	19	13085652,74	9,493	,000
Within Groups	4E+008	265	1378402,439		
Total	6E+008	284			

POST HOC TEST

tekstur

Duncan[a,b]

gabungan	N	Subset for alpha = .05				
		1	2	3	4	5
segar,suhu ruang,H-1	15	8511,320				
steam blanch,suhu freezer,h-3,thawing	15	8626,260	8626,260			
steam blanch,suhu freezer,h-1,thawing	15	8650,213	8650,213			
steam blanch,suhu refrigerator,h-3	15	8651,220	8651,220			
steam blanch,suhu freezer,h-0,thawing	15	8670,947	8670,947			
steam blanch,suhu refrigerator,H-6	10	8951,950	8951,950			
steam blanch,suhu regfrigerator,H-0	15	9062,420	9062,420			
steam blanch,suhu refrigerator,h-1	15	9101,720	9101,720			
Steam blanch,suhu freezer,H-0	15	9105,293	9105,293			
steam blanch,suhu freezer,h-10,thawing	15	9127,187	9127,187			
steam blanch,suhu ruang,H-0	15	9205,193	9205,193	9205,193		
Steam blanch,suhu freezer,h-14,thawing	15	9244,873	9244,873	9244,873		
steam blanch,suhu freezer,h-6,thawing	15	9321,540	9321,540	9321,540		
steam blanch,suhu refrigerator, h-10	5	9445,400	9445,400	9445,400		
steam blanch,suhu freezer,h-1	15		9632,033	9632,033		
segar,H0	15		9660,367	9660,367		
steam blanch,suhu freezer,h-3	15			10203,920	10203,920	
steam blanch,suhu freezer,h-10	15				11026,173	11026,173
steam blanch,suhu freezer,h-6	15					11182,113
steam blanch,suhu freezer,h-14	15					11947,011
Sig.		,096	,065	,058	,072	,056

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 13,333.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

4.5. Warna (L*, a*, b*, ΔE, dan *chromaticity*)

Tests of Normality[b,c,d,e,f,g]

	gabungan	Kolmogorov-Smirnov[a] Statistic	df	Sig.	Shapiro-Wilk Statistic	df	Sig.
L	segar,H0	,166	15	,200*	,930	15	,268
	segar,suhu ruang,H-1	,132	15	,200*	,976	15	,940
	steam blanch,suhu ruang,H-0	,217	15	,056	,913	15	,150
	steam blanch,suhu regfrigerator,H-0	,182	15	,193	,948	15	,495
	steam blanch,suhu refrigerator,h-1	,195	15	,129	,914	15	,157
	steam blanch,suhu refrigerator,h-3	,146	15	,200*	,937	15	,341
	steam blanch,suhu refrigerator,H-6	,102	10	,200*	,972	10	,908
	steam blanch,suhu refrigerator, h-10	,225	5	,200*	,946	5	,709
	Steam blanch,suhu freezer,H-0	,166	15	,200*	,960	15	,689
	steam blanch,suhu freezer,h-1	,104	15	,200*	,980	15	,972
	steam blanch,suhu freezer,h-3	,159	15	,200*	,896	15	,082
	steam blanch,suhu freezer,h-6	,111	15	,200*	,976	15	,933
	steam blanch,suhu freezer,h-10	,149	15	,200*	,945	15	,447
	steam blanch,suhu freezer,h-14	,167	15	,200*	,920	15	,195

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

b. There are no valid cases for L when gabungan = 15,000. Statistics cannot be computed for this level.

c. There are no valid cases for L when gabungan = 16,000. Statistics cannot be computed for this level.

d. There are no valid cases for L when gabungan = 17,000. Statistics cannot be computed for this level.

e. There are no valid cases for L when gabungan = 18,000. Statistics cannot be computed for this level.

f. There are no valid cases for L when gabungan = 19,000. Statistics cannot be computed for this level.

g. There are no valid cases for L when gabungan = 20,000. Statistics cannot be computed for this level.

ANOVA

L

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1508,432	13	116,033	20,735	,000
Within Groups	1012,863	181	5,596		
Total	2521,295	194			

POST HOC TEST

L

Duncan[a,b]

gabungan	N	Subset for alpha = .05							
		1	2	3	4	5	6	7	8
steam blanch,suhu refrigerator, h-10	5	36,8480							
steam blanch,suhu freezer,h-14	15		38,9273						
steam blanch,suhu freezer,h-10	15		40,0233	40,0233					
steam blanch,suhu freezer,h-3	15		40,3340	40,3340	40,3340				
steam blanch,suhu freezer,h-6	15		40,4440	40,4440	40,4440				
steam blanch,suhu freezer,h-1	15			41,0800	41,0800	41,0800			
steam blanch,suhu refrigerator,h-3	15				42,2067	42,2067	42,2067		
Steam blanch,suhu freezer,H-0	15					42,8300	42,8300		
steam blanch,suhu refrigerator,H-6	10					42,8680	42,8680		
steam blanch,suhu regfrigerator,H-0	15					42,8680	42,8680		
steam blanch,suhu ruang,H-0	15						43,5473		
steam blanch,suhu refrigerator,h-1	15						43,7447		
segar,suhu ruang,H-1	15							46,0560	
segar,H0	15								49,1620
Sig.		1,000	,143	,311	,069	,091	,157	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12,727.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Tests of Normality[b,c,d,e,f,g]

