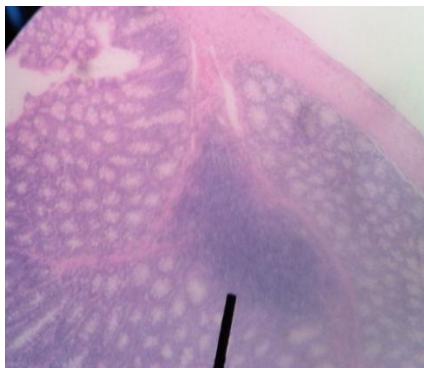


## Lampiran 1

### Histopatologis Kolon Mencit Kelompok Perlakuan Kontrol Negatif



Mukosa Tampak Normal



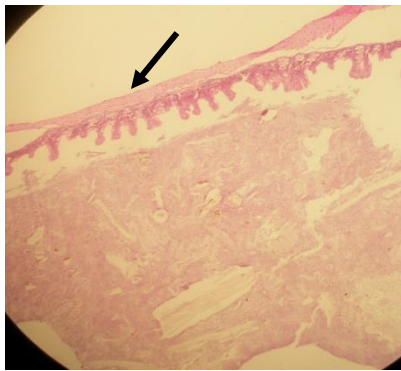
Nodus Limfatikus/ *Plaque Peyer's*



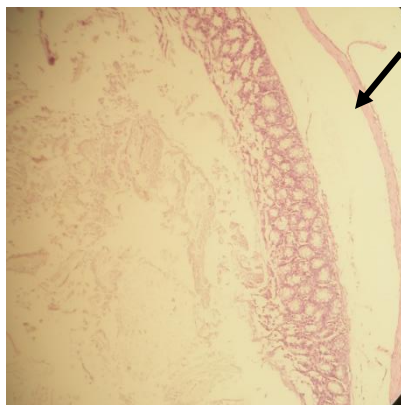
Mukosa dengan Sel Goblet

## Lampiran 2

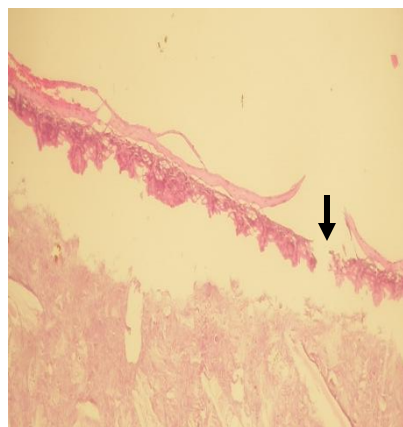
### Histopatologis Kolon Mencit Kelompok Perlakuan Kontrol DSS



