



LAMPIRAN 2  
DOKUMENTASI KEGIATAN



(a)



(b)



(c)



(d)

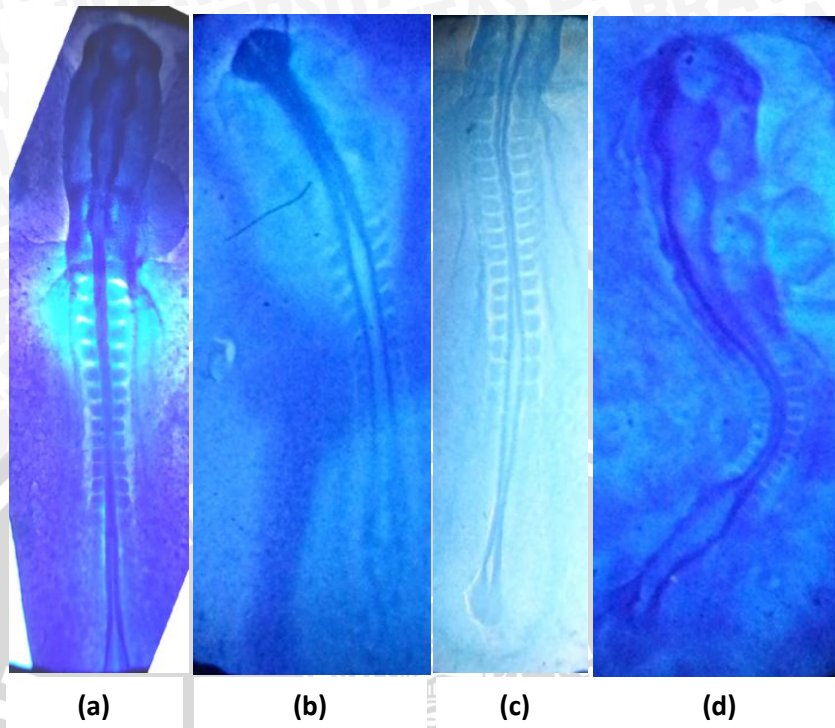


(e)

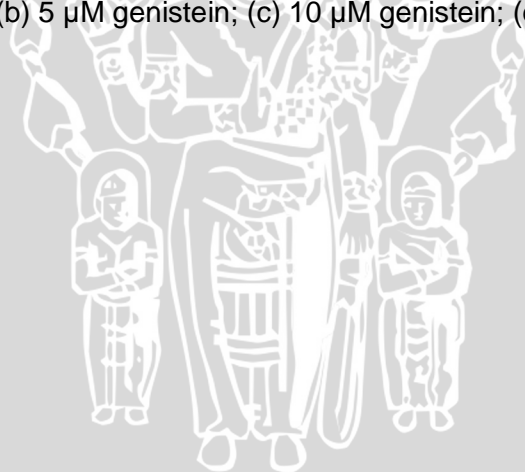


(f)

Gambar 1 (a) Persiapan zat aktif genistein; (b) Penyuntikkan telur; (c) Inkubasi telur (d) Pengambilan blastodisk; (e) Telur ayam mati; (f) Telur ayam hidup



Gambar 2. Foto embrio ayam dengan Pewarnaan Toluidine Blue dengan kelompok (a) Kontrol; (b) 5  $\mu$ M genistein; (c) 10  $\mu$ M genistein; (d) 20  $\mu$ M genistein



**LAMPIRAN 3**  
**DATA STATISTIK**  
**UJI NORMALITAS, UJI VARIAN DAN UJI KRUSKAL-WALLIS**  
**PADA PANJANG NEURAL TUBE**

**Tests of Normality**

Perlakuan n	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Panjang Neural Tube Kontrol	.118	9	.200*	.973	9	.918
5 uM	.169	9	.200*	.937	9	.548
10 uM	.237	9	.154	.886	9	.180
20 uM	.213	9	.200*	.885	9	.176

a. Lilliefors Significance Correction

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

**Test of Homogeneity of Variances**

Panjang Neural Tube

Levene Statistic	df1	df2	Sig.
4.683	3	32	.008

**Kruskal-Wallis Test**

**Ranks**

Perlakuan n	N	Mean Rank
Panjang Neural Tube Kontrol	9	18.78
5 uM	9	16.11
10 uM	9	20.67
20 uM	9	18.44
Total	36	