	gabungan	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
a	segar,H0	,151	15	,200*	,955	15	,609
	segar,suhu ruang,H-1	,187	15	,165	,939	15	,366
	steam blanch,suhu ruang,H-0	,203	15	,097	,949	15	,503
	steam blanch,suhu regfrigerator,H-0	,112	15	,200*	,968	15	,830
	steam blanch,suhu refrigerator,h-1	,138	15	,200*	,941	15	,397
	steam blanch,suhu refrigerator,h-3	,138	15	,200*	,971	15	,871
	steam blanch,suhu refrigerator,H-6	,160	10	,200*	,909	10	,273
	steam blanch,suhu refrigerator, h-10	,274	5	,200*	,840	5	,166
	Steam blanch,suhu freezer,H-0	,101	15	,200*	,979	15	,966
	steam blanch,suhu freezer,h-1	,152	15	,200*	,953	15	,575
	steam blanch,suhu freezer,h-3	,141	15	,200*	,921	15	,202
	steam blanch,suhu freezer,h-6	,109	15	,200*	,958	15	,660
	steam blanch,suhu freezer,h-10	,213	15	,067	,808	15	,005
	steam blanch,suhu freezer,h-14	,112	15	,200*	,982	15	,983

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

b. There are no valid cases for a when gabungan = 15,000. Statistics cannot be computed for this level.

c. There are no valid cases for a when gabungan = 16,000. Statistics cannot be computed for this level.

d. There are no valid cases for a when gabungan = 17,000. Statistics cannot be computed for this level.

e. There are no valid cases for a when gabungan = 18,000. Statistics cannot be computed for this level.

f. There are no valid cases for a when gabungan = 19,000. Statistics cannot be computed for this level.

g. There are no valid cases for a when gabungan = 20,000. Statistics cannot be computed for this level.

ANOVA

a

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	509,293	13	39,176	14,206	,000
Within Groups	499,138	181	2,758		
Total	1008,431	194			

POST HOC TEST

a

Duncan[a,b]

gabungan	N	Subset for alpha = .05				
		1	2	3	4	5
steam blanch,suhu regfrigerator,H-0	15	-9,3920				
Steam blanch,suhu freezer,H-0	15	-9,2813				
steam blanch,suhu ruang,H-0	15	-8,5193				
steam blanch,suhu refrigerator,h-1	15	-8,1027	-8,1027			
steam blanch,suhu freezer,h-1	15		-6,8973	-6,8973		
segar,H0	15			-6,3687	-6,3687	
steam blanch,suhu freezer,h-10	15			-5,8893	-5,8893	
steam blanch,suhu freezer,h-6	15			-5,8573	-5,8573	
steam blanch,suhu freezer,h-3	15			-5,7060	-5,7060	
segar,suhu ruang,H-1	15				-5,3613	
steam blanch,suhu refrigerator,h-3	15				-5,2973	
steam blanch,suhu freezer,h-14	15				-5,2087	
steam blanch,suhu refrigerator,H-6	10				-5,0280	
steam blanch,suhu refrigerator, h-10	5					-3,0380
Sig.		,075	,069	,109	,084	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12,727.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

b*

Tests of Normality[b,c,d,e,f,g]

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	gabungan	Statistic	df	Sig.	Statistic	df	Sig.
b	segar,H0	,188	15	,159	,944	15	,432
	segar,suhu ruang,H-1	,215	15	,061	,890	15	,066
	steam blanch,suhu ruang,H-0	,196	15	,124	,864	15	,028
	steam blanch,suhu regfrigerator,H-0	,130	15	,200*	,957	15	,635
	steam blanch,suhu refrigerator,h-1	,132	15	,200*	,969	15	,845
	steam blanch,suhu refrigerator,h-3	,130	15	,200*	,967	15	,815
	steam blanch,suhu refrigerator,H-6	,203	10	,200*	,896	10	,200
	steam blanch,suhu refrigerator, h-10	,291	5	,192	,891	5	,363
	Steam blanch,suhu freezer,H-0	,128	15	,200*	,964	15	,769
	steam blanch,suhu freezer,h-1	,156	15	,200*	,937	15	,348
	steam blanch,suhu freezer,h-3	,140	15	,200*	,957	15	,637
	steam blanch,suhu freezer,h-6	,142	15	,200*	,929	15	,262
	steam blanch,suhu freezer,h-10	,139	15	,200*	,954	15	,585
	steam blanch,suhu freezer,h-14	,125	15	,200*	,951	15	,545

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

b. There are no valid cases for b when gabungan = 15,000. Statistics cannot be computed for this level.

c. There are no valid cases for b when gabungan = 16,000. Statistics cannot be computed for this level.

d. There are no valid cases for b when gabungan = 17,000. Statistics cannot be computed for this level.

e. There are no valid cases for b when gabungan = 18,000. Statistics cannot be computed for this level.

f. There are no valid cases for b when gabungan = 19,000. Statistics cannot be computed for this level.

g. There are no valid cases for b when gabungan = 20,000. Statistics cannot be computed for this level.