Dinding sangat tipis



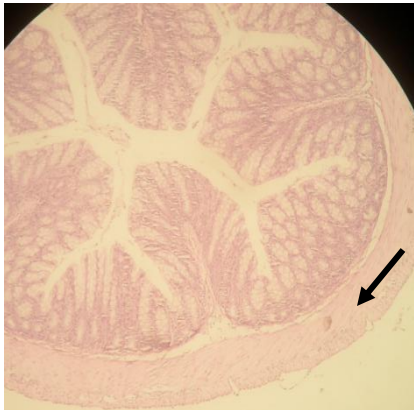
Mukosa Tipis dengan Sel Goblet



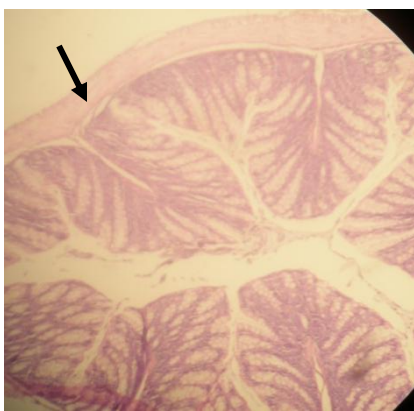
Mukosa mengalami Ulserasi

### Lampiran 3

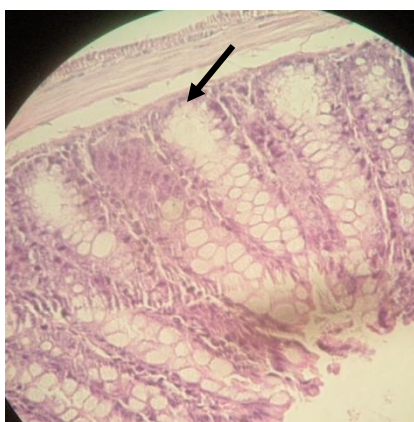
#### Histopatologis Kolon Mencit Kelompok Perlakuan Kontrol Brokoli



Dinding tebal, mukosa normal



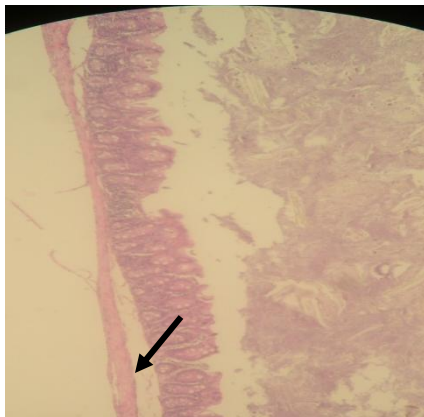
Dinding tebal, mukosa normal



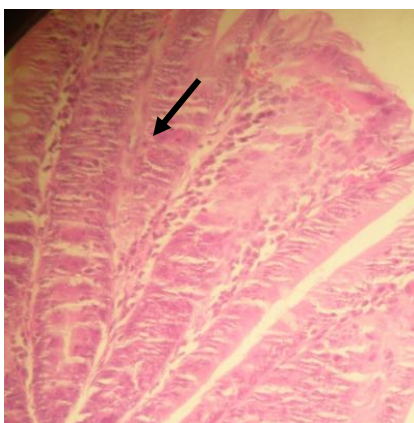
Mukosa normal dengan sel goblet

**Lampiran 4**

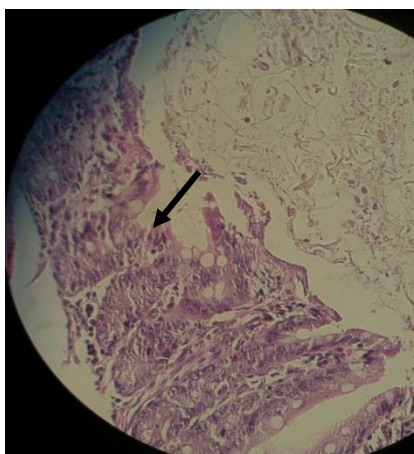
**Histopatologis Kolon Mencit Kelompok Perlakuan 1**



Dinding tipis



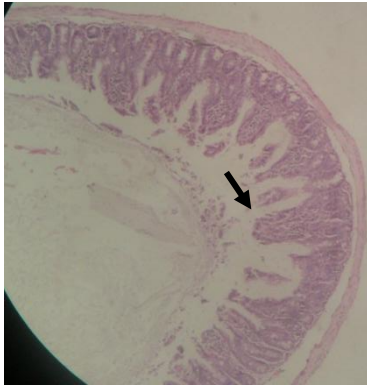
Hiperproliferasi epitel



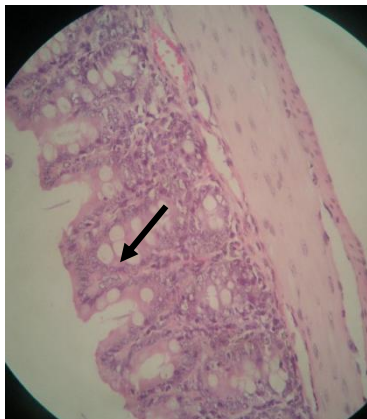
Hilangnya Kripta Ringan

## Lampiran 5

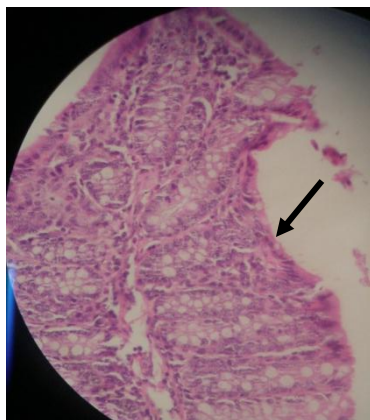
### Histopatologis Kolon Mencit Kelompok Perlakuan 2