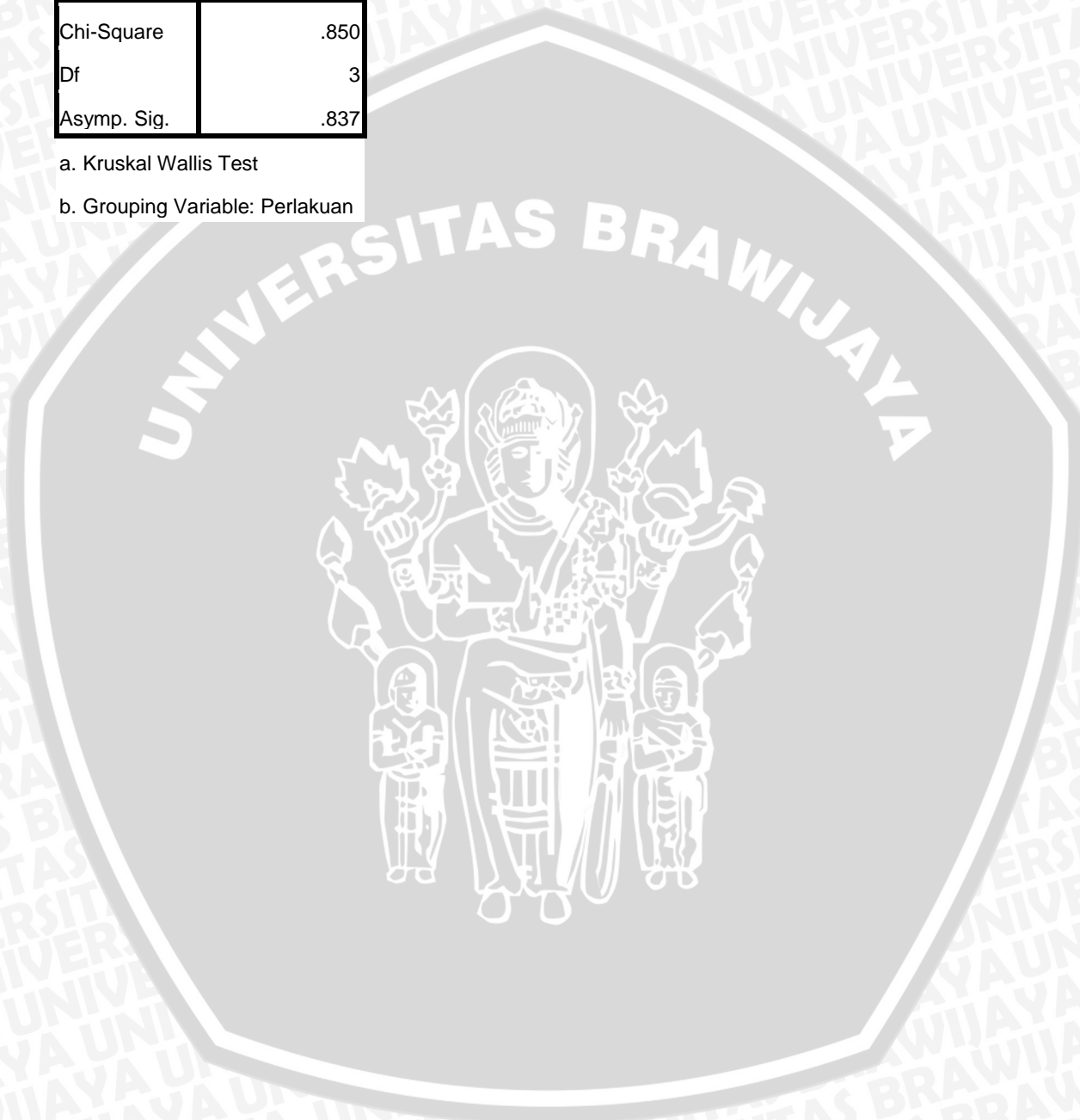


Test Statistics<sup>a,b</sup>

	Panjang Neural Tube
Chi-Square	.850
Df	3
Asymp. Sig.	.837

a. Kruskal Wallis Test

b. Grouping Variable: Perlakuan



**LAMPIRAN 4**  
**PERHITUNGAN EFFECT SIZE**  
**PADA PANJANG NEURAL TUBE**

Rumus *Cohen's d type effect size* :

$$d = \frac{\text{Rerata Kelompok Kontrol} - \text{Rerata Kelompok Perlakuan}}{\text{Standar Deviasi Kelompok Kontrol}}$$

