

**LAMPIRAN**

## Lampiran 1

**Perhitungan Randemen Ekstrak**

$$\text{Berat cawan kosong} = 73,7550 \text{ g}$$

$$\text{Berat cawan + Ekstrak} = 139,8493 \text{ g}$$

$$\begin{aligned} \text{Bobot ekstrak} &= (\text{berat cawan+ekstrak}) - \text{Cawan kosong} \\ &= 139,8493 \text{ g} - 73,7550 \text{ g} = 66,0943 \text{ g} \end{aligned}$$

$$\begin{aligned} \text{Randemen Ekstrak} &= \frac{\text{bobot ekstrak}}{\text{bobot total simplisia}} \times 100\% \\ &= \frac{66,0943 \text{ g}}{500 \text{ g}} \times 100\% = 13,218\% \end{aligned}$$

## Lampiran 2

**Perhitungan Parameter Spesifik serta Non Spesifik****– Parameter spesifik****Kadar sari larut air**

$$= \frac{\text{bobot kadar sari} - \text{bobot cawan kosong}}{\text{bobot simplisia}} \times \frac{100}{20} \times 100\%$$

$$= \frac{33,0426 - 32,9847}{2 \text{ g}} \times \frac{100}{20} 100\% = 14,405\%$$

**Kadar sari larut etanol**

$$= \frac{\text{bobot kadar sari} - \text{bobot cawan kosong}}{\text{bobot simplisia}} \times \frac{100}{20} \times 100\%$$

$$= \frac{30,4834 - 30,4038}{2 \text{ g}} \times \frac{100}{20} 100\% = 19,9\%$$

**– Parameter non spesifik****Kadar Air**

$$= \frac{2}{20} \times 100 \% = 10 \%$$

$$= \frac{1,6}{20} \times 100 \% = 8 \%$$

$$\text{Rata-rata kandungan Air} = \frac{10+8}{2} = 9 \%$$

**Kadar abu total**

$$\text{Krus 1} = \text{Berat krus kosong} = 35,360 \text{ g}$$

$$\text{Berat krus} + \text{abu} = 35,492 \text{ g}$$

$$\text{Berat Simplisia} = 1,0005 \text{ g}$$

$$\text{Kadar abu total} = \frac{\text{bobot krus+abu} - \text{bobot krus kosong}}{\text{bobot simplisia}} \times 100 \%$$

$$= \frac{35,492 - 35,360}{1,0005} \times 100 \% = 13,193 \%$$

$$\text{Krus 2} = \text{Berat krus kosong} = 34,260 \text{ g}$$

$$\text{Berat krus} + \text{abu} = 34,392 \text{ g}$$

$$\text{Berat Simplisia} = 1,0088 \text{ g}$$

$$\text{Kadar abu total} = \frac{\text{bobot krus+abu} - \text{bobot krus kosong}}{\text{bobot simplisia}} \times 100 \%$$

$$= \frac{34,392 - 34,260}{1,0088} \times 100 \% = 13,084 \%$$

**Kadar abu tidak larut asam**

$$\text{Krus 1} = \text{Berat krus kosong} = 35,360 \text{ g}$$

$$\text{Berat krus} + \text{abu tidak larut asam} = 35,3730 \text{ g}$$

$$\text{Berat Simplisia} = 1,0005 \text{ g}$$

$$\begin{aligned} \text{Kadar abu total} &= \frac{\text{bobot krus+abu}-\text{bobot krus kosong}}{\text{bobot simplisia}} \times 100 \% \\ &= \frac{35,3730 - 35,360}{1,0005} \times 100 \% = 1,299 \% \end{aligned}$$

$$\text{Krus 2} = \text{Berat krus kosong} = 34,260 \text{ g}$$

$$\text{Berat krus + abu} = 34,2770 \text{ g}$$

$$\text{Berat Simplisia} = 1,0088 \text{ g}$$

$$\begin{aligned} \text{Kadar abu total} &= \frac{\text{bobot krus+abu}-\text{bobot krus kosong}}{\text{bobot simplisia}} \times 100 \% \\ &= \frac{34,2770 - 34,260}{1,0088} \times 100 \% = 1,685 \% \end{aligned}$$