Hiperproliferasi epitel



Dinding tebal , mukosa normal



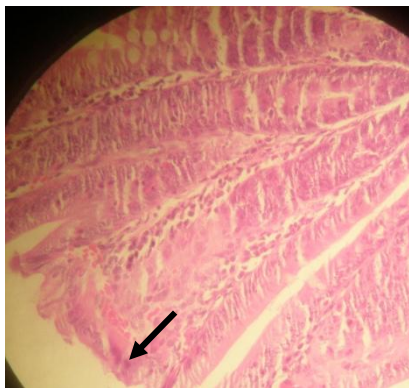
Hilangnya Kripta sedang

**Lampiran 6**

**Histopatologis Kolon Mencit Kelompok Perlakuan 3**



Dinding tebal, mukosa normal



Hiperproliferasi epitel



Dinding tebal, mukosa normal

Lampiran 7  
**Kruskal-Wallis Test**

**Proksimal 10x10**

**Ranks**

	perlakuan	N	Mean Rank
hasil	KN	5	12
	DSS	5	24
	B	5	12
	P1	5	21
	P2	5	12
	P3	5	14
	Total	30	

**Test Statistics(a,b)**

	hasil
Chi-Square	15.156
df	5.000
Asymp. Sig.	0.010

**Proksimal 10x40**

**Ranks**

	perlakuan	N	Mean Rank
hasil	KN	5	8
	DSS	5	23
	B	5	14
	P1	5	21
	P2	5	15
	P3	5	13
	Total	30	

**Test Statistics(a,b)**

	hasil
Chi-Square	11.141
df	5.000
Asymp. Sig.	0.049

**Medial 10x10**

**Ranks**

	perlakuan	N	Mean Rank
hasil	KN	5	11
	DSS	5	28
	B	5	11
	P1	5	13
	P2	5	16
	P3	5	16
	Total	30	

**Test Statistics(a,b)**

	hasil
Chi-Square	19.601
df	5.000
Asymp. Sig.	0.001

**Medial 10x 40**

<b>Ranks</b>			
	perlakuan	N	Mean Rank
hasil	KN	5	10
	DSS	5	28
	B	5	12
	P1	5	12
	P2	5	15
	P3	5	17
	Total	30	

<b>Test Statistics(a,b)</b>	
	hasil
Chi-Square	18.692
df	5.000
Asymp. Sig.	0.002

#### **Distal 10x10**

<b>Ranks</b>			
	perlakuan	N	Mean Rank
hasil	KN	5	12
	DSS	5	28
	B	5	12
	P1	5	12
	P2	5	17
	P3	5	12
	Total	30	

<b>Test Statistics(a,b)</b>	
	hasil
Chi-Square	24.392
df	5.000
Asymp. Sig.	0.000

#### **Distal 10x40**

<b>Ranks</b>			
	perlakuan	N	Mean Rank
hasil	KN	5	11
	DSS	5	28
	B	5	11
	P1	5	11
	P2	5	21
	P3	5	11
	Total	30	

