

LAMPIRAN A
HASIL STANDARDISASI NON PARAMETRIK EKSTRAK
KERING HERBA SELEDRI

Hasil Penetapan Kadar Air

Replikasi	Berat cawan (g)	Berat ekstrak (g)	Berat cawan+ekstrak konstan (g)	Kadar (%)
1	44,6457	9,9580	54,2428	3,7605
2	35,5330	9,9885	45,1650	3,7012
3	33,1614	9,9761	42,7702	3,8225
$\bar{x} \pm SD$				3,7614 \pm 0,0607

Contoh perhitungan penetapan kadar air ekstrak:

Ekstrak herba seledri replikasi 1:

Berat ekstrak = 9,9580 gram

Berat cawan+ekstrak konstan = 54,2428 gram

Berat cawan kosong = 44,6457 gram

$$\% \text{ kadar air} = \frac{9,9580 - (54,2428 - 44,6457)}{(54,2428 - 44,6457)} \times 100\% = 3,7605\%$$

Hasil Penetapan Susut Pengerinan

Replikasi	Susut Pengerinan (%)
1	4,2
2	4,5
3	4,6
$\bar{x} \pm SD$	4,4 \pm 0,2

Hasil Penetapan Kadar Abu Total

Replikasi	Berat krus (g)	Berat ekstrak (g)	Berat krus+ ekstrak konstan (g)	Kadar (%)
1	32,1429	3,0018	32,3141	5,7032
2	34,8241	2,9765	34,9966	5,7954
3	33,6151	3,0024	33,7749	5,3224
$\bar{x} \pm SD$				5,6070 \pm 0,2507

Contoh perhitungan penetapan kadar abu total ekstrak:

Ekstrak herba seledri replikasi 1:

Berat ekstrak = 3,0018 gram

Berat krus+ekstrak konstan = 32,3141 gram

Berat krus kosong = 32,1429 gram

$$\% \text{ kadar abu total} = \frac{32,3141 - 32,1429}{3,0018} \times 100\% = 5,7032\%$$

Hasil Penetapan Kadar Abu Yang Tidak Larut Asam

Replikasi	Berat krus (g)	Berat ekstrak (g)	Berat krus+ abu konstan (g)	Berat abu+ HCl konstan (g)	Kadar (%)
1	33,6108	2,9989	33,7808	33,6206	5,7647
2	36,3239	3,0004	36,4885	36,3328	5,4070
3	34,7829	2,9973	34,9503	34,7921	5,4958
\bar{x}					5,5559
SD					0,1862

Contoh perhitungan penetapan kadar abu yang tidak larut asam:

Ekstrak herba seledri replikasi 1:

Berat ekstrak = 2,9989 gram

Berat krus+abu konstan = 33,7808 gram

Berat krus kosong = 33,6108 gram

$$\% \text{ kadar abu total} = \frac{33,7808 - 33,6108}{2,9989} \times 100\% = 5,6687\%$$

$$\% \text{ kadar abu tidak larut asam} = \frac{33,6206 - 33,6108}{33,7808 - 33,6108} \times 100\% = 5,7647\%$$

Hasil Penetapan Kadar Abu Yang Larut Dalam Air

Replikasi	Berat krus (g)	Berat ekstrak (g)	Berat		Kadar (%)
			krus+ abu konstan (g)	Berat abu+ aquadestilata konstan (g)	
1	36,1208	2,9968	36,2715	36,1651	29,3962
2	34,2080	2,9916	34,3587	34,2529	29,7943
3	36,3406	3,0042	36,5038	36,3885	29,3505
\bar{x}					29,5136
SD					0,2441

Contoh perhitungan penetapan kadar abu yang larut dalam air:

Ekstrak herba seledri replikasi 1:

Berat ekstrak = 2,9968 gram

Berat krus+abu konstan = 36,2715 gram

Berat krus kosong = 36,1208 gram

$$\% \text{ kadar abu total} = \frac{36,2715 - 36,1208}{2,9968} \times 100\% = 5,0257\%$$

$$\% \text{ kadar abu larut air} = \frac{36,1651 - 36,1208}{36,2715 - 36,1208} \times 100\% = 29,3962\%$$

LAMPIRAN B
HASIL STANDARDISASI PARAMETRIK EKSTRAK KERING
HERBA SELEDRI

Hasil Penentuan pH

Replikasi	pH	Suhu (°C)
1	5,85	26,6
2	5,84	26,2
3	5,82	26,0
$\bar{x} \pm SD$	$5,84 \pm 0,02$	$26,27 \pm 0,31$

Hasil Penentuan Titik Leleh

Replikasi	Suhu (°C)
1	230,4
2	230,3
3	230,4
$\bar{x} \pm SD$	$230,4 \pm 0,2441$

Hasil Penentuan Ukuran Partikel

Replikasi	No. Mesh	d (µm)	ln d (µm)	Berat ekstrak yang tertahan (g)	% bobot	% FKB	Nilai Z
1	20	850	6,7452	0,03	0,03	99,86	2,98
	40	425	6,0529	0,12	0,12	99,74	2,79
	60	250	5,5215	2,98	2,98	96,76	1,84
	80	180	5,1930	8,34	8,34	88,42	1,19
	100	150	5,0106	3,45	3,45	84,97	1,03
	120	125	4,8283	13,54	13,54	71,43	0,56
	0	0	0,0000	71,43	71,43	0,00	-3,09
	Σ			99,89	99,89		
2	20	850	6,7452	0,13	0,13	99,79	2,86
	40	425	6,0529	0,07	0,07	99,72	2,77
	60	250	5,5215	2,84	2,84	96,88	1,86
	80	180	5,1930	8,51	8,51	88,37	1,19
	100	150	5,0106	3,52	3,52	84,85	1,03
	120	125	4,8283	13,75	13,75	71,10	0,56
	0	0	0,0000	71,10	71,10	0,00	-3,09
	Σ			99,92	99,92		
3	20	850	6,7452	0,09	0,09	99,87	3,00
	40	425	6,0529	0,12	0,12	99,75	2,81
	60	250	5,5215	2,93	2,93	96,82	1,85
	80	180	5,1930	8,51	8,51	88,31	1,19
	100	150	5,0106	3,42	3,42	84,89	1,03
	120	125	4,8283	13,76	13,76	71,13	0,56
	0	0	0,0000	71,13	71,13	0,00	-3,09
	Σ			99,96	99,96		

Replikasi i	A	b	r	d50%	d84%	σ	dvs
1	-3,2807	0,9075	0,9835	37,1551	111,8323	3,0099	20,2488
2	-3,2572	0,8989	0,9841	37,4685	113,9774	3,0420	20,1837
3	-3,2855	0,9100	0,9830	36,9808	110,9745	3,0009	20,2209
\bar{x}							20,2178
SD							0,0327

Hasil Penetapan Kadar Sari Larut Air

Replikasi	Berat ekstrak (g)	Pelarut (ml)	Filtrat yang diuapkan (ml)	Berat cawan kosong (g)	Berat pemanasan konstan (g)	Kadar (%)
1	5,0014	100,0	20,0	34,0189	35,0019	98,2725
2	5,0027	100,0	20,0	31,6351	32,6283	99,2664
3	5,0025	100,0	20,0	31,4883	32,4817	99,2904
\bar{x}						98,9431
SD						0,5809

Contoh perhitungan penetapan kadar sari larut air :

Ekstrak herba seledri replikasi 1:

Berat pemanasan konstan = 35,0019 gram

Berat cawan kosong = 34,0189 gram

Berat ekstrak = 5,0014 gram

Pelarut untuk maserasi = 100,0 ml

Filtrat yang diuapkan = 20,0 ml

$$\% \text{ kadar sari larut air} = \frac{35,0019 - 34,0189}{5,0014 \cdot (100,0 - 20,0)} \times 100\% = 98,2725\%$$

Hasil Penetapan Kadar Sari Larut Etanol

Replikasi	Berat ekstrak (g)	Pelarut (ml)	Filtrat yang diuapkan (ml)	Berat cawan kosong (g)	Berat pemanasan konstan (g)	Kadar (%)
1	5,0014	100,0	20,0	39,2285	39,3774	14,8858
2	5,0034	100,0	20,0	29,4437	29,5750	13,1211
3	5,0015	100,0	20,0	33,1417	33,2830	14,1258
\bar{x}						14,0442
SD						0,8852

Contoh perhitungan penetapan kadar sari larut etanol :

Ekstrak herba seledri replikasi 1:

Berat pemanasan konstan = 39,3716 gram

Berat cawan kosong = 39,2287 gram

Berat ekstrak = 5,0014 gram

Pelarut untuk maserasi = 100,0 ml

Filtrat yang diuapkan = 20,0 ml

$$\% \text{ kadar sari larut etanol} = \frac{39,3774 - 39,2285}{5,0014 \cdot (100,0 - 20,0)} \times 100\% = 14,8858\%$$

LAMPIRAN C
HASIL UJI MUTU FISIK GRANUL

Hasil Uji Kelembaban (%) Granul

Formula	Replikasi	Bets I	Bets II	Persyaratan
A	I	2,68	3,69	3-5 % (Voigt, 1995)
	II	3,36	3,81	
	III	3,62	4,46	
	\bar{x}	3,22	3,99	
	SD	0,49	0,41	
B	I	5,38	5,24	
	II	3,37	3,49	
	III	3,13	3,53	
	\bar{x}	3,96	4,09	
	SD	1,24	1,00	
C	I	2,54	2,61	
	II	4,44	2,73	
	III	3,04	4,13	
	\bar{x}	3,34	3,16	
	SD	0,98	0,85	
D	I	2,53	2,63	
	II	3,63	3,12	
	III	4,67	3,94	
	\bar{x}	3,61	3,23	
	SD	1,07	0,66	

Hasil Uji Waktu Alir (detik) Granul

Formula	Replikasi	Bets I	Bets II	Persyaratan
A	I	9,60	9,20	≤ 10 detik (Siregar dan Saleh, 2010)
	II	9,11	9,40	
	III	9,35	9,29	
	\bar{x}	9,35	9,30	
	SD	0,25	0,10	
B	I	8,28	8,62	
	II	8,93	8,39	
	III	8,50	8,50	
	\bar{x}	8,57	8,50	
	SD	0,33	0,12	
C	I	4,81	4,64	
	II	4,66	4,56	
	III	5,01	4,50	
	\bar{x}	4,83	4,57	
	SD	0,18	0,07	
D	I	5,58	5,17	
	II	5,24	5,10	
	III	5,13	4,90	
	\bar{x}	5,32	5,06	
	SD	0,23	0,14	

Hasil Uji Sudut Istirahat (⁰) Granul

Formula	Replikasi	Bets I	Bets II	Persyaratan
A	I	29,68	30,54	
	II	30,11	29,68	
	III	30,11	29,25	
	\bar{x}	29,97	29,82	
	SD	0,25	0,66	
B	I	30,54	30,11	
	II	30,11	30,11	
	III	28,81	29,25	< 25 = baik sekali
	\bar{x}	29,82	29,82	25-30 = baik
	SD	0,90	0,50	30-40 = agak baik
C	I	29,68	28,88	
	II	29,25	29,25	
	III	30,11	29,25	>40 = sangat buruk
	\bar{x}	29,68	29,13	(Wells, 1988)
	SD	0,43	0,21	
D	I	28,88	28,37	
	II	27,47	29,68	
	III	28,37	28,37	
	\bar{x}	28,24	28,81	
	SD	0,71	0,76	

Contoh perhitungan uji sudut istirahat granul:

Formula A bets 1:

W persegi panjang = 4,44 gram

W lingkaran = 1,0 gram

Luas persegi panjang = 29,7 x 21,0

= 623,70 cm²

Luas lingkaran = $\frac{1,03}{4,07} \times 623,70 = 140,47 \text{ cm}^2$

$A = \pi \cdot r^2$

$r^2 = \frac{A}{\pi}$

= $\frac{140,47}{3,14} = 44,74$

$$r = 6,69 \text{ cm}$$

$$\text{tg } \alpha = \frac{h}{r}$$

$$= \frac{3,8}{6,69} = 0,57$$

$$\alpha = 29,68^{\circ}$$

Hasil Uji Indeks Kompresibilitas (%) Granul

Formula	Replikasi	Bets I	Bets II	Persyaratan
A	I	17,00	18,00	
	II	18,00	21,00	
	III	17,00	17,00	
	\bar{x}	17,33	18,67	
	SD	0,58	2,08	
B	I	17,00	15,00	5-15% = baik sekali 12-16% = baik 18-21% = agak baik (Siregar dan Saleh, 2010)
	II	16,00	16,00	
	III	16,00	14,81	
	\bar{x}	16,33	15,27	
	SD	0,58	0,64	
C	I	12,00	13,00	
	II	13,00	11,00	
	III	12,00	11,00	
	\bar{x}	12,33	11,67	
	SD	0,58	1,15	
D	I	19,00	17,00	
	II	18,00	16,00	
	III	19,00	18,00	
	\bar{x}	18,67	17,00	
	SD	0,58	1,00	