ANOVA

b

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	715,789	13	55,061	18,550	,000
Within Groups	537,250	181	2,968		
Total	1253,039	194			

POST HOC TEST

b

Duncan[a,b]

gabungan	N	Subset for alpha = .05						
		1	2	3	4	5	6	7
steam blanch,suhu freezer,h-14	15	6,3100						
steam blanch,suhu freezer,h-10	15	6,4173						
steam blanch,suhu freezer,h-3	15	7,2613	7,2613					
steam blanch,suhu freezer,h-6	15	7,3073	7,3073					
steam blanch,suhu refrigerator, h-10	5	7,6400	7,6400	7,6400				
steam blanch,suhu freezer,h-1	15		7,9287	7,9287	7,9287			
segar,suhu ruang,H-1	15			8,9780	8,9780	8,9780		
segar,H0	15				9,1760	9,1760		
steam blanch,suhu ruang,H-0	15					10,2500	10,2500	
Steam blanch,suhu freezer,H-0	15						10,7253	10,7253
steam blanch,suhu regfrigerator,H-0	15						10,9740	10,9740
steam blanch,suhu refrigerator,h-3	15						11,1007	11,1007
steam blanch,suhu refrigerator,H-6	10							11,7830
steam blanch,suhu refrigerator,h-1	15							11,8887
Sig.		,084	,381	,065	,086	,079	,262	,133

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12,727.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

ΔE

Tests of Normality[b,c,d,e,f,g,h,i,j,k]

	gabungan	Kolmogorov-Smirnov[a] Statistic	df	Sig.	Shapiro-Wilk Statistic	df	Sig.
delta_E	segar,suhu ruang,H-1	,147	15	,200*	,949	15	,506
	steam blanch,suhu refrigerator,h-1	,139	15	,200*	,969	15	,843
	steam blanch,suhu refrigerator,h-3	,154	15	,200*	,960	15	,686
	steam blanch,suhu refrigerator,H-6	,197	10	,200*	,940	10	,553
	steam blanch,suhu refrigerator, h-10	,162	5	,200*	,981	5	,938
	steam blanch,suhu freezer,h-1	,204	15	,094	,914	15	,157
	steam blanch,suhu freezer,h-3	,191	15	,147	,924	15	,224
	steam blanch,suhu freezer,h-6	,145	15	,200*	,909	15	,131
	steam blanch,suhu freezer,h-10	,139	15	,200*	,942	15	,410
	steam blanch,suhu freezer,h-14	,167	15	,200*	,929	15	,264

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

b. There are no valid cases for delta_E when gabungan = 1,000. Statistics cannot be computed for this level.

c. There are no valid cases for delta_E when gabungan = 3,000. Statistics cannot be computed for this level.

d. There are no valid cases for delta_E when gabungan = 4,000. Statistics cannot be computed for this level.

e. There are no valid cases for delta_E when gabungan = 9,000. Statistics cannot be computed for this level.

f. There are no valid cases for delta_E when gabungan = 15,000. Statistics cannot be computed for this level.

g. There are no valid cases for delta_E when gabungan = 16,000. Statistics cannot be computed for this level.

h. There are no valid cases for delta_E when gabungan = 17,000. Statistics cannot be computed for this level.

i. There are no valid cases for delta_E when gabungan = 18,000. Statistics cannot be computed for this level.

j. There are no valid cases for delta_E when gabungan = 19,000. Statistics cannot be computed for this level.

k. There are no valid cases for delta_E when gabungan = 20,000. Statistics cannot be computed for this level.