### Susut pengeringan

$$\text{Cawan 1} = \text{Bobot simplisia} = 2,0096 \text{ g}$$

$$\text{Bobot cawan kosong} = 55,0365 \text{ g}$$

$$\text{Bobot cawan + simplisia} = 56,7471 \text{ g}$$

$$\begin{aligned} \text{Bobot senyawa yang hilang} &= \text{bobot cawan + simplisia} - \text{bobot cawan kosong} - \\ &\text{bobot simplisia} \\ &= 56,7471 - 55,0365 - 2,0096 \\ &= 0,299 \text{ g} \end{aligned}$$

$$\text{Kadar susut pengeringan} =$$

$$= \frac{\text{bobot senyawa yang hilang}}{\text{bobot simplisia}} \times 100 \%$$

$$= \frac{0,299}{2,0096} \times 100 \% = 14,87 \%$$

$$\text{Cawan 2} = \text{Bobot simplisia} = 2,0014 \text{ g}$$

$$\text{Bobot cawan kosong} = 60,8749 \text{ g}$$

$$\text{Bobot cawan + simplisia} = 62,5813 \text{ g}$$

$$\begin{aligned} \text{Bobot senyawa yang hilang} &= \text{bobot cawan + simplisia} - \text{bobot cawan kosong} - \\ &\text{bobot simplisia} \\ &= 62,5813 - 60,8749 - 2,0014 \\ &= 0,295 \text{ g} \end{aligned}$$

$$\text{Kadar susut pengeringan} =$$

$$= \frac{\text{bobot senyawa yang hilang}}{\text{bobot simplisia}} \times 100 \%$$

$$= \frac{0,295}{2,0014} \times 100 \% = 14,73 \%$$

$$\text{Rata-rata kandungan susut pengeringan} = \frac{14,87+14,73}{2} = 14,8 \%$$

## Lampiran 3

Uji Statistik ANOVA *one way*

## Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval		Minimum	Maximum	Between- Component Variance	
					for Mean					
					Lower Bound	Upper Bound				
Hari_3	Kontrol Positif	3	2,9333	,05774	,03333	2,7899	3,0768	2,90	3,00	
	Kontrol Negatif	3	3,0000	,00000	,00000	3,0000	3,0000	3,00	3,00	
	Uji 1	3	3,0000	,00000	,00000	3,0000	3,0000	3,00	3,00	
	Uji 2	3	2,9667	,05774	,03333	2,8232	3,1101	2,90	3,00	
	Uji 3	3	2,9333	,05774	,03333	2,7899	3,0768	2,90	3,00	
	Total	15	2,9667	,04880	,01260	2,9396	2,9937	2,90	3,00	
	Model									
Fixed Effects			,04472	,01155	2,9409	2,9924				
Random Effects				,01491	2,9253	3,0081			,00044	
Hari_6	Kontrol Positif	3	2,8333	,11547	,06667	2,5465	3,1202	2,70	2,90	
	Kontrol Negatif	3	2,9333	,05774	,03333	2,7899	3,0768	2,90	3,00	
	Uji 1	3	2,9667	,05774	,03333	2,8232	3,1101	2,90	3,00	
	Uji 2	3	2,8667	,05774	,03333	2,7232	3,0101	2,80	2,90	
	Uji 3	3	2,7667	,05774	,03333	2,6232	2,9101	2,70	2,80	
	Total	15	2,8733	,09612	,02482	2,8201	2,9266	2,70	3,00	
	Model									
Fixed Effects			,07303	,01886	2,8313	2,9153				
Random Effects				,03559	2,7745	2,9721			,00456	
Hari_9	Kontrol Positif	3	2,6333	,05774	,03333	2,4899	2,7768	2,60	2,70	
	Kontrol Negatif	3	2,8000	,10000	,05774	2,5516	3,0484	2,70	2,90	
	Uji 1	3	2,8333	,05774	,03333	2,6899	2,9768	2,80	2,90	
	Uji 2	3	2,7333	,11547	,06667	2,4465	3,0202	2,60	2,80	
	Uji 3	3	2,6000	,00000	,00000	2,6000	2,6000	2,60	2,60	
	Total	15	2,7200	,11464	,02960	2,6565	2,7835	2,60	2,90	
	Model									
Fixed Effects			,07746	,02000	2,6754	2,7646				
Random Effects				,04546	2,5938	2,8462			,00833	