Contoh perhitungan uji indeks kompresibilitas granul:

Formula A betis 1:

Berat gelas ukur (W_1) = 90,35 gram

Berat gelas ukur + granul (W_2) = 136,18 gram

Volume gelas ukur kosong (V_0) = 100 ml

Volume gelas ukur setelah pengetukan (V_1) = 83 ml

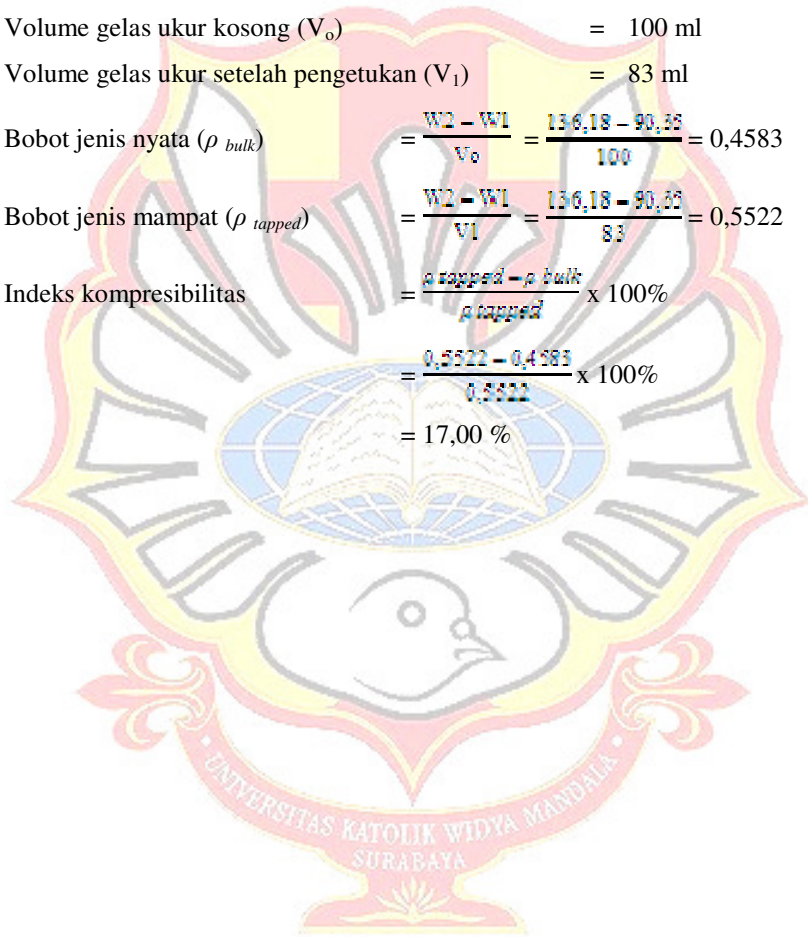
Bobot jenis nyata (ρ_{bulk}) = $\frac{W_2 - W_1}{V_0} = \frac{136,18 - 90,35}{100} = 0,4583$

Bobot jenis mampat (ρ_{tapped}) = $\frac{W_2 - W_1}{V_1} = \frac{136,18 - 90,35}{83} = 0,5522$

Indeks kompresibilitas = $\frac{\rho_{tapped} - \rho_{bulk}}{\rho_{tapped}} \times 100\%$

= $\frac{0,5522 - 0,4583}{0,5522} \times 100\%$

= 17,00 %

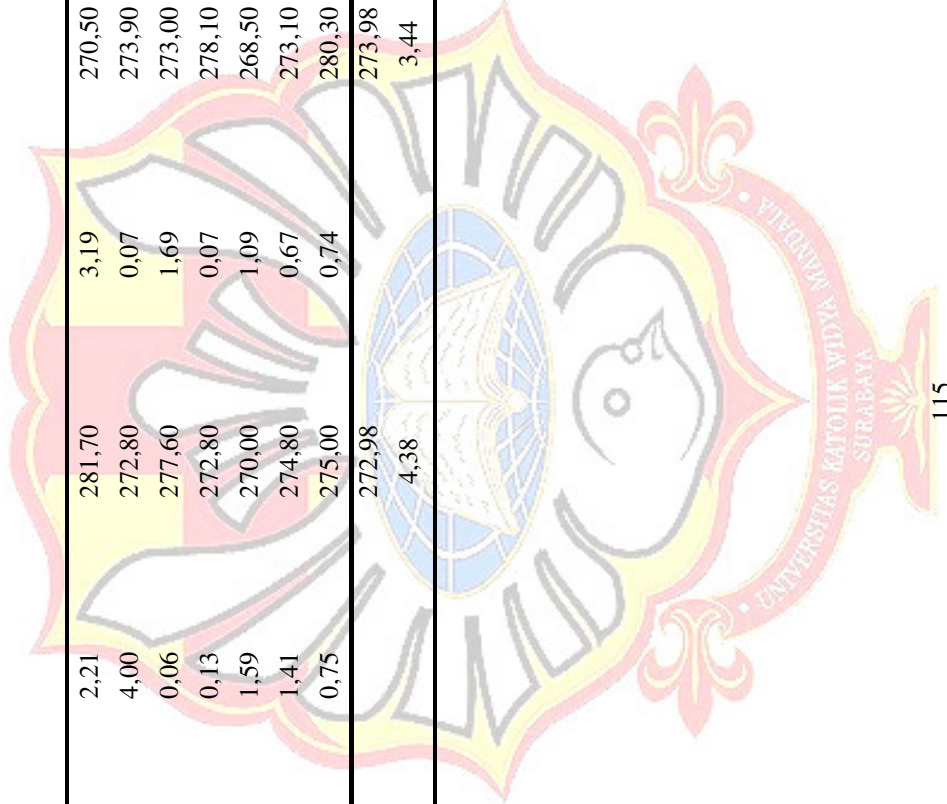


LAMPIRAN D**HASIL UJI MUTU FISIK TABLET**

Hasil Uji Keseragaman Bobot Tablet Formula A Bets 1

No	Replikasi 1			Replikasi 2			Replikasi 3		
	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)	
1	270,60	1,08	267,30	2,08	277,20	1,18			
2	270,80	1,01	273,80	0,30	276,70	0,99			
3	275,50	0,71	275,40	0,89	279,70	2,09			
4	268,80	1,74	265,90	2,59	276,40	0,89			
5	268,90	1,70	275,10	0,78	270,60	1,23			
6	277,00	1,26	268,10	1,79	272,00	0,72			
7	273,00	0,20	272,40	0,21	273,80	0,06			
8	276,70	1,15	271,50	0,54	275,40	0,52			
9	268,90	1,70	274,30	0,48	274,10	0,05			
10	268,30	1,92	281,00	2,94	275,10	0,41			
11	276,80	1,18	271,90	0,40	268,50	2,00			
12	272,60	0,35	265,00	2,92	269,80	1,52			
13	273,50	0,02	273,20	0,08	272,80	0,43			

14	279,60	2,21	281,70	3,19	270,50	1,27
15	284,50	4,00	272,80	0,07	273,90	0,03
16	273,40	0,06	277,60	1,69	273,00	0,36
17	273,20	0,13	272,80	0,07	278,10	1,51
18	277,90	1,59	270,00	1,09	268,50	2,00
19	269,70	1,41	274,80	0,67	273,10	0,32
20	271,50	0,75	275,00	0,74	280,30	2,31
\bar{x}	273,56		272,98		273,98	
SD	4,24		4,38		3,44	



Contoh perhitungan uji keseragaman bobot tablet:

Penyimpangan bobot tablet (%) =

$$\frac{|\text{bobot tiap tablet} - \text{bobot rata-rata tablet}|}{\text{bobot rata-rata tablet}} \times 100\%$$

$$= \frac{|270,60 - 270,56|}{270,56} \times 100\%$$

$$= 1,08\%$$



Hasil Uji Keseragaman Bobot Tablet Formula A Bets 2

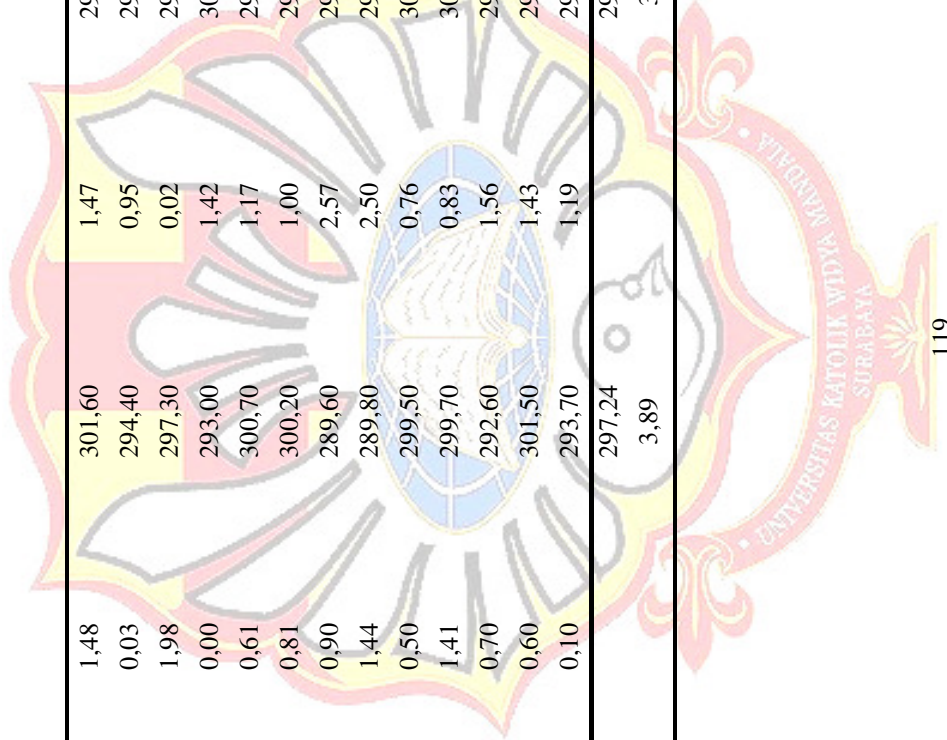
No	Replikasi 1		Replikasi 2		Replikasi 3	
	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)
1	269,60	1,37	267,90	1,95	277,80	1,64
2	270,50	1,04	279,70	2,36	269,80	1,29
3	270,60	1,00	276,80	1,30	278,90	2,04
4	269,90	1,26	273,60	0,13	268,70	1,69
5	268,50	1,77	268,90	1,59	276,60	1,20
6	274,00	0,24	276,60	1,23	266,90	2,35
7	276,30	1,08	272,00	0,45	271,80	0,56
8	270,40	1,08	268,90	1,59	272,20	0,41
9	278,40	1,85	268,70	1,66	272,90	0,15
10	273,50	0,06	279,90	2,44	275,30	0,72
11	277,90	1,67	274,70	0,53	271,20	0,78
12	268,70	1,70	277,80	1,67	278,50	1,90
13	275,00	0,61	277,50	1,56	272,30	0,37
14	269,80	1,30	269,80	1,26	272,80	0,19
15	268,70	1,70	268,80	1,62	269,80	1,29
16	279,70	2,32	275,80	0,94	269,20	1,51

17	278,90	2,03	267,80	1,99	269,60	1,36
18	277,80	1,63	276,80	1,30	277,90	1,68
19	269,90	1,26	273,40	0,06	275,40	0,76
20	278,80	2,00	269,40	1,41	278,80	2,00
\bar{x}	273,35		273,24		273,32	
SD	4,11		4,20		3,81	

Hasil Uji Keseragaman Bobot Tablet Formula B Bets 1

No	Replikasi 1		Replikasi 2		Replikasi 3	
	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)
1	300,40	0,94	300,70	1,17	297,20	0,02
2	295,30	0,77	296,50	0,25	296,30	0,28
3	296,30	0,43	295,00	0,75	300,50	1,13
4	297,20	0,13	298,70	0,49	296,50	0,21
5	303,10	1,85	299,50	0,76	300,60	1,17
6	297,20	0,13	300,80	1,20	294,50	0,89
7	299,40	0,61	299,90	0,90	301,40	1,44

8	302,00	1,48	301,60	1,47	295,50	0,55
9	297,50	0,03	294,40	0,95	298,70	0,53
10	291,70	1,98	297,30	0,02	295,00	0,72
11	297,60	0,00	293,00	1,42	300,70	1,20
12	299,40	0,61	300,70	1,17	291,20	2,00
13	300,00	0,81	300,20	1,00	292,60	1,52
14	294,90	0,90	289,60	2,57	295,60	0,51
15	293,30	1,44	289,80	2,50	296,80	0,11
16	296,10	0,50	299,50	0,76	300,80	1,24
17	301,80	1,41	299,70	0,83	301,50	1,47
18	295,50	0,70	292,60	1,56	298,60	0,49
19	295,80	0,60	301,50	1,43	297,40	0,09
20	297,30	0,10	293,70	1,19	291,20	2,00
\bar{x}	297,59		297,24		297,13	
SD	2,95		3,89		3,25	