ANOVA

delta_E

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	372,293	9	41,366	8,781	,000
Within Groups	588,851	125	4,711		
Total	961,144	134			

POST HOC TEST

delta_E

Duncan[a,b]

gabungan	N	Subset for alpha = .05				
		1	2	3	4	5
steam blanch,suhu refrigerator,h-1	15	4,1527				
segar,suhu ruang,H-1	15	4,7487	4,7487			
steam blanch,suhu freezer,h-1	15	5,5933	5,5933	5,5933		
steam blanch,suhu refrigerator,h-3	15	5,6353	5,6353	5,6353		
steam blanch,suhu refrigerator,H-6	10		6,4530	6,4530	6,4530	
steam blanch,suhu freezer,h-6	15			7,1080	7,1080	
steam blanch,suhu freezer,h-3	15			7,1740	7,1740	
steam blanch,suhu freezer,h-14	15				7,8540	
steam blanch,suhu freezer,h-10	15				8,0147	
steam blanch,suhu refrigerator, h-10	5					11,9000
Sig.		,130	,081	,115	,120	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12,000.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Chromaticity

Tests of Normality[b,c,d,e,f,g]

	gabungan	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
chroma	segar,H0	,093	15	,200*	,974	15	,908
	segar,suhu ruang,H-1	,135	15	,200*	,901	15	,099
	steam blanch,suhu ruang,H-0	,144	15	,200*	,917	15	,171
	steam blanch,suhu regfrigerator,H-0	,153	15	,200*	,955	15	,612
	steam blanch,suhu refrigerator,h-1	,153	15	,200*	,974	15	,907
	steam blanch,suhu refrigerator,h-3	,113	15	,200*	,958	15	,650
	steam blanch,suhu refrigerator,H-6	,140	10	,200*	,966	10	,849
	steam blanch,suhu refrigerator, h-10	,188	5	,200*	,968	5	,859
	Steam blanch,suhu freezer,H-0	,139	15	,200*	,947	15	,478
	steam blanch,suhu freezer,h-1	,171	15	,200*	,919	15	,187
	steam blanch,suhu freezer,h-3	,117	15	,200*	,952	15	,556
	steam blanch,suhu freezer,h-6	,149	15	,200*	,947	15	,483
	steam blanch,suhu freezer,h-10	,161	15	,200*	,841	15	,013
	steam blanch,suhu freezer,h-14	,121	15	,200*	,963	15	,752

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

b. There are no valid cases for chroma when gabungan = 15,000. Statistics cannot be computed for this level.

c. There are no valid cases for chroma when gabungan = 16,000. Statistics cannot be computed for this level.

d. There are no valid cases for chroma when gabungan = 17,000. Statistics cannot be computed for this level.

e. There are no valid cases for chroma when gabungan = 18,000. Statistics cannot be computed for this level.

f. There are no valid cases for chroma when gabungan = 19,000. Statistics cannot be computed for this level.

g. There are no valid cases for chroma when gabungan = 20,000. Statistics cannot be computed for this level.

ANOVA

chroma

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	873,182	13	67,168	12,916	,000
Within Groups	941,249	181	5,200		
Total	1814,432	194			

POST HOC TEST

chroma

Duncan[a,b]

gabungan	N	Subset for alpha = .05				
		1	2	3	4	5
steam blanch,suhu freezer,h-14	15	8,1953				
steam blanch,suhu refrigerator, h-10	5	8,2720				
steam blanch,suhu freezer,h-10	15	8,9160	8,9160			
steam blanch,suhu freezer,h-3	15	9,2527	9,2527	9,2527		
steam blanch,suhu freezer,h-6	15	9,3793	9,3793	9,3793		
segar,suhu ruang,H-1	15		10,4907	10,4907		
steam blanch,suhu freezer,h-1	15		10,5347	10,5347		
segar,H0	15			11,1827	11,1827	
steam blanch,suhu refrigerator,h-3	15				12,6327	12,6327
steam blanch,suhu refrigerator,H-6	10				12,9070	12,9070
Steam blanch,suhu freezer,H-0	15				13,0127	13,0127
steam blanch,suhu ruang,H-0	15					13,3400
steam blanch,suhu refrigerator,h-1	15					14,4240
steam blanch,suhu regfrigerator,H-0	15					14,5180
Sig.		,251	,113	,057	,065	,069

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 12,727.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

LAMPIRAN 5. Foto Jaringan Sel Brokoli Selama Penyimpanan

1. Brokoli Segar, Penyimpanan Suhu Ruang

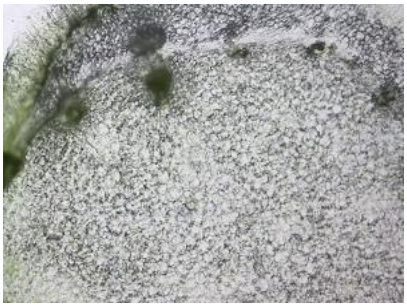
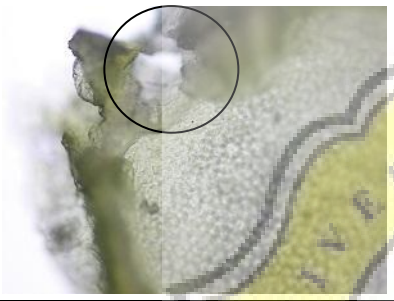
a. Perbesaran 4 x 10

H0	H1	H3
		
H6	H10	H14
	Sampel Rusak	Sampel Rusak

(foto dok. pribadi)

Keterangan :
Gambar yang dilingkari menunjukkan bagian jaringan sel brokoli yang mengalami kerusakan yang ditandai dengan melunaknya jaringan sel selama penyimpanan.

b. Perbesaran 10 x 10 (bagian tepi)

H0	H1	H3
		
H6	H10	H14
	Sampel Rusak	Sampel Rusak

(foto dok. pribadi)

Keterangan :
Gambar yang dilingkari menunjukkan bagian jaringan sel brokoli yang mengalami kerusakan yang ditandai dengan melunaknya jaringan sel selama penyimpanan.