<b>Test Statistics(a,b)</b>	
	hasil
Chi-Square	26.359
df	5.000
Asymp. Sig.	0.000



**LAMPIRAN 8. Uji STATISTIK MANN-WHITNEY**

<b>Kolon</b>	<b>Perlakuan</b>	<b>Pemb</b>	<b>Mann-Whitney U</b>	<b>Asymp. Sign (2-tailed)</b>	<b>Perlakuan</b>	<b>Pemb</b>	<b>Mann-Whitney U</b>	<b>Asymp Sign (2-tailed)</b>
<b>Proksimal</b>	DSS-B	10X10	2.500	0.017	DSS-B	10X40	4.000	0.065
	DSS-PI		10.500	0.650	DSS-PI		10.500	0.655
	DSS-P2		2.500	0.017	DSS-P2		5.500	0.125
	DSS-P3		4.500	0.065	DSS-P3		5.000	0.095
	KN-DSS		2.500	0.017	KN-DSS		2.500	0.017
	KN-B		12.500	1.000	KN-B		5.000	0.050
	KN-P1		5.000	0.053	KN-P1		2.500	0.018
	KN-P2		12.500	1.000	KN-P2		5.000	0.053
	KN-P3		10.000	0.317	KN-P3		7.500	0.136
	B-P1		5.000	0.053	B-P1		5.500	0.125
	B-P2		12.500	1.000	B-P2		11.000	0.729
	B-P3		10.000	0.317	B-P3		11.000	0.817
	P1-P2		5.000	0.053	P1-P2		7.000	0.233
	P1-P3		7.000	0.189	P1-P3		6.000	0.154
P2-P3		10.000	0.317	P2-P3		10.500	0.650	
<b>Medial</b>	DSS-B	10X10	-	0.005	DSS-B	10X40	-	0.005
	DSS-PI		-	0.007	DSS-PI		-	0.005
	DSS-P2		-	0.008	DSS-P2		-	0.006
	DSS-P3		-	0.008	DSS-P3		-	0.007
	KN-DSS		-	0.005	KN-DSS		-	0.004
	KN-B		12.500	1.000	KN-B		10.000	0.317
	KN-P1		10.000	0.317	KN-P1		10.000	0.317
	KN-P2		7.500	0.134	KN-P2		7.500	0.134
	KN-P3		7.500	0.134	KN-P3		5.000	0.053
	B-P1		10.000	0.317	B-P1		12.500	1.000
	B-P2		7.500	0.134	B-P2		9.000	0.366
	B-P3		7.500	0.134	B-P3		6.500	0.155
	P1-P2		10.000	0.317	P1-P2		9.000	0.366
	P1-P3		10.000	0.317	P1-P3		6.500	0.155
P2-P3		12.500	1.000	P2-P3		11.000	0.729	
<b>Distal</b>	DSS-B	10X10	-	0.005	DSS-B	10X40	-	0.004
	DSS-PI		-	0.005	DSS-PI		-	0.004
	DSS-P2		-	0.007	DSS-P2		-	0.007
	DSS-P3		-	0.005	DSS-P3		-	0.004
	KN-DSS		-	0.005	KN-DSS		-	0.004
	KN-B		12.500	1.000	KN-B		12.500	1.000
	KN-P1		12.500	1.000	KN-P1		12.500	1.000
	KN-P2		7.500	0.136	KN-P2		2.500	0.018
	KN-P3		12.500	1.000	KN-P3		12.500	1.000
	B-P1		12.500	1.000	B-P1		12.500	1.000
	B-P2		7.500	0.136	B-P2		2.500	0.018
	B-P3		12.500	1.000	B-P3		12.500	1.000
	P1-P2		7.500	0.136	P1-P2		2.500	0.018
	P1-P3		12.500	1.000	P1-P3		12.500	1.000
P2-P3		7.500	0.136	P2-P3		2.500	0.018	

LAMPIRAN 9.

