

LAMPIRAN A

SURAT KETERANGAN IDENTIFIKASI DAUN ASAM JAWA



DINAS KESEHATAN PROPINSI JAWA TIMUR

UPT MATERIA MEDICA

Jalan Lahor No.87 Telp. (0341) 593396 Batu (65313)

KOTA BATU

Nomor : 074 / 141 / 101.8 / 2011
Sifat : Biasa
Perihal : Determinasi Tanaman Asam Jawa

Memenuhi permohonan saudara :

Nama : MARIA FABIOLA NOVIANTI NGAJO
N R P : 244.300.7117
Fakultas : Fakultas Farmasi
Universitas Katolik Widya Mandala Surabaya

1. Perihal determinasi tanaman Asam Jawa

Divisi : Spermatophyta
Sub divisi : Angiospermae
Kelas : Dicotyledoneae
Bangsa : Rosales
Suku : Leguminosae
Marga : Tamaridus
Jenis : *Tamarindus indica* L.
Sinonim : Tamarind (Inggris), Tamarinier (Perancis); Asam Jawa (Indonesia),
sumatera Bak mee (Aceh) Acam lagi (Gayo) Asam Jawa Melayu) Cumalagi
(Minangkabau), Jawa Tangkal asem (Sunda) Wilasem (Jawa) Acem, (Madura),
Bali Celagi (Bali), Nusa tenggara Bage (Sasak) Mangga (Bima) Kanefo kiu
(Timor) Tobli (Solor), Kalimantan Asam Jawa (Dayak), Sulawesi Asang jawi
(Gorontalo) Tamalagi (Bul) Saamba lagi (Barros) Comba (Makasar, Maluku
Sablaki (Taninbar) Asam Jawa ka (Buru) Asam awa (Ternate) Tabelaka
(Seram)

2. Nama Simplicia : Tamarindoni Pulpa cruda; Asam Kawak.Tamarindi Fructus; Buah
Asam.Asam Kawak adalah daging buah Asam yang ditanak dan dapat
disimpan lama.

3. Kandungan kimia : Buah polong asam Jawa mengandung senyawa kimia antara lain asam appel,
asam sitrat, asam anggur, asam tartrat, asam suksinat, pectin dan gula invert.
Buah asam Jawa yang masak di pohon diantaranya mengandung nilai kalori
sebesar 239 kal per 100 gram, protein 2,8 gram per 100 gram, lemak 0,6
gram per 100 gram, hidrat arang 62,5 gram per 100 gram, kalsium 74
miligram per 100 gram, fosfor 113 miligram per 100 gram, zat besi 0,6
miligram per 100 gram, vitamin A 30 SI per 100 gram, vitamin B1 0,34
miligram per 100 gram, vitamin C 2 miligram per 100 gram. Kulit bijinya
mengandung phlobatannin dan bijinya mengandung albuminoid serta pati.
Daging buah, daun dan batang Tamarindus indica mengandung
saponin, flavonoida dan tanin.

4. Penggunaan : Penelitian

5. Daftar Pustaka : - Anonim, /http.www.ipteknet.com/asam Jawa. Diakses tanggal 29 Oktober
2010.
- Steenis,CGGJ Van Dr, *FLORA*, 2008, Pradnya Paramita, Jakarta
- Syamsuhidayat, Sri sugati, Hutapea, Johny Ria. *Inventaris Tanaman
Obat Indonesia* Departemen Kesehatan Republik Indonesia : Badan
Penelitian Dan Pengembangan Kesehatan

Demikian determinasi ini kami buat untuk dipergunakan sebagaimana mestinya.

Batu, 12 Oktober 2011
Kepala UPT Materia Medica Batu



LAMPIRAN B
SERTIFIKAT TIKUS PUTIH

CV.SURABAYA MOUSE SERVICE

Wedoro masjid 20e RT : 01 RW : 05

Wedoro -Waru-Sidoarjo

Telp : 081938310682 – 085731276778

Yang bertanda tangan dibawah ini :

Nama : M.Syamsul Bahri,S.Kom

Selaku penanggung jawab pengembangan hewan percobaan menerangkan bahwa yang di gunakan pada penelitian :

Peneliti : Maria Fabiola Novianti Ngajo
Penelitian : Efek Antipiretik Eksrak Etanol Daun Asam Jawa
Fakultas : Farmasi Universitas Khatolik Widya Mandala Surabaya
NRP : 2443007117

Hewan uji yang digunakan dengan spesifikasi :

Tikus galur : Wistar
Umur : 3 Bulan (!50 - 200 Gram)
Kelamin : Jantan
Jumlah : 20 Ekor