Hasil Uji Keseragaman Bobot Tablet Formula B Bets 2

No	Replikasi 1		Replikasi 2		Replikasi 3	
	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)
1	301,70	1,21	301,20	1,14	296,50	0,46
2	295,80	0,77	294,20	1,21	298,20	0,11
3	297,30	0,27	294,70	1,04	298,60	0,25
4	297,40	0,24	295,80	0,67	294,90	1,00
5	300,20	0,70	300,10	0,77	295,50	0,79
6	297,60	0,17	301,60	1,28	296,10	0,59
7	294,40	1,24	294,60	1,07	301,80	1,32
8	295,30	0,94	300,60	0,94	295,50	0,79
9	299,50	0,47	295,40	0,80	299,20	0,45
10	301,30	1,07	301,30	1,18	294,30	1,20
11	295,10	1,01	300,20	0,81	299,20	0,45
12	295,30	0,94	295,70	0,70	298,50	0,21
13	298,00	0,04	297,50	0,10	294,60	1,10
14	297,50	0,20	295,40	0,80	299,30	0,48
15	298,50	0,13	295,60	0,74	300,70	0,95
16	294,70	1,14	299,00	0,40	295,40	0,83

17	301,80	1,24	295,30	0,84	301,50	1,22
18	298,60	0,17	298,70	0,30	299,10	0,41
19	300,40	0,77	298,90	0,37	304,40	2,19
20	301,70	1,21	300,10	0,77	294,00	1,30
x	298,11		297,80		297,87	
SD	2,50		2,61		2,87	

Hasil Uji Keseragaman Bobot Tablet Formula C Bets 1

No	Replikasi 1		Replikasi 2		Replikasi 3	
	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)
1	302,30	0,61	300,00	1,41	297,70	2,10
2	301,20	0,97	311,20	2,27	300,80	1,08
3	299,10	1,66	312,60	2,73	303,10	0,32
4	301,20	0,97	300,20	1,34	305,10	0,33
5	303,30	0,28	312,10	2,57	298,70	1,77
6	298,10	1,99	311,70	2,44	298,90	1,71
7	309,40	1,72	300,70	1,18	311,50	2,44

8	312,10	2,61	297,20	2,33	298,50	1,84
9	312,30	2,68	299,60	1,54	300,90	1,05
10	303,60	0,18	298,00	2,07	311,10	2,31
11	303,80	0,12	311,70	2,44	299,80	1,41
12	299,80	1,43	312,10	2,57	298,00	2,00
13	311,20	2,31	299,70	1,51	301,80	0,75
14	298,40	1,89	300,50	1,24	310,90	2,24
15	300,60	1,17	312,90	2,83	312,80	2,87
16	303,80	0,12	299,80	1,47	297,90	2,03
17	301,70	0,81	302,60	0,55	297,50	2,17
18	308,70	1,49	304,20	0,03	312,80	2,87
19	302,20	0,64	298,70	1,84	311,70	2,50
20	310,40	2,05	300,20	1,34	312,20	2,67
\bar{x}	304,16		304,29		304,09	
SD	4,73		6,02		6,15	

Hasil Uji Keseragaman Bobot Tablet Formula C Bets 2

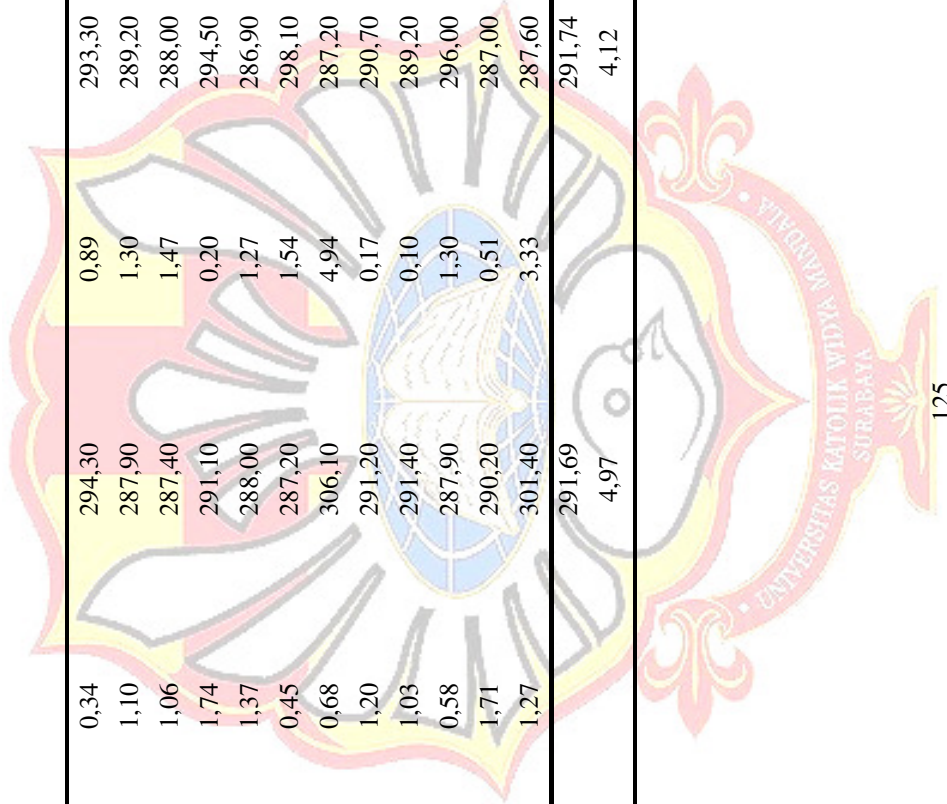
No	Replikasi 1			Replikasi 2			Replikasi 3		
	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)	
1	300,00	1,48	297,30	2,68	297,60	2,41	297,60	2,41	
2	299,80	1,55	307,70	0,72	297,60	2,41	297,60	2,41	
3	310,50	1,97	311,60	2,00	299,80	1,69	299,80	1,69	
4	309,70	1,70	308,90	1,11	308,00	1,00	308,00	1,00	
5	309,40	1,61	310,60	1,67	312,20	2,38	312,20	2,38	
6	297,80	2,20	309,90	1,44	300,10	1,59	300,10	1,59	
7	310,10	1,84	306,90	0,46	311,50	2,15	311,50	2,15	
8	299,60	1,61	309,10	1,18	311,80	2,25	311,80	2,25	
9	298,80	1,88	299,70	1,90	306,80	0,61	306,80	0,61	
10	299,70	1,58	311,50	1,96	309,40	1,46	309,40	1,46	
11	311,10	2,16	306,50	0,33	308,90	1,30	308,90	1,30	
12	312,20	2,53	309,90	1,44	297,60	2,41	297,60	2,41	
13	297,90	2,17	310,40	1,60	297,50	2,44	297,50	2,44	
14	310,10	1,84	300,10	1,77	299,70	1,72	299,70	1,72	
15	299,70	1,58	309,90	1,44	307,90	0,97	307,90	0,97	
16	302,30	0,73	304,60	0,29	311,40	2,12	311,40	2,12	

17	305,80	0,42	296,90	2,82	311,60	2,18
18	301,10	1,12	295,70	3,21	300,60	1,42
19	302,50	0,66	300,40	1,67	299,50	1,79
20	312,10	2,49	302,40	1,01	309,40	1,46
\bar{x}	304,51		305,50		304,95	
SD	5,46		5,38		5,84	

Hasil Uji Keseragaman Bobot Tablet Formula D Bets 1

No	Replikasi 1		Replikasi 2		Replikasi 3	
	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)
1	287,00	1,71	295,50	1,31	295,20	1,19
2	297,60	1,92	288,70	1,03	298,50	2,32
3	287,70	1,47	294,30	0,89	288,40	1,14
4	293,20	0,41	290,20	0,51	296,20	1,53
5	292,40	0,14	294,40	0,93	291,10	0,22
6	295,00	1,03	291,80	0,04	293,00	0,43
7	289,80	0,76	287,70	1,37	287,30	1,52
8	291,60	0,14	287,10	1,57	297,40	1,94

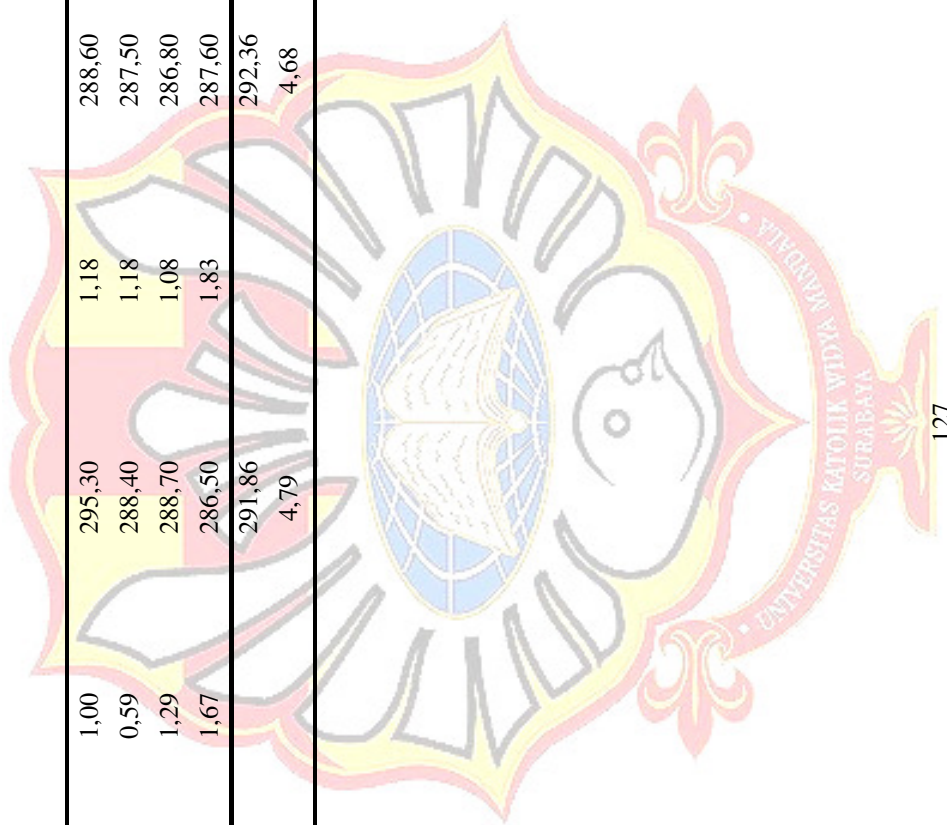
9	293,00	0,34	294,30	0,89	293,30	0,53
10	288,80	1,10	287,90	1,30	289,20	0,87
11	295,10	1,06	287,40	1,47	288,00	1,28
12	297,10	1,74	291,10	0,20	294,50	0,95
13	288,00	1,37	288,00	1,27	286,90	1,66
14	290,70	0,45	287,20	1,54	298,10	2,18
15	294,00	0,68	306,10	4,94	287,20	1,56
16	288,50	1,20	291,20	0,17	290,70	0,36
17	295,00	1,03	291,40	0,10	289,20	0,87
18	290,30	0,58	287,90	1,30	296,00	1,46
19	297,00	1,71	290,20	0,51	287,00	1,62
20	288,30	1,27	301,40	3,33	287,60	1,42
\bar{x}	292,01		291,69		291,74	
SD	3,42		4,97		4,12	



Hasil Uji Keseragaman Bobot Tablet Formula D Bets 2

No	Replikasi 1		Replikasi 2		Replikasi 3	
	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)	Bobot (mg)	Penyimpangan (%)
1	288,60	1,32	287,60	1,46	295,50	1,08
2	293,60	0,38	287,30	1,56	294,60	0,77
3	289,30	1,09	287,80	1,39	293,80	0,49
4	292,10	0,13	297,30	1,87	287,90	1,52
5	294,00	0,52	287,70	1,42	294,70	0,80
6	287,00	1,87	295,40	1,21	295,10	0,94
7	292,30	0,06	288,40	1,18	300,20	2,68
8	290,30	0,74	294,60	0,94	287,00	1,83
9	295,10	0,90	300,70	3,03	293,80	0,49
10	289,50	1,02	287,50	1,49	288,80	1,22
11	301,10	2,95	295,80	1,35	288,20	1,42
12	291,70	0,26	294,30	0,84	300,10	2,65
13	291,40	0,37	301,20	3,20	294,50	0,73
14	292,70	0,08	288,60	1,12	294,60	0,77
15	301,50	3,09	295,30	1,18	287,60	1,63
16	293,40	0,32	288,70	1,08	300,20	2,68

17	295,40	1,00	295,30	1,18	288,60	1,28
18	294,20	0,59	288,40	1,18	287,50	1,66
19	288,70	1,29	288,70	1,08	286,80	1,90
20	287,60	1,67	286,50	1,83	287,60	1,63
\bar{x}	292,48		291,86		292,36	
SD	3,89		4,79		4,68	