Hari_12	Kontrol Positif	3	2,4333	,05774	,03333	2,2899	2,5768	2,40	2,50	
	Kontrol Negatif	3	2,6000	,00000	,00000	2,6000	2,6000	2,60	2,60	
	Uji 1	3	2,5333	,05774	,03333	2,3899	2,6768	2,50	2,60	
	Uji 2	3	2,5333	,05774	,03333	2,3899	2,6768	2,50	2,60	
	Uji 3	3	2,3333	,05774	,03333	2,1899	2,4768	2,30	2,40	
	Total	1 5	2,4867	,10601	,02737	2,4280	2,5454	2,30	2,60	
	Model	Fixed								
		Effects		,05164	,01333	2,4570	2,5164			
		Random								
		Effects			,04667	2,3571	2,6162			,01000
Hari_15	Kontrol Positif	3	2,1667	,05774	,03333	2,0232	2,3101	2,10	2,20	
	Kontrol Negatif	3	2,4667	,05774	,03333	2,3232	2,6101	2,40	2,50	
	Uji 1	3	2,4000	,00000	,00000	2,4000	2,4000	2,40	2,40	
	Uji 2	3	2,3333	,05774	,03333	2,1899	2,4768	2,30	2,40	
	Uji 3	3	2,1667	,05774	,03333	2,0232	2,3101	2,10	2,20	
	Total	1 5	2,3067	,13345	,03446	2,2328	2,3806	2,10	2,50	
	Model	Fixed								
		Effects		,05164	,01333	2,2770	2,3364			
		Random								
		Effects			,06092	2,1375	2,4758			,01767

### Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Hari_3	8,000	4	10	,004
Hari_6	2,000	4	10	,171
Hari_9	2,933	4	10	,076
Hari_12	4,000	4	10	,034
Hari_15	4,000	4	10	,034

### Robust Tests of Equality of Means<sup>b,c,d,e</sup>

	Statistic <sup>a</sup>	df1	df2	Sig.
Hari_3	Welch	.	.	.
	Brown-Forsythe	.	.	.
Hari_6	Welch	3,836	4	,087
	Brown-Forsythe	3,562	4	,076
Hari_9	Welch	.	.	.
	Brown-Forsythe	.	.	.
Hari_12	Welch	.	.	.
	Brown-Forsythe	.	.	.
Hari_15	Welch	.	.	.

Brown-Forsythe

- a. Asymptotically F distributed.
- b. Robust tests of equality of means cannot be performed for Hari\_3 because at least one group has 0 variance.
- c. Robust tests of equality of means cannot be performed for Hari\_9 because at least one group has 0 variance.
- d. Robust tests of equality of means cannot be performed for Hari\_12 because at least one group has 0 variance.
- e. Robust tests of equality of means cannot be performed for Hari\_15 because at least one group has 0 variance.

## ANOVA

	Sum of Squares	df	Mean Square	F	Sig.	
Hari_3	Between Groups	,013	4	,003	1,667	,233
	Within Groups	,020	10	,002		
	Total	,033	14			
Hari_6	Between Groups	,076	4	,019	3,562	,047
	Within Groups	,053	10	,005		
	Total	,129	14			
Hari_9	Between Groups	,124	4	,031	5,167	,016
	Within Groups	,060	10	,006		
	Total	,184	14			
Hari_12	Between Groups	,131	4	,033	12,250	,001
	Within Groups	,027	10	,003		
	Total	,157	14			
Hari_15	Between Groups	,223	4	,056	20,875	,000
	Within Groups	,027	10	,003		
	Total	,249	14			

## Multiple Comparisons

LSD

Dependent Variable	(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Hari_3	Kontrol Negatif		-,06667	,03651	,098	-,1480	,0147
		Uji 1	-,06667	,03651	,098	-,1480	,0147
		Uji 2	-,03333	,03651	,383	-,1147	,0480
	Kontrol Positif	Uji 3	,00000	,03651	1,000	-,0814	,0814
		Kontrol Positif	,06667	,03651	,098	-,0147	,1480
		Uji 1	,00000	,03651	1,000	-,0814	,0814
	Negatif	Uji 2	,03333	,03651	,383	-,0480	,1147