2. Brokoli *Steam Blanched*, Penyimpanan Suhu Ruang

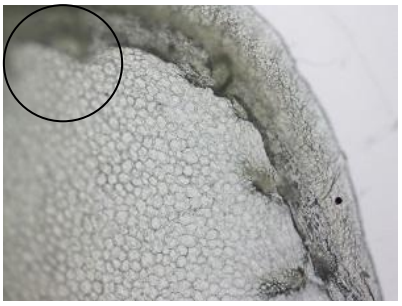
a. Perbesaran 4 x 10

H0	H1	H3
		Sampel Rusak
H6	H10	H14
Sampel Rusak	Sampel Rusak	Sampel Rusak

(foto dok. pribadi)

Keterangan :
Gambar yang dilingkari menunjukkan bagian jaringan sel brokoli yang mengalami kerusakan yang ditandai dengan melunaknya jaringan sel selama penyimpanan.

b. Perbesaran 10 x 10 (bagian tepi)

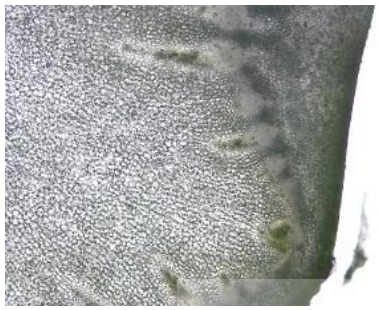
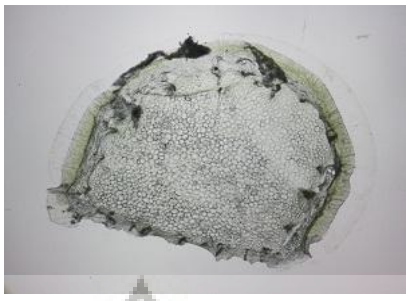
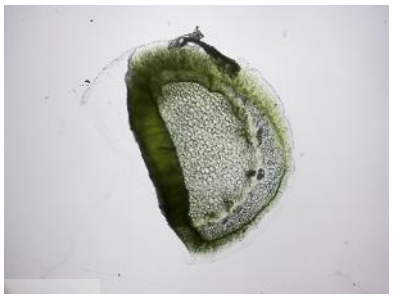
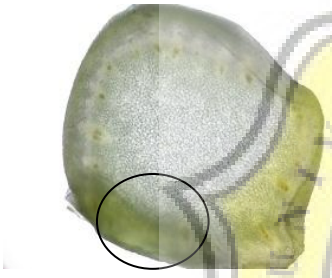
H0	H1	H3
		Sampel Rusak
H6	H10	H14
Sampel Rusak	Sampel Rusak	Sampel Rusak

(foto dok. pribadi)

Keterangan :
Gambar yang dilingkari menunjukkan bagian jaringan sel brokoli yang mengalami kerusakan yang ditandai dengan melunaknya jaringan sel selama penyimpanan.

3. Brokoli *Steam Blanched*, Penyimpanan Suhu *Refrigerator*

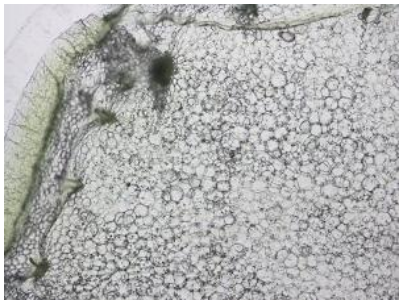
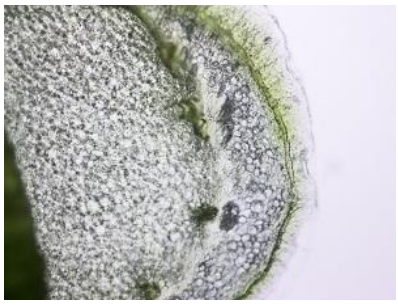
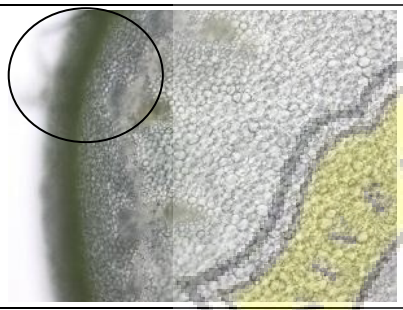
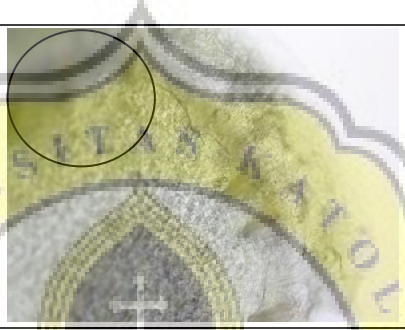
a. Perbesaran 4 x 10