Demikian Surat keterangan ini dibuat untuk digunakan dengan sebaik-baiknya

Sidoarjo, 24 Oktober 2011
penanggung jawab



M.Syamsul Bahri,S.Kom

LAMPIRAN C

**HASIL PERHITUNGAN SUSUT PENGERINGAN, KADAR ABU,
DAN KADAR SARI LARUT ETANOL**

Hasil perhitungan penetapan susut pengeringan serbuk

Replikasi	Hasil Susut Pengeringan(%)
1	8,2
2	8,5
3	8,5
Rerata	8,4

$$\text{Rata-rata} = \frac{8,20 + 8,50 + 8,50}{3} = 8,4\%$$

Hasil Perhitungan Penetapan Kadar Abu

No	Berat serbuk (g)	Berat krus kosong (g)	Berat krus + abu (g)	Kadar abu (%)
1	2,016	20,269	20,348	3,919
2	2,018	20,269	20,351	4,063
3	2,019	20,269	20,353	4,160
Rerata				4,047

$$\begin{aligned}
 1. \text{ kadar abu} &= \frac{(\text{berat krus} + \text{abu}) - \text{berat krus kosong}}{\text{berat serbuk}} \times 100\% \\
 &= \frac{20,348 - 20,269}{2,016} \times 100\% \\
 &= 3,919\%
 \end{aligned}$$

$$2. \quad \text{kadar abu} = \frac{(\text{berat krus+abu}) - \text{berat krus kosong}}{\text{berat serbuk}} \times 100\%$$

$$= \frac{20,351 - 20,269}{2,018} \times 100\%$$

$$= 4,063\%$$

$$3. \quad \text{kadar abu} = \frac{(\text{berat krus+abu}) - \text{berat krus kosong}}{\text{berat serbuk}} \times 100\%$$

$$= \frac{20,353 - 20,269}{2,019} \times 100\%$$

$$= 4,160\%$$

$$\text{Rata-rata} = \frac{3,919 + 4,063 + 4,160}{3} = 4,047\%$$

Hasil perhitungan kadar sari larut etanol

No	Berat cawan + ekstrak setelah diuapkan	Berat cawan kosong	Berat ekstrak	Kadar sari larut etanol (%)
1	64,698	64,623	5,078	1,48
2	78,469	78,400	5,045	1,37
3	72,133	72,062	5,058	1,40
Rerata				1,42

$$1. \quad \text{Kadar sari larut etanol} = \frac{(\text{berat cawan+ekstrak}) - (\text{berat cawan kosong})}{\text{berat ekstrak}} \times 100\%$$

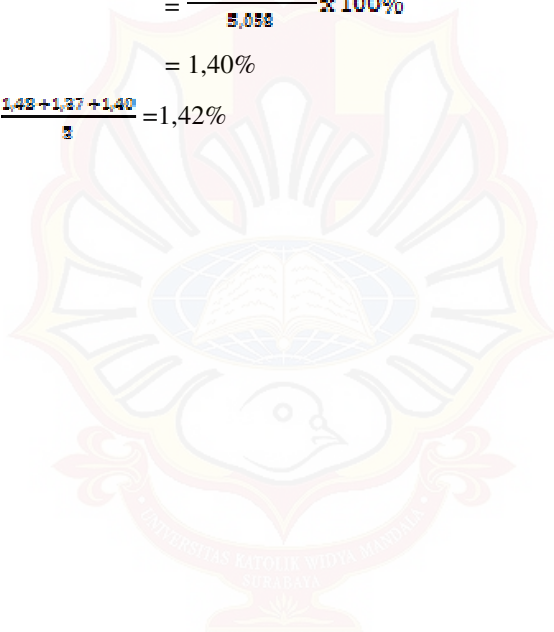
$$= \frac{65,698 - 64,623}{5,078} \times 100\%$$

$$= 1,48\%$$

$$\begin{aligned}
 2. \text{ Kadar sari larut etanol} &= \frac{(\text{berat cawan+ ekstrak}) - (\text{berat cawan kosong})}{\text{berat ekstrak}} \times 100\% \\
 &= \frac{78,489 - 78,480}{5,045} \times 100\% \\
 &= 1,37\%
 \end{aligned}$$

$$\begin{aligned}
 3. \text{ kadar sari larut etanol} &= \frac{(\text{berat cawan+ ekstrak}) - (\text{berat cawan kosong})}{\text{berat ekstrak}} \times 100\% \\
 &= \frac{72,133 - 72,062}{5,058} \times 100\% \\
 &= 1,40\%
 \end{aligned}$$

$$\text{Rata-rata} = \frac{1,43 + 1,37 + 1,40}{3} = 1,42\%$$



LAMPIRAN D

HASIL PERHITUNGAN HARGA Rf

Hasil perhitungan harga Rf pada pemeriksaan secara KLT dengan pelarut *n*-butanol : asam asetat : air (4 : 1 : 2)