Hasil Uji Keseragaman Ukuran Tablet Formula A Bets 1

No	Replikasi 1		Replikasi 2		Replikasi 3	
	Tebal (mm)	Diameter (mm)	Tebal (mm)	Diameter (mm)	Tebal (mm)	Diameter (mm)
1	4,150	9,150	4,100	9,150	4,150	9,150
2	4,300	9,150	4,150	9,100	4,000	9,100
3	4,250	9,100	4,200	9,150	4,150	9,150
4	4,000	9,150	4,100	9,100	4,250	9,150
5	3,850	9,200	4,200	9,150	4,000	9,150
6	4,150	9,150	4,150	9,100	4,200	9,150
7	4,200	9,150	4,050	9,150	3,850	9,150
8	3,950	9,150	4,000	9,150	4,200	9,150
9	4,100	9,150	4,150	9,150	4,000	9,150
10	4,350	9,100	4,200	9,100	4,100	9,150
11	4,100	9,150	4,300	9,100	3,950	9,150
12	4,200	9,150	4,250	9,100	4,300	9,100
13	4,200	9,150	4,000	9,150	4,100	9,150
14	4,100	9,100	4,000	9,150	4,200	9,150
15	4,000	9,150	4,100	9,150	4,150	9,150
16	4,200	9,150	4,300	9,100	4,000	9,150
17	4,100	9,150	4,350	9,150	4,000	9,100
18	3,850	9,150	4,300	9,150	4,200	9,150
19	4,400	9,150	4,100	9,150	4,000	9,150
20	4,150	9,150	4,350	9,100	4,200	9,150
\bar{x}	4,130	9,145	4,168	9,130	4,100	9,143
SD	0,147	0,022	0,114	0,025	0,118	0,018

Hasil Uji Keseragaman Ukuran Tablet Formula A Bets 2

No	Replikasi 1		Replikasi 2		Replikasi 3	
	Tebal (mm)	Diameter (mm)	Tebal (mm)	Diameter (mm)	Tebal (mm)	Diameter (mm)
1	4,200	9,100	4,200	9,150	4,100	9,150
2	4,300	9,200	4,100	9,150	3,950	9,150
3	3,950	9,150	3,950	9,150	3,950	9,200
4	4,250	9,150	4,100	9,150	4,200	9,200
5	4,100	9,150	4,100	9,150	4,250	9,150
6	3,950	9,150	3,900	9,150	4,000	9,150
7	4,300	9,150	4,300	9,150	4,250	9,150
8	4,000	9,150	4,100	9,150	4,100	9,150
9	4,200	9,150	4,250	9,150	4,100	9,150
10	4,100	9,150	4,100	9,150	4,200	9,200
11	3,950	9,150	4,200	9,200	4,200	9,150
12	4,100	9,150	3,900	9,200	3,950	9,150
13	4,250	9,150	4,100	9,150	4,300	9,200
14	3,950	9,200	4,300	9,150	4,300	9,150
15	4,100	9,150	4,100	9,150	4,000	9,150
16	4,200	9,150	4,500	9,150	4,200	9,150
17	4,000	9,200	4,100	9,200	4,150	9,150
18	4,100	9,150	4,200	9,200	4,250	9,150
19	4,250	9,200	3,950	9,200	4,150	9,150
20	4,200	9,150	4,250	9,150	4,300	9,200
\bar{x}	4,123	9,158	4,135	9,163	4,145	9,163
SD	0,123	0,024	0,148	0,022	0,121	0,022

Hasil Uji Keseragaman Ukuran Tablet Formula B Bets 1

No	Replikasi 1		Replikasi 2		Replikasi 3	
	Tebal (mm)	Diameter (mm)	Tebal (mm)	Diameter (mm)	Tebal (mm)	Diameter (mm)
1	4,700	9,200	4,750	9,200	4,950	9,200
2	4,750	9,150	4,850	9,200	4,900	9,150
3	4,900	9,200	4,900	9,150	5,000	9,200
4	4,750	9,150	5,000	9,150	4,750	9,100
5	4,750	9,150	4,700	9,200	4,700	9,150
6	4,900	9,150	4,900	9,150	5,000	9,150
7	4,600	9,150	4,800	9,200	4,750	9,150
8	4,750	9,200	4,750	9,150	5,000	9,100
9	4,950	9,200	4,700	9,200	4,800	9,250
10	4,900	9,200	4,700	9,150	4,950	9,200
11	4,900	9,200	5,000	9,200	4,750	9,150
12	4,750	9,200	4,900	9,200	5,000	9,150
13	5,000	9,250	4,850	9,200	4,900	9,150
14	4,900	9,250	4,750	9,150	4,850	9,150
15	4,900	9,150	5,000	9,150	4,700	9,200
16	4,700	9,200	4,700	9,200	5,000	9,150
17	4,850	9,200	4,900	9,150	4,800	9,150
18	4,900	9,150	4,750	9,250	4,750	9,200
19	4,700	9,200	4,850	9,200	5,000	9,150
20	4,900	9,150	4,800	9,200	5,000	9,100
\bar{x}	4,823	9,185	4,828	9,183	4,878	9,160
SD	0,107	0,033	0,103	0,029	0,116	0,038

Hasil Uji Keseragaman Ukuran Tablet Formula B Bets 2

No	Replikasi 1		Replikasi 2		Replikasi 3	
	Tebal (mm)	Diameter (mm)	Tebal (mm)	Diameter (mm)	Tebal (mm)	Diameter (mm)
1	4,950	9,200	4,850	9,200	4,900	9,200
2	4,750	9,150	4,850	9,200	5,000	9,150
3	5,000	9,200	4,750	9,150	4,900	9,200
4	4,900	9,150	4,850	9,150	4,700	9,100
5	4,900	9,150	4,750	9,200	4,900	9,150
6	4,650	9,150	4,850	9,150	4,900	9,150
7	4,650	9,150	4,700	9,200	4,700	9,150
8	4,900	9,200	4,800	9,150	4,650	9,100
9	4,950	9,200	4,800	9,200	4,900	9,250
10	5,000	9,200	4,950	9,150	4,950	9,200
11	4,950	9,200	4,950	9,200	4,600	9,150
12	5,000	9,200	4,950	9,200	4,750	9,150
13	4,950	9,250	4,850	9,200	4,850	9,150
14	4,900	9,250	4,750	9,150	4,900	9,150
15	4,850	9,150	4,900	9,150	4,850	9,200
16	4,850	9,200	4,750	9,200	4,750	9,150
17	4,850	9,200	4,800	9,150	4,750	9,150
18	4,750	9,150	4,950	9,250	4,800	9,200
19	4,600	9,200	4,800	9,200	4,800	9,150
20	4,750	9,150	4,850	9,200	4,750	9,100
\bar{x}	4,855	9,185	4,835	9,183	4,815	9,160
SD	0,123	0,033	0,076	0,029	0,106	0,038

Hasil Uji Keseragaman Ukuran Tablet Formula C Bets 1

No	Replikasi 1		Replikasi 2		Replikasi 3	
	Tebal (mm)	Diameter (mm)	Tebal (mm)	Diameter (mm)	Tebal (mm)	Diameter (mm)
1	4,950	9,200	5,000	9,200	4,900	9,200
2	4,900	9,150	4,850	9,200	5,000	9,150
3	5,000	9,200	4,900	9,150	4,900	9,200
4	4,900	9,150	4,950	9,150	4,900	9,100
5	4,900	9,150	4,950	9,200	4,900	9,150
6	4,650	9,150	4,900	9,150	4,900	9,150
7	4,900	9,150	5,000	9,200	5,000	9,150
8	4,900	9,200	4,900	9,150	5,000	9,100
9	5,000	9,200	5,000	9,200	4,900	9,250
10	5,000	9,200	4,950	9,150	4,950	9,200
11	4,950	9,200	4,950	9,200	5,000	9,150
12	5,000	9,200	4,950	9,200	5,000	9,150
13	4,950	9,250	4,900	9,200	4,850	9,150
14	4,900	9,250	4,900	9,150	4,900	9,150
15	4,850	9,150	4,900	9,150	4,850	9,200
16	4,850	9,200	5,000	9,200	4,900	9,150
17	4,850	9,200	4,900	9,150	5,000	9,150
18	4,950	9,150	4,950	9,250	4,800	9,200
19	4,900	9,200	4,800	9,200	4,800	9,150
20	5,000	9,150	4,850	9,200	4,950	9,100
\bar{x}	4,915	9,185	4,925	9,183	4,920	9,160
SD	0,081	0,033	0,055	0,029	0,066	0,038

Hasil Uji Keseragaman Ukuran Tablet Formula C Bets 2

No	Replikasi 1		Replikasi 2		Replikasi 3	
	Tebal (mm)	Diameter (mm)	Tebal (mm)	Diameter (mm)	Tebal (mm)	Diameter (mm)
1	5,000	9,250	4,700	9,200	5,000	9,150
2	4,900	9,200	4,850	9,200	4,850	9,200
3	5,050	9,200	4,800	9,200	4,950	9,200
4	4,950	9,200	4,900	9,200	5,000	9,200
5	4,900	9,200	4,900	9,200	4,900	9,200
6	4,950	9,200	4,950	9,200	5,000	9,200
7	4,950	9,200	4,900	9,200	4,850	9,200
8	5,000	9,200	5,050	9,200	4,900	9,200
9	5,000	9,200	5,000	9,200	4,900	9,200
10	5,000	9,150	4,850	9,200	5,000	9,200
11	5,050	9,200	5,000	9,150	4,900	9,200
12	4,900	9,200	4,850	9,200	4,900	9,200
13	4,950	9,250	4,850	9,200	4,900	9,200
14	5,100	9,200	4,950	9,150	4,850	9,200
15	4,950	9,150	4,950	9,200	5,050	9,200
16	4,900	9,200	5,000	9,200	4,900	9,200
17	4,900	9,200	4,900	9,200	5,050	9,200
18	4,900	9,200	4,950	9,200	4,900	9,200
19	4,950	9,200	5,000	9,200	4,900	9,200
20	5,000	9,200	5,000	9,200	4,950	9,200
\bar{x}	4,965	9,200	4,918	9,195	4,933	9,198
SD	0,059	0,023	0,085	0,015	0,063	0,011

Hasil Uji Keseragaman Ukuran Tablet Formula D Bets 1

No	Replikasi 1		Replikasi 2		Replikasi 3	
	Tebal (mm)	Diameter (mm)	Tebal (mm)	Diameter (mm)	Tebal (mm)	Diameter (mm)
1	4,950	9,150	4,350	9,100	4,300	9,200
2	5,000	9,150	4,800	9,150	4,300	9,150
3	4,700	9,150	4,800	9,150	5,000	9,150
4	4,800	9,150	4,300	9,200	4,300	9,200
5	4,800	9,150	4,850	9,150	4,300	9,200
6	4,750	9,150	4,400	9,200	4,300	9,150
7	4,950	9,150	4,750	9,150	4,300	9,200
8	5,000	9,200	4,350	9,150	4,500	9,200
9	4,300	9,150	4,550	9,200	4,500	9,200
10	5,000	9,200	4,850	9,150	4,300	9,150
11	4,800	9,150	4,200	9,200	4,800	9,200
12	4,800	9,200	4,900	9,150	4,300	9,200
13	4,750	9,200	4,650	9,200	4,650	9,200
14	5,000	9,150	4,400	9,200	5,050	9,150
15	4,950	9,200	4,650	9,150	4,250	9,200
16	4,400	9,200	4,750	9,150	4,850	9,200
17	5,000	9,150	5,000	9,150	4,300	9,000
18	4,700	9,200	4,850	9,150	4,300	9,150
19	5,000	9,200	4,950	9,200	4,550	9,200
20	5,000	9,150	4,750	9,150	4,800	9,150
\bar{x}	4,833	9,170	4,655	9,165	4,498	9,173
SD	0,200	0,025	0,242	0,029	0,266	0,046

Hasil Uji Keseragaman Ukuran Tablet Formula D Bets 2

No	Replikasi 1		Replikasi 2		Replikasi 3	
	Tebal (mm)	Diameter (mm)	Tebal (mm)	Diameter (mm)	Tebal (mm)	Diameter (mm)
1	4,700	9,200	4,650	9,200	4,700	9,200
2	4,650	9,200	4,600	9,200	4,600	9,200
3	4,400	9,200	4,700	9,200	4,750	9,200
4	4,600	9,200	4,750	9,200	4,700	9,200
5	4,650	9,200	4,550	9,200	4,650	9,200
6	4,650	9,200	4,650	9,200	4,750	9,200
7	4,700	9,200	4,650	9,200	4,700	9,200
8	4,700	9,200	4,650	9,200	4,650	9,250
9	4,650	9,250	4,650	9,200	4,650	9,250
10	4,550	9,250	4,600	9,200	4,700	9,200
11	4,700	9,200	4,600	9,200	4,600	9,200
12	4,700	9,200	4,500	9,200	4,700	9,200
13	4,700	9,200	4,700	9,250	4,750	9,250
14	4,650	9,200	4,700	9,200	4,700	9,200
15	4,700	9,200	4,700	9,200	4,700	9,200
16	4,800	9,200	4,650	9,200	4,750	9,200
17	4,700	9,200	4,600	9,250	4,700	9,200
18	4,650	9,250	4,650	9,200	4,650	9,200
19	4,650	9,200	4,700	9,200	4,650	9,200
20	4,650	9,200	4,650	9,250	4,700	9,200
\bar{x}	4,658	9,208	4,645	9,208	4,688	9,208
SD	0,078	0,018	0,058	0,018	0,046	0,018