H0	H1	H3
		
H6	H10	H14
		Sampel Rusak

(foto dok. pribadi)

Keterangan :
Gambar yang dilingkari menunjukkan bagian jaringan sel brokoli yang mengalami kerusakan yang ditandai dengan melunaknya jaringan sel selama penyimpanan.

b. Perbesaran 10 x 10 (bagian tepi)

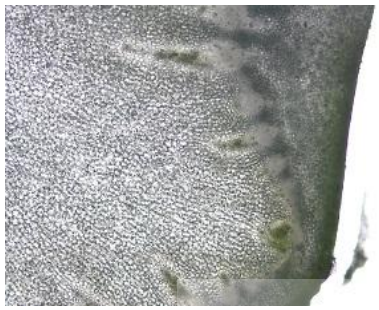
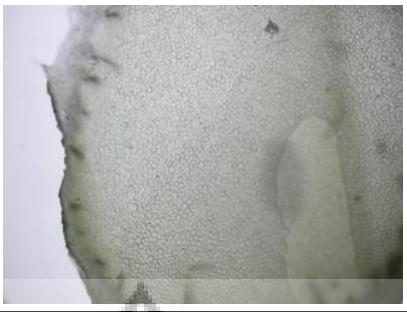
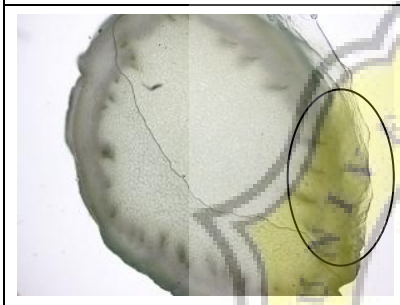
H0	H1	H3
		
H6	H10	H14
		Sampel Rusak

(foto dok. pribadi)

Keterangan :
Gambar yang dilingkari menunjukkan bagian jaringan sel brokoli yang mengalami kerusakan yang ditandai dengan melunaknya jaringan sel selama penyimpanan.

4. Brokoli *Steam Blanched*, Penyimpanan Suhu *Freezer*

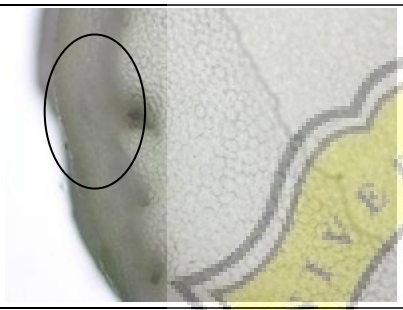
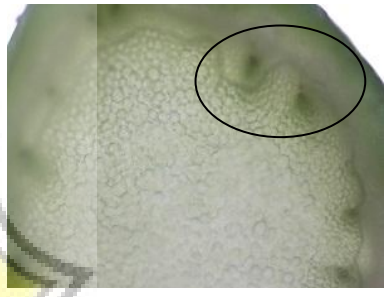
a. Perbesaran 4 x 10

H0	H1	H3
		
H6	H10	H14
		

(foto dok. pribadi)

Keterangan :
Gambar yang dilingkari menunjukkan bagian jaringan sel brokoli yang mengalami kerusakan yang ditandai dengan melunaknya jaringan sel selama penyimpanan.

b. Perbesaran 10 x 10 (bagian tepi)

H0	H1	H3
		
H6	H10	H14
		

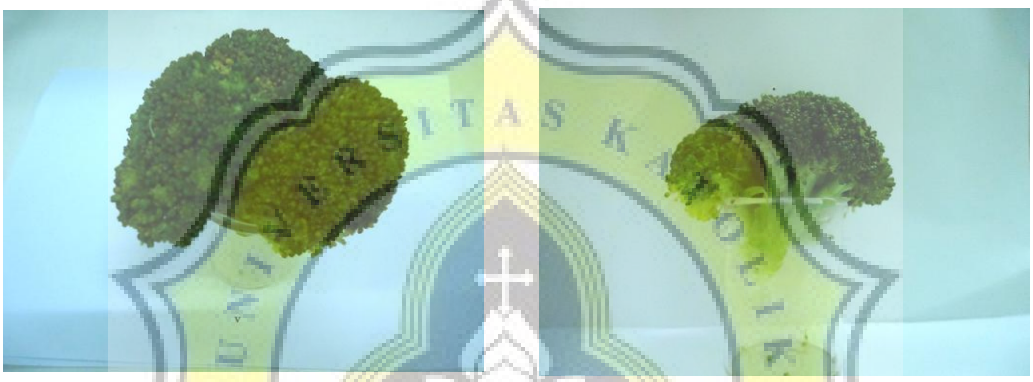
(foto dok. pribadi)

Keterangan :
Gambar yang dilingkari menunjukkan bagian jaringan sel brokoli yang mengalami kerusakan yang ditandai dengan melunaknya jaringan sel.