Dosis 5  $\mu\text{M}$  genistein :

$$d = \frac{4990 - 4633,73}{578.81} = 0.55$$

Dosis 10  $\mu\text{M}$  genistein :

$$d = \frac{4990 - 5176.67}{578.81} = 0.32$$

Dosis 20  $\mu\text{M}$  genistein :

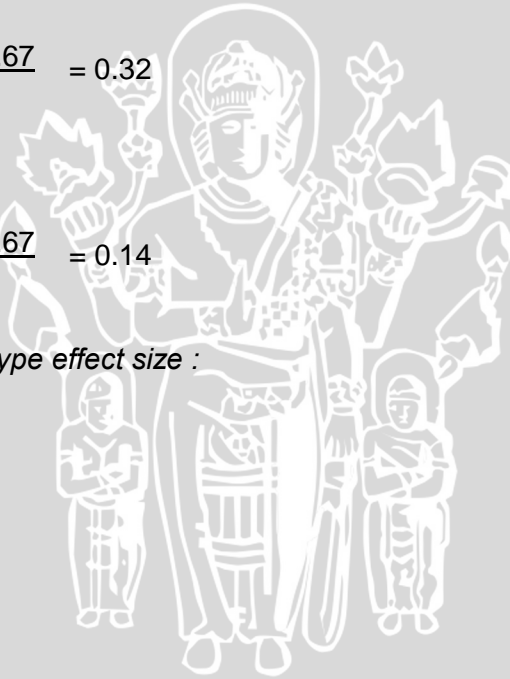
$$d = \frac{4990 - 4906.67}{578.81} = 0.14$$

Interpretasi *Cohen's d type effect size* :

0,2 – 0,5 : kecil

0,5 – 0,8 : sedang

> 0,8 : besar



**LAMPIRAN 5**  
**DATA STATISTIK UJI CROSSTABS**  
**DENGAN ANALISIS FISHER**  
**PADA NEURAL TUBE**

**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Perlakuan_2 * Neural Tube	36	100.0%	0	.0%	36	100.0%

**Perlakuan\_2 \* Neural Tube Crosstabulation**

Expected Count		Neural Tube		
		Normal	Abnormal	Total
Perlakuan_2	Kontrol	5.2	3.8	9.0
	Perlakuan Genistein	15.8	11.2	27.0
Total		21.0	15.0	36.0

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.867 <sup>a</sup>	1	.172		
Continuity Correction <sup>b</sup>	.952	1	.329		
Likelihood Ratio	1.974	1	.160		
Fisher's Exact Test				.252	.165
Linear-by-Linear Association	1.815	1	.178		
N of Valid Cases <sup>b</sup>	36				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 3,75.

b. Computed only for a 2x2 table



**LAMPIRAN 6**  
**DATA STATISTIK UJI CROSSTABS**  
**DENGAN ANALISIS FISHER**  
**PADA NEUROPORE ANTERIOR**

**Case Processing Summary**

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Perlakuan_2 * Penutupan Neuropore Anterior	36	100.0%	0	.0%	36	100.0%

**Perlakuan\_2 \* Penutupan Neuropore Anterior Crosstabulation**

Expected Count				
		Penutupan Neuropore Anterior		
		Tertutup	Terbuka	Total
Perlakuan_2	Kontrol	6.8	2.2	9.0
	Perlakuan Genistein	20.2	6.8	27.0
Total		27.0	9.0	36.0

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	1.235 <sup>a</sup>	1	.267		
Continuity Correction <sup>b</sup>	.444	1	.505		
Likelihood Ratio	1.394	1	.238		
Fisher's Exact Test				.396	.262
Linear-by-Linear Association	1.200	1	.273		
N of Valid Cases <sup>b</sup>	36				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 2,25.