Hasil Uji Kekerasan Tablet Formula A

Kekerasan tablet (Kgf)						
No	Bets 1			Bets 2		
	Replikasi 1	Replikasi 2	Replikasi 3	Replikasi 1	Replikasi 2	Replikasi 3
1	4,8	4,1	4,2	5,0	4,6	4,0
2	6,9	8,7	7,3	4,3	8,6	4,4
3	6,4	6,3	8,6	5,0	4,3	8,7
4	6,6	4,8	7,2	8,8	8,3	4,9
5	5,7	7,8	6,7	5,3	5,6	6,4
6	6,3	6,9	4,7	7,5	4,9	4,7
7	5,8	5,8	4,7	5,0	5,5	4,4
8	6,1	4,4	4,2	4,5	5,8	4,4
9	7,4	4,3	5,9	7,8	4,2	7,8
10	4,1	5,8	6,4	4,6	4,3	4,8
\bar{x}	6,01	5,89	5,99	5,78	5,61	5,45
SD	0,98	1,56	1,51	1,61	1,60	1,62

Hasil Uji Kekerasan Tablet Formula B

Kekerasan Tablet (Kgf)						
No	Bets 1			Bets 2		
	Replikasi 1	Replikasi 2	Replikasi 3	Replikasi 1	Replikasi 2	Replikasi 3
1	8,7	8,2	6,9	5,7	5,3	5,2
2	4,7	7,4	6,3	8,2	6,9	7,9
3	4,7	5,1	8,1	5,3	5,8	5,9
4	4,7	4,3	5,7	8,0	5,7	5,4
5	5,2	6,3	4,4	5,2	7,2	7,2
6	4,4	4,4	6,9	5,0	6,4	5,1
7	8,5	4,6	4,4	5,4	6,3	5,8
8	4,8	6,7	5,6	6,4	5,2	5,3
9	5,9	4,3	5,8	5,1	5,8	5,8
10	7,5	8,6	6,9	7,8	5,7	4,9
\bar{x}	5,91	5,99	6,10	6,21	6,03	5,85
SD	1,68	1,67	1,17	1,30	0,66	0,97

Hasil Uji Kekerasan Tablet Formula C

Kekerasan tablet (Kgf)						
No	Bets 1			Bets 2		
	Replikasi 1	Replikasi 2	Replikasi 3	Replikasi 1	Replikasi 2	Replikasi 3
1	5,6	5,5	4,4	5,1	5,7	7,6
2	5,8	4,8	4,5	5,6	4,7	4,4
3	5,5	4,2	6,5	4,0	4,3	4,9
4	7,3	4,0	7,0	6,9	7,4	5,3
5	7,4	4,7	6,9	6,7	5,9	5,7
6	6,0	4,3	7,2	6,2	6,4	5,5
7	5,7	4,6	6,0	4,5	5,5	6,0
8	5,5	5,8	5,4	6,8	5,6	5,9
9	5,9	4,8	5,4	6,3	4,0	5,4
10	5,5	4,1	5,9	4,4	5,3	5,8
\bar{x}	6,02	4,68	5,92	5,65	5,48	5,65
SD	0,72	0,59	1,00	1,09	1,00	0,84

Hasil Uji Kekerasan Tablet Formula D

Kekerasan tablet (Kgf)						
No	Bets 1			Bets 2		
	Replikasi 1	Replikasi 2	Replikasi 3	Replikasi 1	Replikasi 2	Replikasi 3
1	5,0	4,1	4,4	4,6	4,5	4,0
2	4,6	4,7	4,5	4,4	4,0	4,2
3	4,3	5,1	4,4	3,9	4,0	4,4
4	4,4	3,8	4,7	4,6	3,9	4,2
5	3,9	4,4	3,9	3,9	4,2	4,5
6	4,0	4,3	3,8	4,0	4,4	4,3
7	4,0	4,7	4,0	3,9	4,8	4,2
8	4,1	4,4	4,0	4,2	3,9	4,0
9	3,8	4,0	3,8	4,3	4,9	4,3
10	4,2	4,4	4,1	4,2	3,8	4,2
\bar{x}	4,23	4,39	4,16	4,20	4,24	4,23
SD	0,36	0,38	0,32	0,27	0,39	0,16

Hasil Uji Kerapuhan Tablet

Formula	Bets	Replikasi	Berat awal (gram)	Berat akhir (gram)	Kerapuhan (%)	Rata-rata	SD
A	1	1	5,5377	5,5078	0,54	0,54	0,01
		2	5,5761	5,5466	0,53		
		3	5,5687	5,5387	0,54		
	2	1	5,5466	5,5169	0,54	0,52	0,01
		2	5,5668	5,5377	0,52		
		3	5,6143	5,5853	0,52		
B	1	1	5,7895	5,7676	0,38	0,37	0,01
		2	5,8920	5,8694	0,38		
		3	5,9854	5,9638	0,36		
	2	1	5,9766	5,9540	0,38	0,38	0,01
		2	6,0125	5,9902	0,37		
		3	5,8765	5,8538	0,39		
C	1	1	6,0970	6,0660	0,51	0,50	0,01
		2	6,1088	6,0789	0,49		
		3	6,0988	6,0690	0,49		
	2	1	6,0994	6,0704	0,48	0,48	0,01
		2	6,1252	6,0952	0,49		
		3	6,1065	6,0774	0,48		
D	1	1	5,8007	5,7880	0,22	0,22	0,01
		2	5,7982	5,7854	0,22		
		3	5,8066	5,7930	0,23		
	2	1	5,9140	5,9003	0,23	0,24	0,01
		2	5,9103	5,8965	0,23		
		3	5,9068	5,8921	0,25		

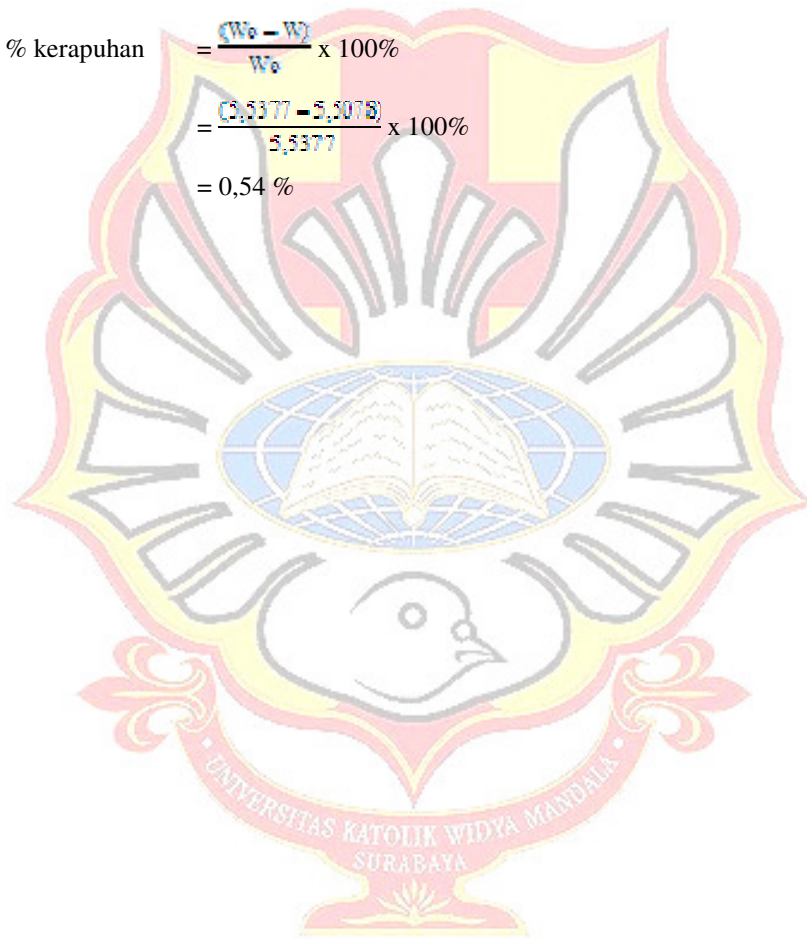
Contoh perhitungan uji kerapuhan tablet:

Formula A bets 1:

Berat tablet mula-mula (W_0) = 5,5377 gram

Berat tablet setelah uji (W) = 5,5078 gram

$$\begin{aligned} \% \text{ kerapuhan} &= \frac{(W_0 - W)}{W_0} \times 100\% \\ &= \frac{(5,5377 - 5,5078)}{5,5377} \times 100\% \\ &= 0,54 \% \end{aligned}$$



Hasil Uji Waktu Hancur Tablet

Formula	Bets	Replikasi	Waktu hancur (menit)	Rata-rata	SD
A	1	1	8,22	8,29	0,14
		2	8,45		
		3	8,19		
	2	1	8,21	8,26	0,06
		2	8,26		
		3	8,32		
B	1	1	10,20	10,21	0,01
		2	10,21		
		3	10,22		
	2	1	10,20	10,22	0,02
		2	10,22		
		3	10,23		
C	1	1	8,41	8,60	0,51
		2	9,18		
		3	8,22		
	2	1	8,1	8,77	0,59
		2	9		
		3	9,2		
D	1	1	9,15	9,16	0,06
		2	9,1		
		3	9,22		
	2	1	9	9,12	0,13
		2	9,10		
		3	9,25		

LAMPIRAN E
HASIL UJI STATISTIK t BERPASANGAN

Respon Kekerasan Formula A

Paired Samples Test

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Formula A_1 - Formula A_2	.25500	.03536	.02500	-.06266	.57266	10.200	1	.062

Karena t hitung (0,062) < $t_{0,05}(1; 12,706)$, maka tidak ada perbedaan bermakna antar bets pada respon kekerasan dari sediaan tablet ekstrak herba seledri dengan kombinasi PVP K-30 dan metilselulosa sebagai pengikat.

Respon Kekerasan Formula B

Paired Samples Test

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Formula B_1 - Formula B_2	-.17000	.18385	.13000	-1.82181	1.48181	-1.308	1	.416

Karena t hitung (0,416) < $t_{0,05}(1; 12,706)$, maka tidak ada perbedaan bermakna antar bets pada respon kekerasan dari sediaan tablet ekstrak herba seledri dengan kombinasi PVP K-30 dan metilselulosa sebagai pengikat.

Respon Kekerasan Formula C

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Formula C_1 - Formula C_2	-.21500	.82731	.58500	-7.64813	7.21813	-.368	1	.776

Karena t hitung (0,776) < $t_{0,05}(1; 12,706)$, maka tidak ada perbedaan bermakna antar bets pada respon kekerasan dari sediaan tablet ekstrak herba seledri dengan kombinasi PVP K-30 dan metilselulosa sebagai pengikat.

Respon Kekerasan Formula D

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Formula D_1 - Formula D_2	.09000	.08485	.06000	-.67237	.85237	1.500	1	.374

Karena t hitung (0,374) < $t_{0,05}(1; 12,706)$, maka tidak ada perbedaan bermakna antar bets pada respon kekerasan dari sediaan tablet ekstrak herba seledri dengan kombinasi PVP K-30 dan metilselulosa sebagai pengikat.

Respon Kerapuhan Formula A

Paired Samples Test

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Formula A_1 - Formula A_2	.00500	.00707	.00500	-.05853	.06853	1.000	1	.500

Karena t hitung $(0,500) < t_{0,05}(1; 12,706)$, maka tidak ada perbedaan bermakna antar betas pada respon kerapuhan dari sediaan tablet ekstrak herba seledri dengan kombinasi PVP K-30 dan metilselulosa.

Respon Kerapuhan Formula B

Paired Samples Test

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Formula B_1 - Formula B_2	-.00667	.02082	.01202	-.05838	.04504	-.555	2	.635

Karena t hitung $(0,635) < t_{0,05}(2; 4,303)$, maka tidak ada perbedaan bermakna antar betas pada respon kerapuhan dari sediaan tablet ekstrak herba seledri dengan kombinasi PVP K-30 dan metilselulosa sebagai pengikat.