		Uji 3	,06667	,03651	,098	-,0147	,1480
		Kontrol Positif	,06667	,03651	,098	-,0147	,1480
	Uji 1	Kontrol Negatif	,00000	,03651	1,000	-,0814	,0814
		Uji 2	,03333	,03651	,383	-,0480	,1147
		Uji 3	,06667	,03651	,098	-,0147	,1480
		Kontrol Positif	,03333	,03651	,383	-,0480	,1147
	Uji 2	Kontrol Negatif	-,03333	,03651	,383	-,1147	,0480
		Uji 1	-,03333	,03651	,383	-,1147	,0480
		Uji 3	,03333	,03651	,383	-,0480	,1147
		Kontrol Positif	,00000	,03651	1,000	-,0814	,0814
	Uji 3	Kontrol Negatif	-,06667	,03651	,098	-,1480	,0147
		Uji 1	-,06667	,03651	,098	-,1480	,0147
		Uji 2	-,03333	,03651	,383	-,1147	,0480
		Kontrol Negatif	-,10000	,05963	,124	-,2329	,0329
	Kontrol Positif	Uji 1	-,13333*	,05963	,049	-,2662	-,0005
		Uji 2	-,03333	,05963	,588	-,1662	,0995
		Uji 3	,06667	,05963	,290	-,0662	,1995
		Kontrol Positif	,10000	,05963	,124	-,0329	,2329
	Kontrol Negatif	Uji 1	-,03333	,05963	,588	-,1662	,0995
		Uji 2	,06667	,05963	,290	-,0662	,1995
		Uji 3	,16667*	,05963	,019	,0338	,2995
		Kontrol Positif	,13333*	,05963	,049	,0005	,2662
	Uji 1	Kontrol Negatif	,03333	,05963	,588	-,0995	,1662
		Uji 2	,10000	,05963	,124	-,0329	,2329
		Uji 3	,20000*	,05963	,007	,0671	,3329
		Kontrol Positif	,03333	,05963	,588	-,0995	,1662
	Uji 2	Kontrol Negatif	-,06667	,05963	,290	-,1995	,0662
		Uji 1	-,10000	,05963	,124	-,2329	,0329
		Uji 3	,10000	,05963	,124	-,0329	,2329
		Kontrol Positif	-,06667	,05963	,290	-,1995	,0662
	Uji 3	Kontrol Negatif	-,16667*	,05963	,019	-,2995	-,0338
		Uji 1	-,20000*	,05963	,007	-,3329	-,0671
		Uji 2	-,10000	,05963	,124	-,2329	,0329
		Kontrol Negatif	-,16667*	,06325	,025	-,3076	-,0257
	Kontrol Positif	Uji 1	-,20000*	,06325	,010	-,3409	-,0591
		Uji 2	-,10000	,06325	,145	-,2409	,0409
		Uji 3	,03333	,06325	,610	-,1076	,1743
	Hari_9	Kontrol Positif	,16667*	,06325	,025	,0257	,3076
	Kontrol Negatif	Uji 1	-,03333	,06325	,610	-,1743	,1076
		Uji 2	,06667	,06325	,317	-,0743	,2076
		Uji 3	,20000*	,06325	,010	,0591	,3409
	Uji 1	Kontrol Positif	,20000*	,06325	,010	,0591	,3409