Pengamatan		Rf
UV 254	1	0,65
	2	0,64
	3	0,4
UV 366	1	0,65
	2	0,64
	3	0,4

Contoh perhitungan Rf = $\frac{\text{jarak yang ditempuh oleh zat}}{\text{jarak yang ditempuh oleh fase gerak}}$

pada uv : Rf pembeding = $\frac{5,1}{8} = 0,65$

Rf fraksi = $\frac{5,1}{8} = 0,64$

Rf ekstrak = $\frac{3,2}{8} = 0,4$

LAMPIRAN E
HASIL PERHITUNGAN LC₅₀

Metode Probit *analysis*

Confidence Limits

Probability	95% Confidence Limits for t_concentration			95% Confidence Limits for log(t_concentration) ^b		
	Estimate	Lower Bound	Upper Bound	Estimate	Lower Bound	Upper Bound
PROBIT ^a .010	6.967	1.975	12.289	.843	.296	1.089
.020	8.521	2.756	14.295	.930	.440	1.155
.030	9.681	3.401	15.752	.986	.532	1.197
.040	10.658	3.980	16.957	1.028	.600	1.229
.050	11.524	4.522	18.015	1.062	.655	1.256
.060	12.317	5.038	18.975	1.090	.702	1.278
.070	13.056	5.537	19.867	1.116	.743	1.298
.080	13.756	6.023	20.708	1.139	.780	1.316
.090	14.425	6.501	21.510	1.159	.813	1.333
.100	15.070	6.972	22.282	1.178	.843	1.348
.150	18.060	9.280	25.874	1.257	.968	1.413
.200	20.854	11.589	29.288	1.319	1.064	1.467
.250	23.594	13.954	32.736	1.373	1.145	1.515
.300	26.359	16.402	36.360	1.421	1.215	1.561
.350	29.210	18.954	40.286	1.466	1.278	1.605
.400	32.200	21.622	44.646	1.508	1.335	1.650
.450	35.383	24.420	49.597	1.549	1.388	1.695
.500	38.824	27.366	55.329	1.589	1.437	1.743
.550	42.599	30.485	62.092	1.629	1.484	1.793

.600	46.811	33.819	70.225	1.670	1.529	1.846
.650	51.602	37.432	80.215	1.713	1.573	1.904
.700	57.183	41.424	92.801	1.757	1.617	1.968
.750	63.886	45.962	109.201	1.805	1.662	2.038
.800	72.277	51.325	131.600	1.859	1.710	2.119
.850	83.459	58.050	164.478	1.921	1.764	2.216
.900	100.019	67.357	219.110	2.000	1.828	2.341
.910	104.489	69.765	235.013	2.019	1.844	2.371
.920	109.571	72.457	253.675	2.040	1.860	2.404
.930	115.445	75.512	275.999	2.062	1.878	2.441
.940	122.378	79.050	303.369	2.088	1.898	2.482
.950	130.795	83.252	338.051	2.117	1.920	2.529
.960	141.427	88.432	384.088	2.151	1.947	2.584
.970	155.688	95.184	449.648	2.192	1.979	2.653
.980	176.897	104.868	554.944	2.248	2.021	2.744
.990	216.343	121.966	774.462	2.335	2.086	2.889

a. A heterogeneity factor is used.

b. Logarithm base = 10.

LAMPIRAN F

HASIL OUTPUT SPSS

Jam ke-1

Test of Homogeneity of Variances

d_temp

Levene Statistic	df1	df2	Sig.
.000	4	20	1.000

ANOVA

d_temp

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.430	4	.108	35.867	.000
Within Groups	.060	20	.003		
Total	.490	24			

Post Hoc Tests

Multiple Comparisons

d_temp

Tukey HSD

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(I) t_fr	(J) t_fr				Lower Bound	Upper Bound
t1 fr1	t1 fr2	-.08000	.03464	.183	-.1837	.0237
	t1 fr3	-.28000*	.03464	.000	-.3837	-.1763
	t1 k(-)	.12000*	.03464	.018	.0163	.2237
	t1 P	-.10000	.03464	.062	-.2037	.0037
t1 fr2	t1 fr1	.08000	.03464	.183	-.0237	.1837
	t1 fr3	-.20000*	.03464	.000	-.3037	-.0963
	t1 k(-)	.20000*	.03464	.000	.0963	.3037
	t1 P	-.02000	.03464	.977	-.1237	.0837
t1 fr3	t1 fr1	.28000*	.03464	.000	.1763	.3837
	t1 fr2	.20000*	.03464	.000	.0963	.3037
	t1 k(-)	.40000*	.03464	.000	.2963	.5037
	t1 P	.18000*	.03464	.000	.0763	.2837
t1 k(-)	t1 fr1	-.12000*	.03464	.018	-.2237	-.0163
	t1 fr2	-.20000*	.03464	.000	-.3037	-.0963

	t1 fr3	-.40000*	.03464	.000	-.5037	-.2963
	t1 P	-.22000*	.03464	.000	-.3237	-.1163
t1 P	t1 fr1	.10000	.03464	.062	-.0037	.2037
	t1 fr2	.02000	.03464	.977	-.0837	.1237
	t1 fr3	-.18000*	.03464	.000	-.2837	-.0763
	t1 k(-)	.22000*	.03464	.000	.1163	.3237