Respon Kerapuhan Formula C

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Formula C_1 - Formula C_2	.01000	.01732	.01000	-.03303	.05303	1.000	2	.423

Karena t hitung (0,423) < $t_{0,05}(2; 4,303)$, maka tidak ada perbedaan bermakna antar betas pada respon kerapuhan dari sediaan tablet ekstrak herba seledri dengan kombinasi PVP K-30 dan metilselulosa sebagai pengikat.

Respon Kerapuhan Formula D

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Formula D_1 - Formula D_2	-.01333	.00577	.00333	-.02768	.00101	-4.000	2	.057

Karena t hitung (0,057) < $t_{0,05}(2; 4,303)$, maka tidak ada perbedaan bermakna antar betas pada respon kerapuhan dari sediaan tablet ekstrak herba seledri dengan kombinasi PVP K-30 dan metilselulosa sebagai pengikat.

Respon Waktu Hancur Formula A

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Formula A_1 - Formula A_2	.10000	.12728	.09000	-1.04356	1.24356	1.111	1	.467

Karena t hitung (0,467) < $t_{0,05}(1; 12,706)$, maka tidak ada perbedaan bermakna antar bets pada respon waktu hancur dari sediaan tablet ekstrak herba seledri dengan kombinasi PVP K-30 dan metilselulosa sebagai pengikat.

Respon Waktu Hancur Formula B

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Formula B_1 - Formula B_2	-.00500	.00707	.00500	-.06853	.05853	-1.000	1	.500

Karena t hitung (0,500) < $t_{0,05}(1; 12,706)$, maka tidak ada perbedaan bermakna antar bets pada respon waktu hancur dari sediaan tablet ekstrak herba seledri dengan kombinasi PVP K-30 dan metilselulosa sebagai pengikat.

Respon Waktu Hancur Formula C

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Formula C_1 - Formula C_2	-.16333	.71023	.41005	-1.92765	1.60099	-.398	2	.729

Karena t hitung (0,729) < $t_{0,05}(2; 4,303)$, maka tidak ada perbedaan bermakna antar bets pada respon waktu hancur dari sediaan tablet ekstrak herba seledri dengan kombinasi PVP K-30 dan metilselulosa sebagai pengikat.

Respon Waktu Hancur Formula D

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Formula D_1 - Formula D_2	.07500	.10607	.07500	-.87797	1.02797	1.000	1	.500

Karena t hitung (0,500) < $t_{0,05}(1; 12,706)$, maka tidak ada perbedaan bermakna antar bets pada respon waktu hancur dari sediaan tablet ekstrak herba seledri dengan kombinasi PVP K-30 dan metilselulosa sebagai pengikat.

LAMPIRAN F

HASIL UJI STATISTIK ONE WAY ANOVA

Hasil Uji Statistik Kekerasan Tablet

ANOVA	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.799	3	1.266	79.447	.001
Within Groups	.064	4	.016		
Total	3.862	7			

Multiple Comparisons

Tukey HSD

(I) Formula	(J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Formula A	Formula B	-.23000	.12624	.382	-.7439	.2839
	Formula C	.22000	.12624	.411	-.2939	.7339
	Formula D	1.54500*	.12624	.001	1.0311	2.0589
Formula B	Formula A	.23000	.12624	.382	-.2839	.7439
	Formula C	.45000	.12624	.076	-.0639	.9639
	Formula D	1.77500*	.12624	.001	1.2611	2.2889
Formula C	Formula A	-.22000	.12624	.411	-.7339	.2939
	Formula B	-.45000	.12624	.076	-.9639	.0639
	Formula D	1.32500*	.12624	.002	.8111	1.8389
Formula D	Formula A	-1.54500*	.12624	.001	-2.0589	-1.0311
	Formula B	-1.77500*	.12624	.001	-2.2889	-1.2611
	Formula C	-1.32500*	.12624	.002	-1.8389	-.8111

*. The mean difference is significant at the 0.05 level.

Karena F hitung $(79,447) > F_{0,05}(3,8) = 4,07$, maka H_0 ditolak dan ada perbedaan bermakna antar formula pada respon kekerasan dari sediaan tablet ekstrak herba seledri dengan kombinasi PVP K-30 dan metilselulosa sebagai pengikat.

Hasil Uji Statistik Kerapuhan Tablet

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.109	3	0,36	223,051	.000
Within Groups	.001	4	.000		
Total	.109	7			

Multiple Comparisons

Tukey HSD

(I) Formula (J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
Formula A - Formula B	.15500*	.01275	.001	.1031	.2069
Formula A - Formula C	.04000	.01275	.110	-.0119	.0919
Formula A - Formula D	.30000*	.01275	.000	.2481	.3519
Formula B - Formula A	-.15500*	.01275	.001	-.2069	-.1031
Formula B - Formula C	-.11500*	.01275	.003	-.1669	-.0631
Formula B - Formula D	.14500*	.01275	.001	.0931	.1969

Formula C	Formula A	-.04000	.01275	.110	-.0919	.0119
	Formula B	.11500*	.01275	.003	.0631	.1669
	Formula D	.26000*	.01275	.000	.2081	.3119
Formula D	Formula A	-.30000*	.01275	.000	-.3519	-.2481
	Formula B	-.14500*	.01275	.001	-.1969	-.0931
	Formula C	-.26000*	.01275	.000	-.3119	-.2081

*. The mean difference is significant at the 0.05 level.

Karena F hitung $(223,051) > F_{0,05}(3,4) = 6,59$, maka H_0 ditolak dan ada perbedaan bermakna antar formula pada respon kerapuhan dari sediaan tablet ekstrak herba seledri dengan kombinasi PVP K-30 dan metilselulosa sebagai pengikat.

Hasil Uji Statistik Waktu Hancur Tablet

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.192	3	1.397	354.856	.000
Within Groups	.016	4	.004		
Total	4.207	7			





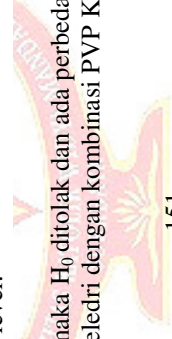
Multiple Comparisons

Tukey HSD

(I) Formula (J) Formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
				Lower Bound	Upper Bound
Formula A	-1.94000*	.06275	.000	-2.1954	-1.6846
Formula B	-.41000*	.06275	.010	-.6654	-.1546
Formula C	-.86500*	.06275	.001	-1.1204	-.6096
Formula D	1.94000*	.06275	.000	1.6846	2.1954
Formula A	1.53000*	.06275	.000	1.2746	1.7854
Formula B	1.07500*	.06275	.000	.8196	1.3304
Formula C	.41000*	.06275	.010	.1546	.6654
Formula D	-1.53000*	.06275	.000	-1.7854	-1.2746
Formula A	-.45500*	.06275	.007	-.7104	-.1996
Formula B	.86500*	.06275	.001	.6096	1.1204
Formula C	-1.07500*	.06275	.000	-1.3304	-.8196
Formula D	.45500*	.06275	.007	.1996	.7104

*. The mean difference is significant at the 0.05 level.

Karena F hitung $(354,856) > F_{0,05}(3,4) = 6,59$, maka H_0 ditolak dan ada perbedaan bermakna antar formula pada respon waktu hancur dari sediaan tablet ekstrak herba seledri dengan kombinasi PVP K-30 dan metilselulosa sebagai pengikat.



LAMPIRAN G

HASIL ANOVA UJI KEKERASAN PADA PROGRAM DESIGN EXPERT

Use your mouse to right click on individual cells for definitions.

Response

1 Kekerasan

ANOVA for selected factorial model

Analysis of variance table [Partial sum of squares - Type III]

Source	Sum of Squares	df	Mean Square	F Value	p-value Prob > F
Model	3,7985375	3	1,266179167	79,44654	0,0005
A-Metilselulosa	0,5995125	1	0,5995125	37,61647	0,0036
B-PVP K-30	1,9900125	1	1,9900125	124,8635	0,0004
AB	1,2090125	1	1,2090125	75,85961	0,0010
Pure Error	0,06375	4	0,0159375		
Cor Total	3,8622875	7			

The Model F-value of 79.45 implies the model is significant. There is only a 0.05% chance that a "Model F-Value" this large could occur due to noise.

Values of "Prob > F" less than 0.0500 indicate model terms are significant.

In this case A, B, AB are significant model terms.

Values greater than 0.1000 indicate the model terms are not significant.

If there are many insignificant model terms (not counting those required to support hierarchy), model reduction may improve your model.

Std. Dev.	0,126243812	R-Squared	0,983494
Mean	5,40125	Adj R-Squared	0,971115
C.V. %	2,337307322	Pred R-Squared	0,933977
PRESS	0,255	Adeq Precision	19,88398

The "Pred R-Squared" of 0.9340 is in reasonable agreement with the "Adj R-Squared" of 0.9711.

"Adeq Precision" measures the signal to noise ratio. A ratio greater than 4 is desirable. Your ratio of 19.884 indicates an adequate signal. This model can be used to navigate the design space.

Factor	Coefficient Estimate	df	Standard Error	95% CI Low	95% CI High	VIF
Intercept	5,40125	1	0,044633928	5,277326353	5,525174	
A-Metilselulosa	-0,27375	1	0,044633928	-0,397673647	-0,14983	1
B-PVP K-30	-0,49875	1	0,044633928	-0,622673647	-0,37483	1
AB	-0,38875	1	0,044633928	-0,512673647	-0,26483	1

Final Equation in Terms of Coded Factors:

$$\begin{aligned} \text{Kekerasan} &= \\ &5,40125 \\ &-0,27375 * A \\ &-0,49875 * B \\ &-0,38875 * A * B \end{aligned}$$

Final Equation in Terms of Actual Factors:

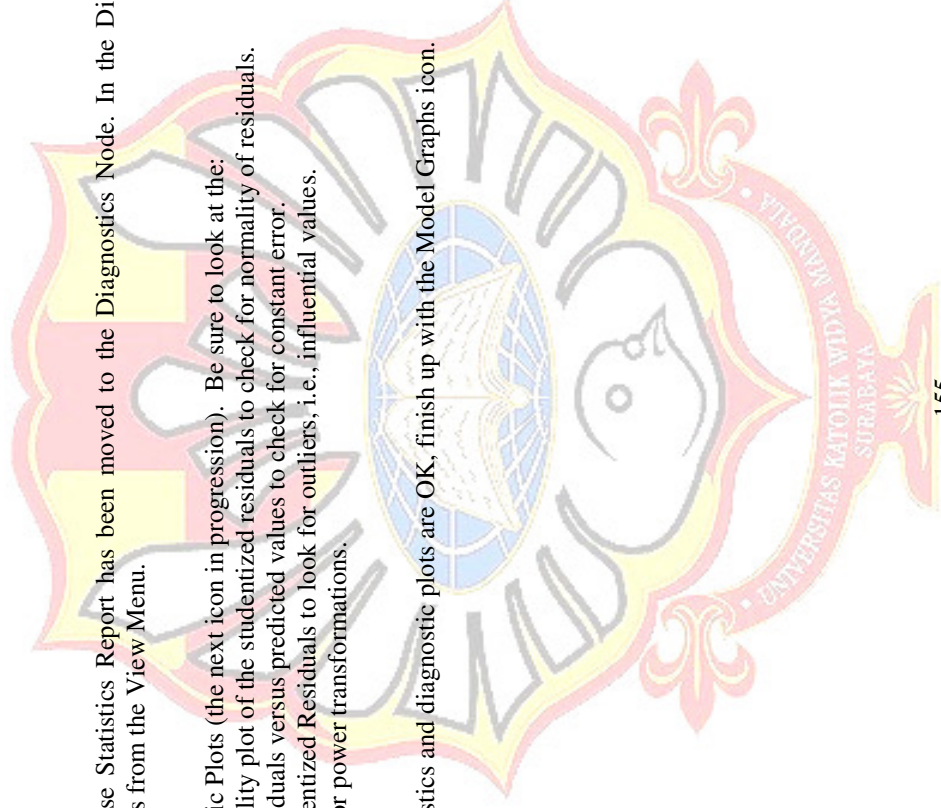
$$\begin{aligned} \text{Kekerasan} &= \\ &5,40125 \\ &-0,27375 * \text{Metilselulosa} \\ &-0,49875 * \text{PVP K-30} \\ &-0,38875 * \text{Metilselulosa} * \text{PVP K-30} \end{aligned}$$

The Diagnostics Case Statistics Report has been moved to the Diagnostics Node. In the Diagnostics Node, Select Case Statistics from the View Menu.

Proceed to Diagnostic Plots (the next icon in progression). Be sure to look at the:

- 1) Normal probability plot of the studentized residuals to check for normality of residuals.
- 2) Studentized residuals versus predicted values to check for constant error.
- 3) Externally Studentized Residuals to look for outliers, i.e., influential values.
- 4) Box-Cox plot for power transformations.

If all the model statistics and diagnostic plots are OK, finish up with the Model Graphs icon.



LAMPIRAN H

HASIL ANOVA UJI KERAPUHAN PADA PROGRAM DESIGN EXPERT

Use your mouse to right click on individual cells for definitions.