LAMPIRAN 6. Foto Brokoli Selama Penyimpanan

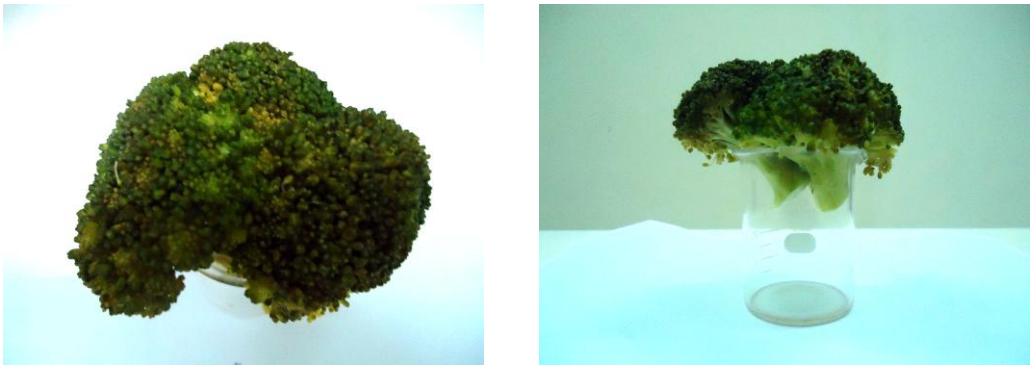
Hari 0

Gambar. Brokoli Segar Hari pertama (h0)



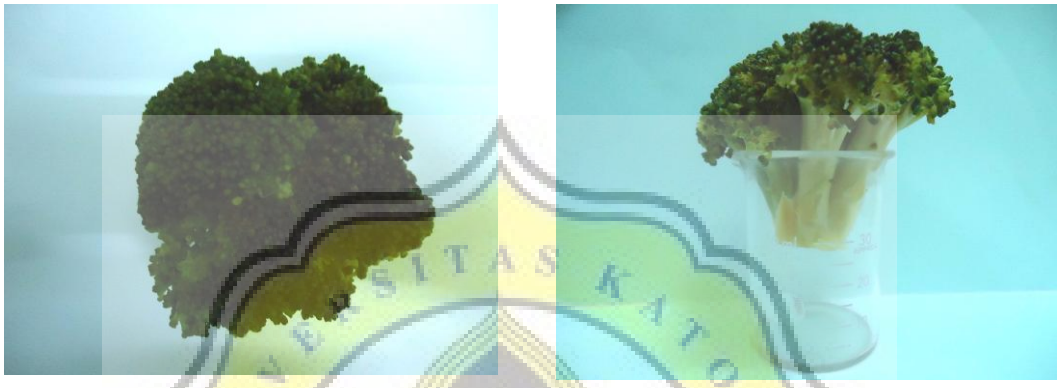
Gambar. Brokoli *Steam Blanched* Hari pertama (h0)

Gambar. Brokoli Segar Hari kedua (h1)

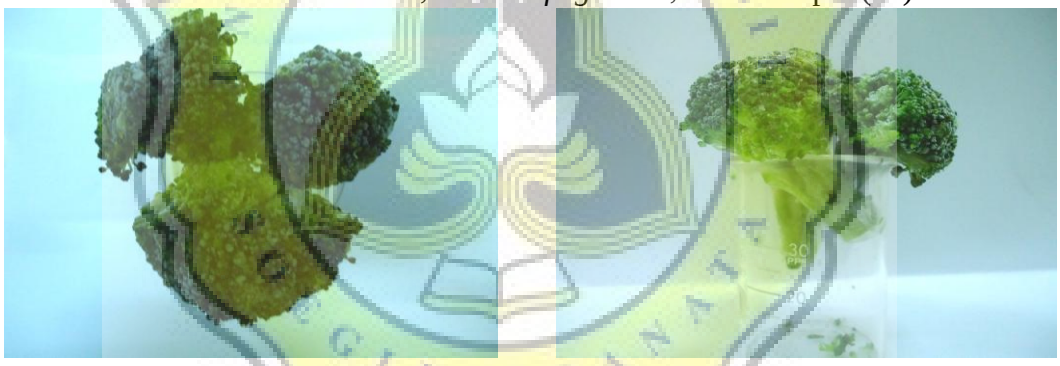


Gambar. Brokoli *Steam Blanched*,Suhu *Refrigerator*, Hari kedua (h1)