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



Jam ke-2

Test of Homogeneity of Variances

d_temp

Levene Statistic	df1	df2	Sig.
.247	4	20	.908

ANOVA

d_temp

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.486	4	.121	24.280	.000
Within Groups	.100	20	.005		
Total	.586	24			

Post Hoc Tests

Multiple Comparisons

d_temp

Tukey HSD

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(I) t_fr	(J) t_fr				Lower Bound	Upper Bound
t2 fr1	t2 fr2	-.16000*	.04472	.014	-.2938	-.0262
	t2 fr3	-.26000*	.04472	.000	-.3938	-.1262
	t2 k(-)	.14000*	.04472	.038	.0062	.2738
	t2 P	-.14000*	.04472	.038	-.2738	-.0062
t2 fr2	t2 fr1	.16000*	.04472	.014	.0262	.2938
	t2 fr3	-.10000	.04472	.207	-.2338	.0338
	t2 k(-)	.30000*	.04472	.000	.1662	.4338
	t2 P	.02000	.04472	.991	-.1138	.1538
t2 fr3	t2 fr1	.26000*	.04472	.000	.1262	.3938
	t2 fr2	.10000	.04472	.207	-.0338	.2338
	t2 k(-)	.40000*	.04472	.000	.2662	.5338
	t2 P	.12000	.04472	.092	-.0138	.2538
t2 k(-)	t2 fr1	-.14000*	.04472	.038	-.2738	-.0062
	t2 fr2	-.30000*	.04472	.000	-.4338	-.1662
	t2 fr3	-.40000*	.04472	.000	-.5338	-.2662

	t2 P	-.28000*	.04472	.000	-.4138	-.1462
t2 P	t2 fr1	.14000*	.04472	.038	.0062	.2738
	t2 fr2	-.02000	.04472	.991	-.1538	.1138
	t2 fr3	-.12000	.04472	.092	-.2538	.0138
	t2 k(-)	.28000*	.04472	.000	.1462	.4138

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



Jam ke-3

Test of Homogeneity of Variances

d_temp

Levene Statistic	df1	df2	Sig.
.603	4	20	.665

ANOVA

d_temp

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.886	4	.222	55.400	.000
Within Groups	.080	20	.004		
Total	.966	24			

Post Hoc Tests

Multiple Comparisons

d_temp

Tukey HSD

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(I) t_fr	(J) t_fr				Lower Bound	Upper Bound
t3 fr1	t3 fr2	-.16000*	.04000	.006	-.2797	-.0403
	t3 fr3	-.28000*	.04000	.000	-.3997	-.1603
	t3 k(-)	.16000*	.04000	.006	.0403	.2797
	t3 P	-.36000*	.04000	.000	-.4797	-.2403
t3 fr2	t3 fr1	.16000*	.04000	.006	.0403	.2797
	t3 fr3	-.12000*	.04000	.049	-.2397	-.0003
	t3 k(-)	.32000*	.04000	.000	.2003	.4397
	t3 P	-.20000*	.04000	.001	-.3197	-.0803
t3 fr3	t3 fr1	.28000*	.04000	.000	.1603	.3997
	t3 fr2	.12000*	.04000	.049	.0003	.2397
	t3 k(-)	.44000*	.04000	.000	.3203	.5597
	t3 P	-.08000	.04000	.302	-.1997	.0397
t3 k(-)	t3 fr1	-.16000*	.04000	.006	-.2797	-.0403
	t3 fr2	-.32000*	.04000	.000	-.4397	-.2003

	t3 fr3	-.44000*	.04000	.000	-.5597	-.3203
	t3 P	-.52000*	.04000	.000	-.6397	-.4003
t3 P	t3 fr1	.36000*	.04000	.000	.2403	.4797
	t3 fr2	.20000*	.04000	.001	.0803	.3197
	t3 fr3	.08000	.04000	.302	-.0397	.1997
	t3 k(-)	.52000*	.04000	.000	.4003	.6397

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



Jam ke-4

Test of Homogeneity of Variances

d_temp

Levene Statistic	df1	df2	Sig.
.564	4	20	.692

ANOVA

d_temp

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.990	4	.497	67.216	.000
Within Groups	.148	20	.007		
Total	2.138	24			