Response

2 Kerapuhan

ANOVA for selected factorial model

Analysis of variance table [Partial sum of squares - Type III]

Source	Sum of Squares	df	Mean Square	F		p-value
				Value	Prob > F	
Model	0,1087375	3	0,036245833	223,0512821	< 0.0001	significant
A-Metilselulosa	0,0861125	1	0,0861125	529,9230769	< 0.0001	
B-PVP K-30	0,0171125	1	0,0171125	105,3076923	0.0005	
AB	0,0055125	1	0,0055125	33,92307692	0.0043	
Pure Error	0,00065	4	0,0001625			
Cor Total	0,1093875	7				

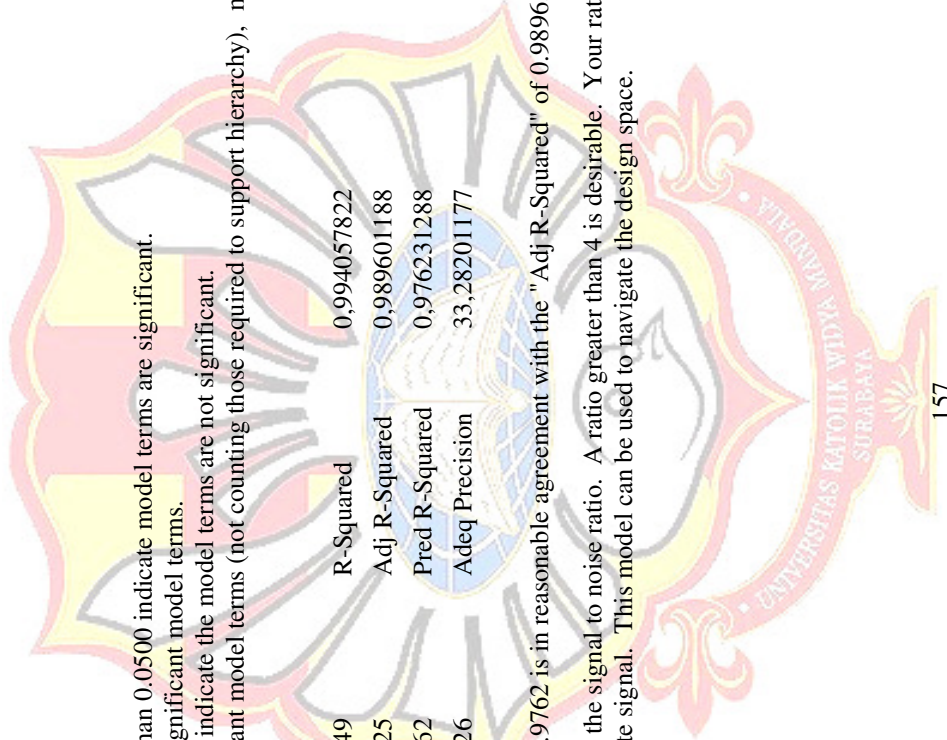
The Model F-value of 223.05 implies the model is significant. There is only a 0.01% chance that a "Model F-Value" this large could occur due to noise.

Values of "Prob > F" less than 0,0500 indicate model terms are significant. In this case A, B, AB are significant model terms. Values greater than 0,1000 indicate the model terms are not significant. If there are many insignificant model terms (not counting those required to support hierarchy), model reduction may improve your model.

Std. Dev.	0,012747549	R-Squared	0,994057822
Mean	0,40625	Adj R-Squared	0,989601188
C.V. %	3,137858162	Pred R-Squared	0,976231288
PRESS	0,0026	Adeq Precision	33,28201177

The "Pred R-Squared" of 0.9762 is in reasonable agreement with the "Adj R-Squared" of 0,9896.

"Adeq Precision" measures the signal to noise ratio. A ratio greater than 4 is desirable. Your ratio of 33.282 indicates an adequate signal. This model can be used to navigate the design space.



Factor	Coefficient Estimate	df	Standard Error	95% CI		VIF
				Low	High	
Intercept	0,40625	1	0,004506939	0,393736731	0,418763269	
A-Metiselulosa	-0,10375	1	0,004506939	-0,116263269	-0,091236731	1
B-PVP K-30	-0,04625	1	0,004506939	-0,058763269	-0,033736731	1
AB	-0,02625	1	0,004506939	-0,038763269	-0,013736731	1

Final Equation in Terms of Coded Factors:

$$\begin{aligned} \text{Kerapuhan} &= \\ &0,40625 \\ &-0,10375 * A \\ &-0,04625 * B \\ &-0,02625 * A * B \end{aligned}$$

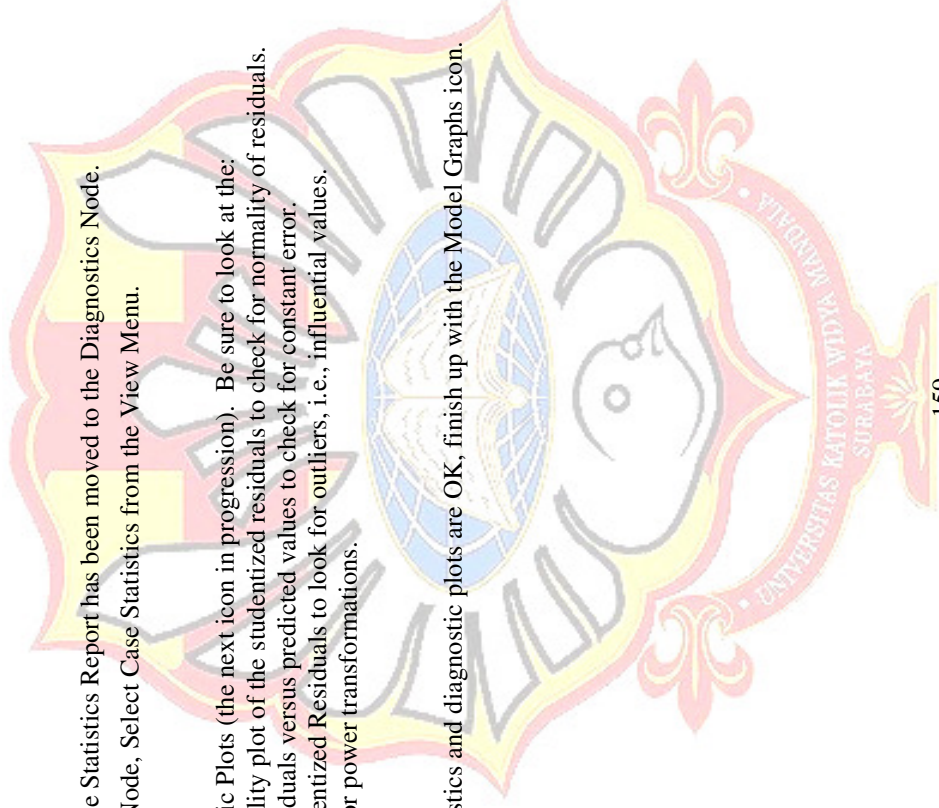
Final Equation in Terms of Actual Factors:

$$\begin{aligned} \text{Kerapuhan} &= \\ &0,40625 \\ &-0,10375 * \text{Metiselulosa} \\ &-0,04625 * \text{PVP K-30} \\ &-0,02625 * \text{Metiselulosa} * \text{PVP K-30} \end{aligned}$$

The Diagnostics Case Statistics Report has been moved to the Diagnostics Node. In the Diagnostics Node, Select Case Statistics from the View Menu.

- Proceed to Diagnostic Plots (the next icon in progression). Be sure to look at the:
- 1) Normal probability plot of the studentized residuals to check for normality of residuals.
 - 2) Studentized residuals versus predicted values to check for constant error.
 - 3) Externally Studentized Residuals to look for outliers, i.e., influential values.
 - 4) Box-Cox plot for power transformations.

If all the model statistics and diagnostic plots are OK, finish up with the Model Graphs icon.



LAMPIRAN I

HASIL ANOVA UJI WAKTU HANCUR PADA PROGRAM DESIGN EXPERT

Use your mouse to right click on individual cells for definitions.

Response
Waktu
3 Hancur

ANOVA for selected factorial model

Analysis of variance table [Partial sum of squares - Type III]

Source	Sum of Squares	df	Mean Square	F Value	p-value Prob > F
Model	4,1917375	3	1,397245833	354,8560847	< 0.0001 significant
A-Metilselulosa	2,8680125	1	2,8680125	728,384127	< 0.0001
B-PVP K-30	0,2211125	1	0,2211125	56,15555556	0.0017
AB	1,1026125	1	1,1026125	280,0285714	< 0.0001
Pure Error	0,01575	4	0,0039375		
Cor Total	4,2074875	7			

The Model F-value of 354.86 implies the model is significant. There is only a 0.01% chance that a "Model F-Value" this large could occur due to noise.

Values of "Prob > F" less than 0.0500 indicate model terms are significant.

In this case A, B, AB are significant model terms.

Values greater than 0.1000 indicate the model terms are not significant.

If there are many insignificant model terms (not counting those required to support hierarchy), model reduction may improve your model.

Std. Dev.	0,062749502	R-Squared	0,996256673
Mean	9,07875	Adj R-Squared	0,993449178
C.V. %	0,69116896	Pred R-Squared	0,985026693
PRESS	0,063	Adeq Precision	43,72264678

The "Pred R-Squared" of 0.9850 is in reasonable agreement with the "Adj R-Squared" of 0.9934.

"Adeq Precision" measures the signal to noise ratio. A ratio greater than 4 is desirable. Your ratio of 43.723 indicates an adequate signal. This model can be used to navigate the design space.

Factor	Coefficient Estimate	df	Standard Error	95% CI Low	95% CI High	VIF
Intercept	9,07875	1	0,022185299	9,017153736	9,140346264	
A-Metilselulosa	0,59875	1	0,022185299	0,537153736	0,660346264	1
B-PVP K-30	-0,16625	1	0,022185299	-0,227846264	-0,104653736	1
AB	-0,37125	1	0,022185299	-0,432846264	-0,309653736	1

Final Equation in Terms of Coded Factors:

$$\begin{aligned} \text{Waktu Hancur} &= \\ &9,07875 \\ &+ 0,59875 * A \\ &- 0,16625 * B \\ &- 0,37125 * A * B \end{aligned}$$

Final Equation in Terms of Actual Factors:

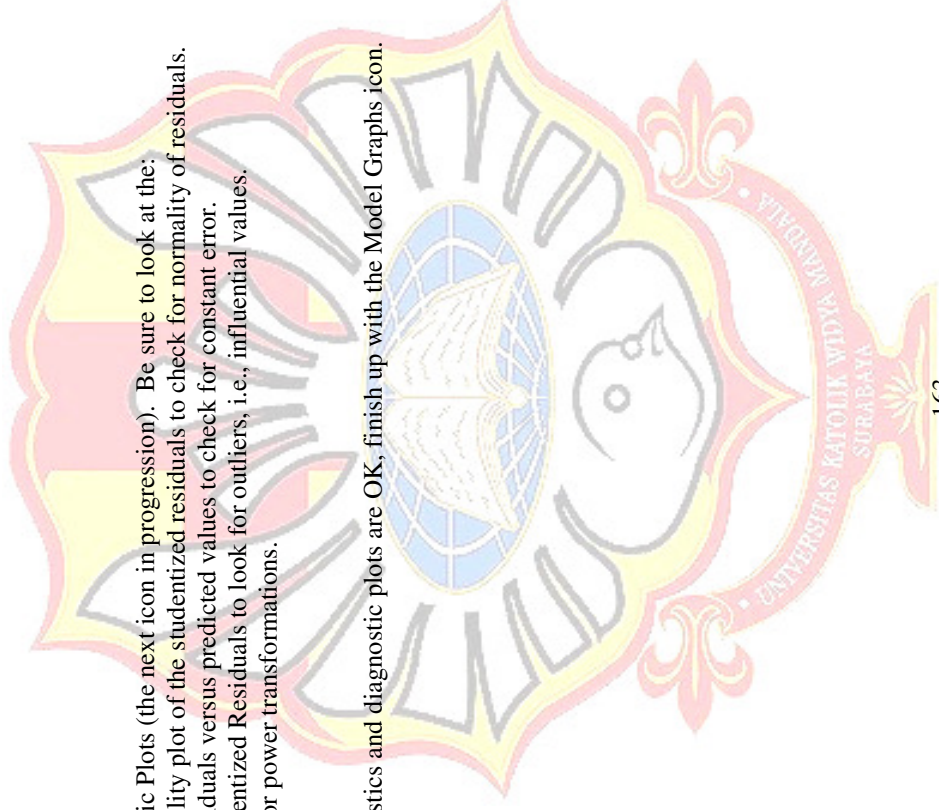
$$\begin{aligned} \text{Waktu Hancur} &= \\ &9,07875 \\ &+ 0,59875 * \text{Metilselulosa} \\ &- 0,16625 * \text{PVP K-30} \\ &- 0,37125 * \text{Metilselulosa} * \text{PVP K-30} \end{aligned}$$

The Diagnostics Case Statistics Report has been moved to the Diagnostics Node.
In the Diagnostics Node, Select Case Statistics from the View Menu.