b. Computed only for a 2x2 table





**LAMPIRAN 7**  
**DATA STATISTIK**  
**UJI NORMALITAS DAN UJI KRUSKAL-WALLIS**  
**PADA LEBAR NEUROPORE POSTERIOR**

**Tests of Normality**

	Perlakuan	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Lebar	Kontrol	.288	9	.030	.875	9	.138
Neuropore	5 uM	.161	9	.200*	.982	9	.973
Posterior	10 uM	.321	9	.008	.751	9	.006
	20 uM	.327	9	.006	.693	9	.001

a. Lilliefors Significance Correction

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

**Kruskal-Wallis Test**

**Ranks**

	Perlakuan	N	Mean Rank
	n		
Lebar Neuropore Posterior	Kontrol	9	23.61
	5 uM	9	20.94
	10 uM	9	15.44
	20 uM	9	14.00
	Total	36	

**Test Statistics<sup>a,b</sup>**

	Lebar Neuropore Posterior
Chi-Square	5.065
df	3
Asymp. Sig.	.167

a. Kruskal Wallis Test

b. Grouping Variable: Perlakuan



**LAMPIRAN 8**  
**DATA STATISTIK**  
**UJI NORMALITAS, UJI VARIAN DAN UJI KRUSKAL-WALLIS**  
**PADA JUMLAH SOMIT**

**Tests of Normality**

Perlakuan	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Jumlah Somit Kontrol	.209	9	.200*	.910	9	.317
5 uM	.162	9	.200*	.924	9	.426
10 uM	.209	9	.200*	.896	9	.231
20 uM	.156	9	.200*	.938	9	.557

a. Lilliefors Significance Correction

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

**Test of Homogeneity of Variances**

Jumlah Somit

Levene Statistic	df1	df2	Sig.
4.459	3	32	.010

**Kruskal-Wallis Test**

**Ranks**

Perlakua	n	N	Mean Rank
Jumlah Somit Kontrol	9	36	15.28
5 uM	9	36	12.78
10 uM	9	36	25.67
20 uM	9	36	20.28
Total	36	36	



Test Statistics<sup>a,b</sup>

	Jumlah Somit
Chi-Square	8.061
Df	3
Asymp. Sig.	.045

a. Kruskal Wallis Test

b. Grouping Variable: Perlakuan



**LAMPIRAN 9**  
**DATA STATISTIK UJI POST-HOC**  
**DENGAN ANALISIS MANN-WHITNEY**  
**PADA JUMLAH SOMIT**

**Mann-Whitney Test**

		Ranks		
Perlakuan	n	N	Mean Rank	Sum of Ranks
Jumlah Somit	Kontrol	9	8.00	72.00
	20 uM	9	11.00	99.00
	Total	18		

Test Statistics <sup>b</sup>	
	Jumlah Somit
Mann-Whitney U	27.000
Wilcoxon W	72.000
Z	-1.216
Asymp. Sig. (2-tailed)	.224
Exact Sig. [2*(1-tailed Sig.)]	.258 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: Perlakuan

**Mann-Whitney Test**

		Ranks		
Perlakuan	n	N	Mean Rank	Sum of Ranks
Jumlah Somit	Kontrol	9	6.83	61.50
	10 uM	9	12.17	109.50
	Total	18		



**Test Statistics<sup>b</sup>**

	Jumlah Somit
Mann-Whitney U	16.500
Wilcoxon W	61.500
Z	-2.141
Asymp. Sig. (2-tailed)	.032
Exact Sig. [2*(1-tailed Sig.)]	.031 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: Perlakuan

**Mann-Whitney Test**

**Ranks**

Perlakuan	n	N	Mean Rank	Sum of Ranks
Jumlah Somit	Kontrol	9	10.44	94.00
	5 uM	9	8.56	77.00
	Total	18		

**Test Statistics<sup>b</sup>**

	Jumlah Somit
Mann-Whitney U	32.000
Wilcoxon W	77.000
Z	-.758
Asymp. Sig. (2-tailed)	.448
Exact Sig. [2*(1-tailed Sig.)]	.489 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: Perlakuan