Post Hoc Tests

Multiple Comparisons

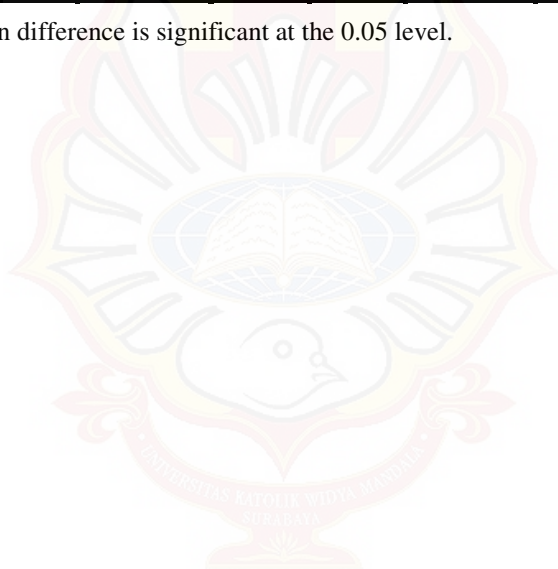
d_temp

Tukey HSD

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(I) t_fr	(J) t_fr				Lower Bound	Upper Bound
t4 fr1	t4 fr2	-.10000	.05441	.381	-.2628	.0628
	t4 fr3	-.46000 ^{ab}	.05441	.000	-.6228	-.2972
	t4 k(-)	.26000 ^{ab}	.05441	.001	.0972	.4228
	t4 P	-.48000 ^{ab}	.05441	.000	-.6428	-.3172
t4 fr2	t4 fr1	.10000	.05441	.381	-.0628	.2628
	t4 fr3	-.36000 ^{ab}	.05441	.000	-.5228	-.1972
	t4 k(-)	.36000 ^{ab}	.05441	.000	.1972	.5228
	t4 P	-.38000 ^{ab}	.05441	.000	-.5428	-.2172
t4 fr3	t4 fr1	.46000 ^{ab}	.05441	.000	.2972	.6228
	t4 fr2	.36000 ^{ab}	.05441	.000	.1972	.5228
	t4 k(-)	.72000 ^{ab}	.05441	.000	.5572	.8828
	t4 P	-.02000	.05441	.996	-.1828	.1428
t4 k(-)	t4 fr1	-.26000 ^{ab}	.05441	.001	-.4228	-.0972

	t4 fr2	-.36000 [*]	.05441	.000	-.5228	-.1972
	t4 fr3	-.72000 [*]	.05441	.000	-.8828	-.5572
	t4 P	-.74000 [*]	.05441	.000	-.9028	-.5772
t4 P	t4 fr1	.48000 [*]	.05441	.000	.3172	.6428
	t4 fr2	.38000 [*]	.05441	.000	.2172	.5428
	t4 fr3	.02000	.05441	.996	-.1428	.1828
	t4 k(-)	.74000 [*]	.05441	.000	.5772	.9028

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



LAMPIRAN G

TABEL UJI F

Baris pertama pada setiap pasangan baris adalah titik pada distribusi F untuk aras 0.05; baris kedua untuk aras 0.01.