- Proceed to Diagnostic Plots (the next icon in progression). Be sure to look at the:
- 1) Normal probability plot of the studentized residuals to check for normality of residuals.
 - 2) Studentized residuals versus predicted values to check for constant error.
 - 3) Externally Studentized Residuals to look for outliers, i.e., influential values.
 - 4) Box-Cox plot for power transformations.

If all the model statistics and diagnostic plots are OK, finish up with the Model Graphs icon.



LAMPIRAN J
PERHITUNGAN KONVERSI DOSIS EKSTRAK HERBA SELEDRI

- Dosis acuan produk paten (fitofarmaka) "Tensigard" = 92 mg, pemakaian 2-3 kali sehari (dosis sehari = 184-276 mg)
- Ekstrak kering herba seledri yang diperoleh dari PT. Natura Laboratoria Prima yang mengandung pengisi, dengan perbandingan ekstrak herba seledri : pengisi = 1 : 1
- Ekstrak herba seledri = 75 mg (dosis untuk 1 tablet)
- Ekstrak herba seledri + pengisi PT. Natura Laboratoria Prima =
 - $\frac{2 \times 75 \text{ mg}}{1} = 150 \text{ mg}$ (dosis untuk 1 tablet)

Sehingga untuk dosis pemakaian digunakan = 3 kali sehari 1 tablet (dosis pemakaian sehari = 225 mg ekstrak herba seledri).

LAMPIRAN K
SERTIFIKAT ANALISIS APIIN

<table style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 30%;">PRODUCT</td><td>Apin</td></tr> <tr><td>PART NUMBER</td><td>00001931</td></tr> <tr><td>STANDARD TYPE</td><td>Reagent Grade (RG)</td></tr> <tr><td>LOT NUMBER</td><td>00001931-101</td></tr> <tr><td>REPORT NUMBER</td><td>CDXA-RSS-788-00</td></tr> <tr><td>CDXA NUMBER</td><td>CDXA-06-0348</td></tr> <tr><td>DATE OF SAMPLE</td><td>03/21/2006</td></tr> <tr><td>DATE OF RE-EVALUATION</td><td>11/10/2010</td></tr> <tr><td>DATE OF REPORT</td><td>06/09/2011</td></tr> </table>	PRODUCT	Apin	PART NUMBER	00001931	STANDARD TYPE	Reagent Grade (RG)	LOT NUMBER	00001931-101	REPORT NUMBER	CDXA-RSS-788-00	CDXA NUMBER	CDXA-06-0348	DATE OF SAMPLE	03/21/2006	DATE OF RE-EVALUATION	11/10/2010	DATE OF REPORT	06/09/2011	<div style="text-align: center;"> <p>Structure</p> </div>
PRODUCT	Apin																		
PART NUMBER	00001931																		
STANDARD TYPE	Reagent Grade (RG)																		
LOT NUMBER	00001931-101																		
REPORT NUMBER	CDXA-RSS-788-00																		
CDXA NUMBER	CDXA-06-0348																		
DATE OF SAMPLE	03/21/2006																		
DATE OF RE-EVALUATION	11/10/2010																		
DATE OF REPORT	06/09/2011																		

NAME	Apin
OTHER NAME	7-[(2-O-D-Apio-β-D-furanosyl-β-D-glucopyranosyl)oxy]-5-hydroxy-2-(4-hydroxyphenyl)-4H-1-benzopyran-4-one; Apigenin-7-(2-O-apiosylglucoside)
CHEMICAL FORMULA	C ₂₆ H ₃₂ O ₁₄
MOLECULAR WEIGHT (MW)	564.49
PUBLISHED MELTING POINT	236-237 °C
CAS NUMBER	[28544-34-3]
EINECS	247-780-0
CHEMICAL FAMILY	Flavonoids
RTECS	NA

STORAGE CONDITIONS

STORAGE	Room Temperature in a dry place.
EXPIRATION DATE	11/2015 under the above conditions.

Note – Reagent Grade (RG) chemicals are not guaranteed as quantitative standards. This product line has been developed for research and qualitative purposes only.

Sylesh Venkataraman, Ph.D.
Digitally signed by Sylesh Venkataraman, Ph.D.
 DN: cn=Sylesh Venkataraman, o=ChromaDex Analytical, Inc.
 Date: 2011.06.13 11:02:30 -0700



Tel: 949. 419. 0288 | www.chromadex.com | Fax: 949. 419. 0294

Page 1 of 1

LAMPIRAN L
SERTIFIKAT ANALISIS EKSTRAK KERING HERBA SELEDRI



QA Dept.

Certificate of Analysis

Ref. No. 0378C8A2QAM112

Product Name : Seledri PE
 Product Code : 5046A
 Batch/Lot No. : P5046A820401

Manufacturing date : February 24th 2012
 Best used before : February 24th 2013
 Date of issued : March 07th 2012

Test Descriptions	Results
Sensory Evaluation	
- Color (Visual)	Crème
- Appearance (Visual)	Homogery, fine powder
- Odor and Taste (Smell)	Characteristic odor and taste of Celedry
Physicochemical	
- Solubility (0,1 % soluble in water)	Soluble in water
- Particle Size (Sieve thru mesh #100)	99,12 %
- Lost On Drying (IR/105 °C)	2,32 %
- Tapped Density (50 ml / 500-750 X)	0,730 g/ml
- pH at 25 °C (1,0 % solution)	5,84
Toxicological	
- Aerobic Plate Count (Ph)	2,55.10 ⁷ cfu/g
- Yeast and Mold (Ph)	1,14.10 ⁷ cfu/g
- E. Coli (Ph)	Negative
- Salmonella sp. (Ph)	Negative

Dewi Alletasari H – QA Dept. :



NATURA LABORATORIA PRIMA pt.

Office : J. Suryopranoto, Kompleks Harmoni Plaza Blok JS-14, Jakarta 10130 - Indonesia.
 Ph. +62-21-6318848 (Puring), Fax. +62-21-6318948
 Factory & Extraction Center : J. Siadon, No. 28, Penejari, Pasuruan 67156, East Java - Indonesia.
 Ph. +62-343-633432; 633433 Fax. +62-343-633435
 e-mail : info@natura-lab.com
 Website : http://www.natura-lab.com



LAMPIRAN M
TABEL UJI t

Nilai kritis distribusi t

df	Uji berarah dua			Uji berarah satu		
	$\alpha = 0,10$	$\alpha = 0,05$	$\alpha = 0,01$	$\alpha = 0,10$	$\alpha = 0,05$	$\alpha = 0,01$
1	6,314	12,706	63,657	3,078	6,314	31,821
2	2,920	4,303	9,925	1,886	2,920	6,965
3	2,353	3,182	5,841	1,638	2,353	4,541
4	2,132	2,776	4,604	1,533	2,132	3,747
5	2,015	2,571	4,032	1,476	2,015	3,365
6	1,943	2,447	3,707	1,440	1,943	3,143
7	1,895	2,365	3,499	1,415	1,895	2,998
8	1,860	2,306	3,355	1,397	1,860	2,896
9	1,833	2,262	3,250	1,383	1,833	2,821
10	1,812	2,228	3,169	1,372	1,812	2,764
11	1,796	2,201	3,106	1,363	1,796	2,718
12	1,782	2,179	3,055	1,356	1,782	2,681
13	1,771	2,160	3,012	1,350	1,771	2,650
14	1,761	2,145	2,977	1,345	1,761	2,624
15	1,753	2,131	2,947	1,341	1,753	2,602
16	1,746	2,120	2,921	1,337	1,746	2,583
17	1,740	2,110	2,898	1,333	1,740	2,567
18	1,734	2,101	2,878	1,330	1,734	2,552
19	1,729	2,093	2,861	1,328	1,729	2,539
20	1,725	2,086	2,845	1,325	1,725	2,528
21	1,721	2,080	2,831	1,323	1,721	2,518
22	1,717	2,074	2,819	1,321	1,717	2,508
23	1,714	2,069	2,807	1,319	1,714	2,500
24	1,711	2,064	2,797	1,318	1,711	2,492
25	1,708	2,060	2,787	1,316	1,708	2,485
26	1,706	2,056	2,779	1,315	1,706	2,479
27	1,703	2,052	2,771	1,314	1,703	2,473
28	1,701	2,048	2,763	1,313	1,701	2,467
29	1,699	2,045	2,756	1,311	1,699	2,462
30	1,697	2,042	2,750	1,310	1,697	2,457
40	1,684	2,021	2,704	1,303	1,684	2,423
60	1,671	2,000	2,660	1,296	1,671	2,390
120	1,658	1,980	2,617	1,289	1,658	2,358
∞	1,645	1,960	2,576	1,282	1,645	2,326

α melambangkan aras nyata, df menyatakan derajat kebebasan.
Diambil dari Murdoch J, Barnes J A, *Statistical Tables for Students of Science, Engineering, Psychology, Business, Management and Finance*, 4th edition, Basingstoke: Macmillan, 1998.

552



(Jones, 2010)

LAMPIRAN N
TABEL UJI F

Nilai kritis distribusi F

$\alpha = 0,05$

		df ₁													
		1	2	3	4	5	6	7	8	10	12	14	16	18	∞
df ₂	1	161,4	199,5	215,7	224,6	230,2	234,0	236,8	238,9	241,9	243,9	249,0	254,3		
	2	18,5	19,0	19,2	19,2	19,3	19,3	19,4	19,4	19,4	19,4	19,5	19,5		
3	10,13	9,53	9,28	9,12	9,01	8,94	8,89	8,85	8,79	8,74	8,64	8,53			
4	7,71	6,94	6,59	6,39	6,26	6,16	6,09	6,04	5,96	5,91	5,77	5,63			
5	6,61	5,79	5,41	5,19	5,05	4,95	4,88	4,82	4,74	4,68	4,53	4,36			
6	5,99	5,14	4,76	4,53	4,39	4,29	4,21	4,15	4,06	4,00	3,84	3,67			
7	5,59	4,74	4,35	4,12	3,97	3,87	3,79	3,73	3,64	3,57	3,41	3,23			
8	5,32	4,46	4,07	3,84	3,69	3,58	3,50	3,44	3,35	3,28	3,12	2,93			
9	5,12	4,26	3,86	3,63	3,48	3,37	3,29	3,23	3,14	3,07	2,90	2,71			
10	4,96	4,10	3,71	3,48	3,33	3,22	3,14	3,07	2,98	2,91	2,74	2,54			
11	4,84	3,98	3,59	3,36	3,20	3,09	3,01	2,95	2,85	2,79	2,61	2,40			
12	4,75	3,89	3,49	3,26	3,11	3,00	2,91	2,85	2,75	2,69	2,51	2,30			
13	4,67	3,81	3,41	3,18	3,03	2,92	2,83	2,77	2,67	2,60	2,42	2,21			
14	4,60	3,74	3,34	3,11	2,96	2,85	2,76	2,70	2,60	2,53	2,35	2,13			
16	4,49	3,63	3,24	3,01	2,85	2,74	2,66	2,59	2,49	2,42	2,24	2,01			
18	4,41	3,55	3,16	2,93	2,77	2,66	2,58	2,51	2,41	2,34	2,15	1,92			
20	4,35	3,49	3,10	2,87	2,71	2,60	2,51	2,45	2,35	2,28	2,08	1,84			
22	4,30	3,44	3,05	2,82	2,66	2,55	2,46	2,40	2,30	2,23	2,03	1,78			
24	4,26	3,40	3,01	2,78	2,62	2,51	2,42	2,36	2,25	2,18	1,98	1,73			
26	4,23	3,37	2,98	2,74	2,59	2,47	2,39	2,32	2,22	2,15	1,95	1,69			
28	4,20	3,34	2,95	2,71	2,56	2,45	2,36	2,29	2,19	2,12	1,91	1,65			
30	4,17	3,32	2,92	2,69	2,53	2,42	2,33	2,27	2,16	2,09	1,89	1,62			
40	4,08	3,23	2,84	2,61	2,45	2,34	2,25	2,18	2,08	2,00	1,79	1,51			
60	4,00	3,15	2,76	2,53	2,37	2,25	2,17	2,10	1,99	1,92	1,70	1,39			
120	3,92	3,07	2,68	2,45	2,29	2,18	2,09	2,02	1,91	1,83	1,61	1,28			
∞	3,84	3,00	2,60	2,37	2,21	2,10	2,01	1,94	1,83	1,75	1,52	1,00			

a melambungkan aras nyata, df₁ melambungkan derajat kebebasan pada pembilang dan df₂ pada penyebut.
Dimodifikasi dari Murdoch J, Barnes J A, *Statistical Tables for Student's of Science, Engineering, Psychology, Business, Management and Finance*, 4th edition, Basingstoke: Macmillan, 1998.

(Jones, 2010)