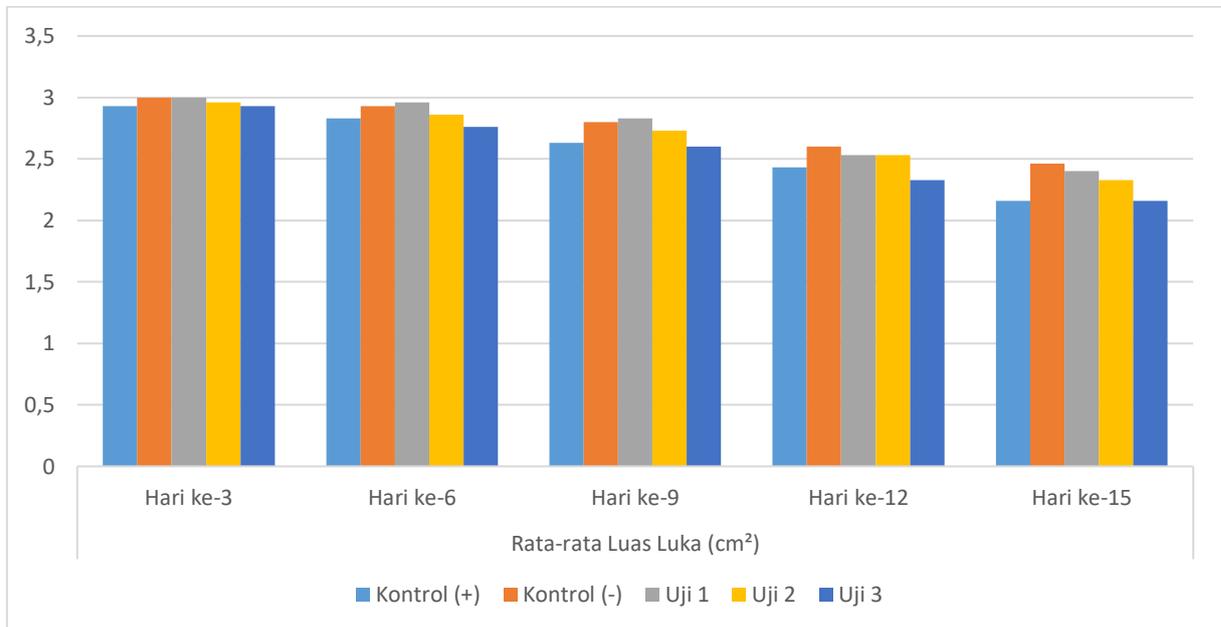
		Kontrol Negatif	,03333	,06325	,610	-,1076	,1743	
		Uji 2	,10000	,06325	,145	-,0409	,2409	
		Uji 3	,23333*	,06325	,004	,0924	,3743	
		Kontrol Positif	,10000	,06325	,145	-,0409	,2409	
	Uji 2	Kontrol Negatif	-,06667	,06325	,317	-,2076	,0743	
		Uji 1	-,10000	,06325	,145	-,2409	,0409	
		Uji 3	,13333	,06325	,061	-,0076	,2743	
		Kontrol Positif	-,03333	,06325	,610	-,1743	,1076	
	Uji 3	Kontrol Negatif	-,20000*	,06325	,010	-,3409	-,0591	
		Uji 1	-,23333*	,06325	,004	-,3743	-,0924	
		Uji 2	-,13333	,06325	,061	-,2743	,0076	
		Kontrol Negatif	-,16667*	,04216	,003	-,2606	-,0727	
	Kontrol Positif	Uji 1	-,10000*	,04216	,039	-,1939	-,0061	
		Uji 2	-,10000*	,04216	,039	-,1939	-,0061	
		Uji 3	,10000*	,04216	,039	,0061	,1939	
		Kontrol Positif	,16667*	,04216	,003	,0727	,2606	
	Kontrol	Uji 1	,06667	,04216	,145	-,0273	,1606	
	Negatif	Uji 2	,06667	,04216	,145	-,0273	,1606	
		Uji 3	,26667*	,04216	,000	,1727	,3606	
		Kontrol Positif	,10000*	,04216	,039	,0061	,1939	
	Uji 1	Kontrol Negatif	-,06667	,04216	,145	-,1606	,0273	
		Uji 2	,00000	,04216	1,000	-,0939	,0939	
		Uji 3	,20000*	,04216	,001	,1061	,2939	
		Kontrol Positif	,10000*	,04216	,039	,0061	,1939	
	Uji 2	Kontrol Negatif	-,06667	,04216	,145	-,1606	,0273	
		Uji 1	,00000	,04216	1,000	-,0939	,0939	
		Uji 3	,20000*	,04216	,001	,1061	,2939	
		Kontrol Positif	-,10000*	,04216	,039	-,1939	-,0061	
	Uji 3	Kontrol Negatif	-,26667*	,04216	,000	-,3606	-,1727	
		Uji 1	-,20000*	,04216	,001	-,2939	-,1061	
		Uji 2	-,20000*	,04216	,001	-,2939	-,1061	
		Kontrol Negatif	-,30000*	,04216	,000	-,3939	-,2061	
	Kontrol Positif	Uji 1	-,23333*	,04216	,000	-,3273	-,1394	
		Uji 2	-,16667*	,04216	,003	-,2606	-,0727	
		Uji 3	,00000	,04216	1,000	-,0939	,0939	
		Kontrol Positif	,30000*	,04216	,000	,2061	,3939	
	Hari_15	Kontrol	Uji 1	,06667	,04216	,145	-,0273	,1606
		Negatif	Uji 2	,13333*	,04216	,010	,0394	,2273
		Uji 3	,30000*	,04216	,000	,2061	,3939	
		Kontrol Positif	,23333*	,04216	,000	,1394	,3273	
	Uji 1	Kontrol Negatif	-,06667	,04216	,145	-,1606	,0273	
		Uji 2	,06667	,04216	,145	-,0273	,1606	

	Uji 3	,23333*	,04216	,000	,1394	,3273
	Kontrol Positif	,16667*	,04216	,003	,0727	,2606
Uji 2	Kontrol Negatif	-,13333*	,04216	,010	-,2273	-,0394
	Uji 1	-,06667	,04216	,145	-,1606	,0273
	Uji 3	,16667*	,04216	,003	,0727	,2606
	Kontrol Positif	,00000	,04216	1,000	-,0939	,0939
Uji 3	Kontrol Negatif	-,30000*	,04216	,000	-,3939	-,2061
	Uji 1	-,23333*	,04216	,000	-,3273	-,1394
	Uji 2	-,16667*	,04216	,003	-,2606	-,0727

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

Lampiran 4

**Grafik Rata-Rata Penyusutan Diameter Luka**



Lampiran 5

**Gambar efek Formulasi Gel Ekstrak**



Lampiran 6



**Gambar Obat Anestesi**

Lampiran 7