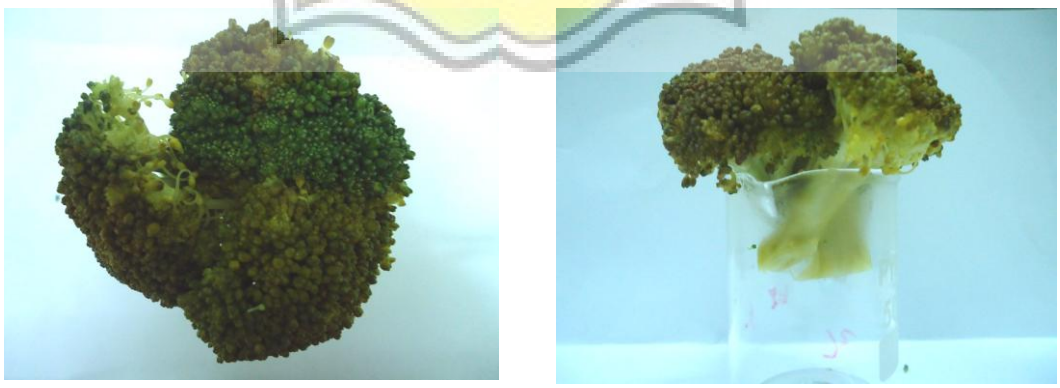
Gambar. Brokoli *Steam Blanched*, Suhu *Freezer*, hari kedua (h1)



Gambar. Brokoli *Steam Blanched*, Suhu *Refrigerator*, hari keempat (h3)

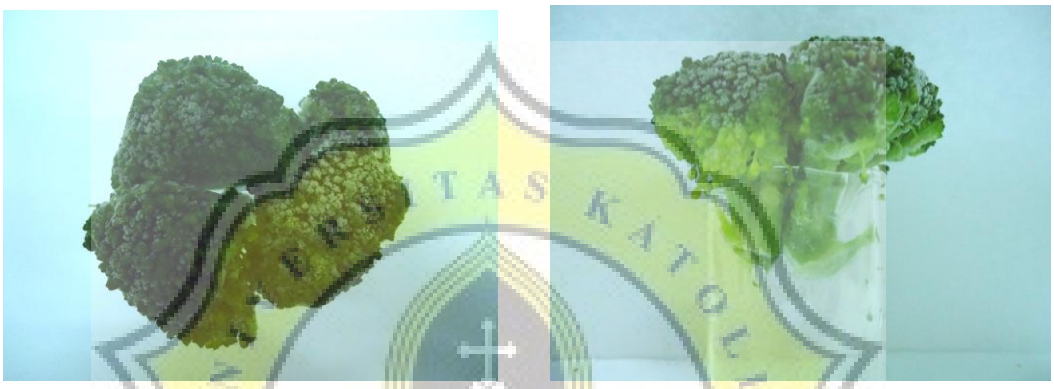


Gambar. Brokoli *Steam Blanched*, Suhu *Freezer*, hari keempat (h3)

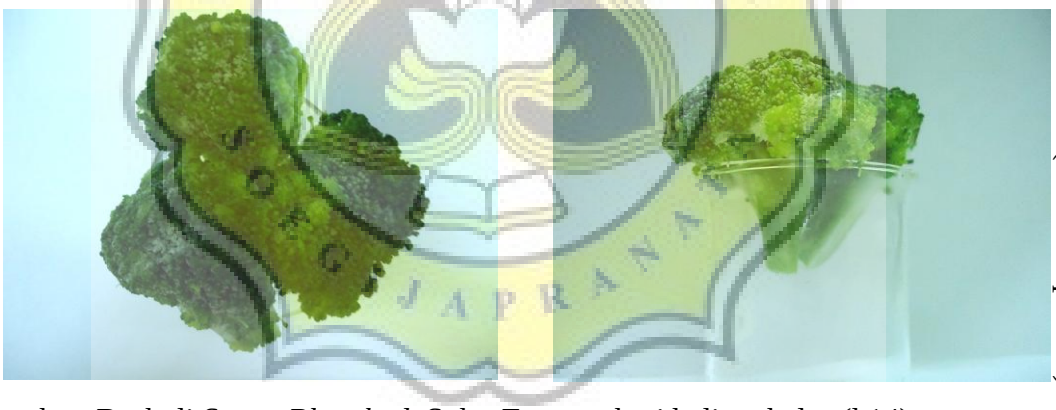


Gambar. Brokoli *Steam Blanched*, Suhu *Refrigerator*, hari ketujuh (h3)

Gambar. Brokoli *Steam Blanched*, Suhu *Freezer*, hari ketujuh (h6)



Gambar. Brokoli *Steam Blanched*, Suhu *Freezer*, hari kesebelas (h10)



Gambar. Brokoli *Steam Blanched*, Suhu *Freezer*, hari kelima belas (h14)

(foto dok. pribadi)