		Derajat kebebasan untuk rataan kuadrat yang lebih besar																									
		1	2	3	4	5	6	7	8	9	10	11	12	14	16	20	24	30	40	50	75	100	200	500	∞		
Derajat kebebasan untuk rataan kuadrat yang lebih kecil.	16	4.49 8.53	3.63 6.23	3.24 5.29	3.01 4.77	2.85 4.44	2.74 4.20	2.66 4.03	2.59 3.89	2.54 3.78	2.49 3.69	2.45 3.61	2.42 3.55	2.42 3.45	2.37 3.37	2.33 3.25	2.28 3.18	2.24 3.10	2.20 3.01	2.16 2.96	2.09 2.89	2.07 2.86	2.04 2.80	2.02 2.77	2.01 2.75		
	17	4.45 8.40	3.59 6.11	3.20 5.18	2.96 4.67	2.81 4.34	2.70 4.10	2.62 3.93	2.55 3.79	2.50 3.68	2.45 3.59	2.41 3.52	2.38 3.45	2.33 3.35	2.29 3.27	2.23 3.16	2.19 3.08	2.15 3.00	2.11 2.92	2.08 2.86	2.04 2.79	2.02 2.76	1.99 2.70	1.97 2.67	1.96 2.65		
	18	4.41 8.28	3.55 6.01	3.16 5.09	2.93 4.58	2.77 4.25	2.66 4.01	2.58 3.85	2.51 3.71	2.46 3.60	2.41 3.51	2.37 3.44	2.34 3.37	2.29 3.27	2.25 3.19	2.19 3.07	2.15 2.91	2.11 2.83	2.07 2.78	2.02 2.71	2.00 2.68	1.98 2.62	1.95 2.59	1.93 2.57			
	19	4.38 8.18	3.52 5.93	3.13 5.01	2.90 4.50	2.74 4.17	2.63 3.94	2.55 3.77	2.48 3.63	2.43 3.52	2.38 3.43	2.34 3.36	2.31 3.30	2.26 3.19	2.21 3.12	2.15 3.00	2.11 2.92	2.07 2.84	2.02 2.76	2.00 2.70	1.96 2.63	1.94 2.60	1.91 2.54	1.90 2.51	1.88 2.49		
	20	4.35 8.10	3.49 5.85	3.10 4.94	2.87 4.43	2.71 4.10	2.60 3.87	2.52 3.71	2.45 3.56	2.40 3.45	2.35 3.37	2.31 3.30	2.28 3.23	2.23 3.13	2.18 3.05	2.12 2.94	2.08 2.77	2.04 2.69	1.99 2.67	1.96 2.63	1.92 2.56	1.90 2.53	1.87 2.47	1.85 2.44	1.84 2.42		
	21	4.32 8.02	3.47 5.78	3.07 4.87	2.84 4.37	2.68 4.04	2.57 3.81	2.49 3.65	2.42 3.51	2.37 3.40	2.32 3.31	2.28 3.24	2.25 3.17	2.20 3.07	2.15 2.99	2.09 2.88	2.05 2.80	2.00 2.72	1.96 2.63	1.93 2.58	1.90 2.51	1.87 2.47	1.84 2.42	1.82 2.38	1.81 2.36		
	22	4.30 7.94	3.44 5.72	3.05 4.82	2.82 4.31	2.66 3.99	2.55 3.76	2.47 3.59	2.40 3.45	2.35 3.35	2.30 3.26	2.26 3.18	2.23 3.12	2.18 3.02	2.13 2.94	2.07 2.83	2.03 2.75	1.98 2.67	1.93 2.58	1.91 2.53	1.87 2.46	1.84 2.42	1.81 2.37	1.80 2.33	1.78 2.31		
	23	4.28 7.88	3.42 5.66	3.03 4.76	2.80 4.26	2.64 3.94	2.53 3.71	2.45 3.54	2.38 3.41	2.32 3.30	2.28 3.21	2.24 3.14	2.20 3.07	2.14 2.97	2.10 2.89	2.04 2.78	2.00 2.70	1.96 2.62	1.91 2.53	1.88 2.48	1.84 2.41	1.82 2.37	1.79 2.32	1.77 2.28	1.76 2.26		
	24	4.26 7.82	3.40 5.61	3.01 4.72	2.78 4.22	2.62 3.90	2.51 3.67	2.43 3.50	2.36 3.36	2.30 3.25	2.26 3.17	2.22 3.09	2.18 3.03	2.13 2.93	2.09 2.85	2.02 2.74	1.98 2.66	1.94 2.58	1.89 2.49	1.86 2.44	1.82 2.36	1.80 2.33	1.76 2.27	1.74 2.23	1.73 2.21		
	25	4.24 7.77	3.38 5.57	2.99 4.68	2.76 4.18	2.60 3.86	2.49 3.63	2.41 3.48	2.34 3.32	2.28 3.21	2.24 3.13	2.20 3.05	2.16 2.99	2.11 2.89	2.06 2.81	2.00 2.70	1.96 2.62	1.92 2.54	1.87 2.45	1.84 2.40	1.80 2.32	1.77 2.29	1.74 2.23	1.72 2.19	1.71 2.17		
	26	4.22 7.72	3.37 5.53	2.97 4.64	2.74 4.14	2.59 3.82	2.47 3.59	2.39 3.42	2.32 3.29	2.27 3.17	2.22 3.09	2.18 3.02	2.15 2.96	2.10 2.86	2.05 2.77	1.99 2.66	1.95 2.50	1.90 2.41	1.85 2.36	1.82 2.28	1.78 2.25	1.76 2.19	1.72 2.15	1.70 2.13	1.69 2.13		
	27	4.21 7.68	3.35 5.49	2.96 4.60	2.73 4.11	2.57 3.79	2.46 3.56	2.37 3.39	2.30 3.26	2.25 3.14	2.20 3.06	2.16 2.98	2.13 2.93	2.08 2.83	2.03 2.74	1.97 2.63	1.93 2.55	1.88 2.47	1.84 2.38	1.80 2.33	1.76 2.25	1.74 2.21	1.71 2.16	1.68 2.12	1.67 2.10		
	28	4.20 7.64	3.34 5.45	2.95 4.57	2.71 4.07	2.56 3.76	2.44 3.53	2.36 3.36	2.29 3.23	2.24 3.11	2.19 3.03	2.15 2.95	2.12 2.90	2.06 2.80	2.02 2.71	1.96 2.60	1.91 2.52	1.87 2.44	1.81 2.35	1.81 2.30	1.78 2.22	1.75 2.17	1.72 2.13	1.69 2.09	1.65 2.06		
	29	4.18 7.60	3.33 5.52	2.93 4.54	2.70 4.04	2.54 3.73	2.43 3.50	2.35 3.32	2.28 3.20	2.22 3.08	2.18 3.00	2.14 2.92	2.10 2.87	2.05 2.77	2.00 2.68	1.94 2.57	1.90 2.49	1.85 2.41	1.80 2.32	1.77 2.27	1.73 2.15	1.71 2.13	1.68 2.10	1.65 2.06	1.64 2.03		
	30	4.17 7.56	3.32 5.39	2.92 4.51	2.69 4.02	2.53 3.70	2.42 3.47	2.34 3.30	2.27 3.17	2.21 3.06	2.16 2.98	2.12 2.90	2.09 2.84	2.04 2.74	1.99 2.64	1.93 2.55	1.89 2.47	1.84 2.38	1.79 2.29	1.76 2.16	1.72 2.13	1.69 2.07	1.66 2.03	1.64 2.01	1.62 2.01		

(bersambung)

TABEL UJI F (LANJUTAN)

Baris pertama pada setiap pasangan baris adalah titik pada distribusi F untuk aras 0,05; baris kedua untuk aras 0,01.

		Derajat kebebasan untuk rataan kuadrat yang lebih besar.																							
		1	2	3	4	5	6	7	8	9	10	11	12	14	16	20	24	30	40	50	75	100	200	500	∞
Derajat kebebasan untuk rataan kuadrat yang lebih kecil.	32	4.15 7.50	3.30 5.34	2.90 4.46	2.67 3.97	2.51 3.66	2.40 3.42	2.32 3.25	2.25 3.12	2.19 3.01	2.14 2.94	2.10 2.86	2.07 2.80	2.02 2.70	1.97 2.62	1.91 2.51	1.86 2.42	1.82 2.34	1.76 2.25	1.74 2.20	1.69 2.12	1.67 2.08	1.64 2.02	1.61 1.98	1.59 1.96
	34	4.13 7.44	3.28 5.29	2.88 4.42	2.65 3.93	2.49 3.61	2.38 3.38	2.30 3.21	2.23 3.08	2.17 2.97	2.12 2.89	2.08 2.82	2.05 2.76	2.00 2.66	1.95 2.58	1.89 2.47	1.84 2.38	1.80 2.30	1.74 2.21	1.71 2.15	1.67 2.08	1.64 2.04	1.61 1.98	1.59 1.94	1.57 1.91
	36	4.11 7.39	3.26 5.25	2.86 4.38	2.63 3.89	2.48 3.58	2.36 3.35	2.28 3.18	2.21 3.04	2.15 2.94	2.10 2.86	2.06 2.78	2.03 2.72	1.89 2.62	1.93 2.54	1.87 2.43	1.82 2.35	1.78 2.26	1.72 2.17	1.69 2.12	1.65 2.04	1.62 2.00	1.59 1.94	1.56 1.90	1.55 1.87
	38	4.10 7.35	3.25 5.21	2.85 4.34	2.62 3.86	2.46 3.54	2.35 3.32	2.26 3.15	2.19 3.02	2.14 2.91	2.09 2.82	2.05 2.75	2.02 2.69	1.96 2.59	1.92 2.51	1.85 2.40	1.80 2.32	1.76 2.22	1.71 2.14	1.67 2.08	1.63 2.00	1.60 1.97	1.57 1.90	1.54 1.86	1.53 1.84
	40	4.08 7.31	3.23 5.18	2.84 4.31	2.61 3.83	2.45 3.51	2.34 3.29	2.25 3.12	2.18 2.99	2.12 2.88	2.07 2.80	2.04 2.73	2.00 2.66	1.95 2.56	1.90 2.49	1.84 2.37	1.79 2.29	1.74 2.22	1.69 2.14	1.66 2.08	1.61 2.00	1.59 1.97	1.55 1.90	1.53 1.86	1.51 1.81
	42	4.07 7.27	3.22 5.15	2.83 4.29	2.59 3.80	2.44 3.49	2.32 3.26	2.24 3.10	2.17 2.96	2.11 2.86	2.06 2.77	2.02 2.70	1.90 2.64	1.94 2.54	1.89 2.46	1.82 2.35	1.78 2.26	1.73 2.22	1.68 2.17	1.64 2.08	1.60 2.02	1.57 1.94	1.54 1.91	1.51 1.85	1.49 1.80
	44	4.06 7.24	3.21 5.12	2.82 4.26	2.58 3.78	2.43 3.46	2.31 3.24	2.23 3.07	2.16 2.94	2.10 2.84	2.05 2.75	2.01 2.68	1.98 2.62	1.92 2.52	1.88 2.44	1.81 2.32	1.76 2.24	1.72 2.15	1.66 2.06	1.63 2.09	1.58 1.92	1.56 1.88	1.52 1.80	1.50 1.82	1.48 1.78
	46	4.05 7.21	3.20 5.10	2.81 4.24	2.57 3.76	2.42 3.44	2.30 3.22	2.22 3.05	2.14 2.92	2.09 2.82	2.04 2.73	2.00 2.66	1.97 2.60	1.91 2.50	1.87 2.42	1.80 2.30	1.75 2.22	1.71 2.13	1.65 2.04	1.62 1.98	1.57 1.90	1.54 1.86	1.51 1.80	1.48 1.76	1.46 1.72
	48	4.04 7.19	3.19 5.08	2.80 4.22	2.56 3.74	2.41 3.42	2.30 3.20	2.21 3.04	2.14 2.90	2.08 2.80	2.03 2.71	1.99 2.64	1.96 2.58	1.90 2.48	1.86 2.40	1.79 2.28	1.74 2.20	1.70 2.11	1.64 2.02	1.61 1.96	1.56 1.88	1.53 1.84	1.50 1.78	1.47 1.73	1.45 1.70
	50	4.03 7.17	3.18 5.06	2.79 4.20	2.56 3.72	2.40 3.41	2.29 3.18	2.20 3.02	2.13 2.88	2.07 2.78	2.02 2.70	1.98 2.62	1.95 2.56	1.90 2.46	1.85 2.39	1.78 2.26	1.74 2.18	1.69 2.10	1.63 2.00	1.60 1.94	1.55 1.86	1.52 1.82	1.48 1.76	1.46 1.71	1.44 1.68
	55	4.02 7.12	3.17 5.01	2.78 4.16	2.54 3.68	2.38 3.37	2.27 3.15	2.18 2.98	2.11 2.85	2.05 2.75	2.00 2.66	1.97 2.59	1.93 2.53	1.88 2.43	1.83 2.35	1.76 2.23	1.72 2.15	1.67 2.06	1.61 1.96	1.58 1.90	1.52 1.82	1.50 1.78	1.46 1.71	1.43 1.66	1.41 1.64
	60	4.00 7.08	3.15 4.98	2.76 4.13	2.52 3.65	2.37 3.34	2.25 3.12	2.17 2.95	2.10 2.82	2.04 2.72	1.99 2.63	1.95 2.56	1.92 2.50	1.86 2.40	1.81 2.32	1.75 2.20	1.70 2.12	1.65 2.03	1.59 1.93	1.56 1.87	1.50 1.79	1.48 1.74	1.44 1.68	1.41 1.63	1.39 1.60
	65	3.99 7.04	3.14 4.95	2.75 4.10	2.51 3.62	2.36 3.31	2.24 3.09	2.15 2.93	2.08 2.79	2.02 2.70	1.98 2.61	1.94 2.54	1.90 2.47	1.85 2.37	1.80 2.30	1.73 2.18	1.68 2.09	1.63 2.00	1.57 1.90	1.54 1.84	1.49 1.76	1.46 1.71	1.42 1.64	1.39 1.60	1.37 1.56
	70	3.98 7.01	3.13 4.92	2.74 4.08	2.50 3.60	2.35 3.29	2.32 3.07	2.14 2.91	2.07 2.77	2.01 2.67	1.97 2.59	1.93 2.51	1.89 2.45	1.84 2.35	1.79 2.28	1.72 2.15	1.67 2.07	1.62 1.98	1.56 1.88	1.53 1.82	1.47 1.74	1.45 1.69	1.40 1.62	1.37 1.56	1.35 1.53
	80	3.96 6.96	3.11 4.88	2.72 4.04	2.48 3.56	2.33 3.25	2.21 3.04	2.12 2.87	2.05 2.74	1.99 2.64	1.95 2.55	1.91 2.48	1.88 2.41	1.82 2.32	1.77 2.24	1.70 2.11	1.65 2.03	1.60 1.94	1.54 1.84	1.51 1.78	1.45 1.70	1.42 1.65	1.38 1.57	1.35 1.52	1.32 1.49

Sumber: Scheffler (1987).

LAMPIRAN H

TABEL UJI R

DEGREES OF FREEDOM (DF)	5 PERCENT	1 PERCENT	DEGREES OF FREEDOM (DF)	5 PERCENT	1 PERCENT
1	.997	1.000	24	.388	.496
2	.950	.990	25	.381	.487
3	.878	.959	26	.374	.478
4	.811	.917	27	.367	.470
5	.754	.874	28	.361	.463
6	.707	.834	29	.355	.456
7	.666	.798	30	.349	.449
8	.632	.765	35	.325	.418
9	.602	.735	40	.304	.393
10	.576	.708	48	.288	.372
11	.553	.684	50	.273	.354
12	.532	.661	60	.250	.325
13	.514	.641	70	.232	.302
14	.497	.623	80	.217	.283
15	.482	.606	90	.205	.267
16	.468	.590	100	.195	.254
17	.456	.575	125	.174	.228
18	.444	.561	150	.159	.208
19	.433	.549	200	.138	.181
20	.423	.537	300	.113	.148
21	.413	.526	400	.098	.128
22	.404	.515	500	.088	.115
23	.396	.505	1000	.062	.081