Skoring Histopatologis Kolon

KONTROL NEGATIF 10x 10

lapang pandang	mencit														
	1			2			3			4			5		
	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
rata-rata	0	0	0	0	0	0	0	0	0	0	0	0.3	0	0	0
st dev	0	0	0	0	0	0	0	0	0	0	0	0.483046	0	0	0

KONTROL NEGATIF 10X 40

lapang pandang	mencit														
	1			2			3			4			5		
	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0
8	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0
9	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0
10	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0
rata-rata	0	0	0.4	0	0	0.3	0	0	0	0	0	0.4	0	0	0
st dev	0	0	0.5163978	0	0	0.4830459	0	0	0	0	0	0.5163978	0	0	0

Kontrol DSS 10x10

lapang pandang	mencit														
	1			2			3			4			5		
	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist
1	0	2	3	0	3	3	1	3	3	0	1	1	1	3	3
2	0	3	3	0	3	3	1	4	4	0	1	2	2	4	3
3	0	3	4	0	3	4	1	4	4	0	1	2	2	4	3
4	0	3	4	0	3	4	1	4	4	1	1	2	2	4	3
5	1	3	4	0	3	4	1	4	4	1	2	2	2	4	3
6	1	3	4	0	4	4	1	4	4	1	2	2	2	4	4
7	1	4	4	0	4	4	1	4	4	1	2	2	2	4	4
8	1	4	5	0	4	4	1	5	4	1	2	2	3	4	5
9	1	4	5	0	4	5	2	5	4	1	2	3	3	4	6
10	2	4	5	1	5	6	2	6	5	2	3	3	3	4	6
rata-rata	0.7	3.3	4.1	0.1	3.6	4.1	1.2	4.3	4	0.8	1.7	2.1	2.2	3.9	4
st dev	0.674949	0.674949	0.737865	0.316228	0.699206	0.875595	0.421637	0.823273	0.471405	0.632456	0.674949	0.567646	0.632456	0.316228	1.247219

Kontrol DSS 10x40

lapang pandang	mencit														
	1			2			3			4			5		
	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist
1	0	3	3	0	4	3	1	4	3	0	1	1	1	3	4
2	0	3	3	0	4	3	1	4	4	1	1	1	2	3	4
3	0	3	4	0	4	4	1	4	4	1	2	2	2	4	4
4	0	4	4	0	4	4	1	4	4	1	2	2	2	4	4
5	1	4	4	0	4	4	1	4	4	1	2	2	3	4	4
6	1	4	4	0	4	4	1	4	4	1	2	2	3	4	4
7	1	4	4	0	4	4	1	4	4	1	2	2	3	4	5
8	1	4	4	0	4	4	1	5	4	1	2	2	3	4	5
9	1	4	5	1	5	4	1	6	4	1	2	2	3	4	6
10	2	4	5	2	5	5	2	6	5	1	2	2	3	4	6
rata-rata	0.7	3.7	4	0.3	4.2	3.9	1.1	4.5	4	0.9	1.8	1.8	2.5	3.8	4.6
st dev	0.674949	0.483046	0.666667	0.674949	0.421637	0.567646	0.316228	0.849837	0.471405	0.316228	0.421637	0.421637	0.707107	0.421637	0.843274

KONTROL BROKOLI 10 x 10

lapang pandang	mencit														
	1			2			3			4			5		
	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
8	1	0	0	0	0	0	0	0	0	1	1	0	1	0	0
9	1	0	0	0	0	0	1	0	0	1	1	0	1	0	0
10	1	0	0	1	1	1	1	0	0	1	1	1	1	0	1
rata-rata	0.3	0	0	0.1	0.1	0.1	0.2	0	0	0.3	0.3	0.1	0.4	0	0.1
st dev	0.483046	0	0	0.316228	0.316228	0.316228	0.421637	0	0	0.483046	0.483046	0.316228	0.516398	0	0.316228

KONTROL BROKOLI 10X40

lapang pandang	mencit														
	1			2			3			4			5		
	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0
7	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0
8	1	0	0	1	0	0	1	0	1	1	1	0	1	0	0
9	1	1	1	1	0	0	1	0	1	1	1	1	1	0	1
10	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1
rata-rata	0.5	0.2	0.2	0.3	0.1	0.1	0.5	0	0.3	0.3	0.3	0.2	0.5	0	0.2
st dev	0.527046	0.421637	0.421637	0.483046	0.316228	0.316228	0.527046	0	0.483046	0.483046	0.483046	0.421637	0.527046	0	0.421637

Perlakuan 1 10 x 10

lapang pandang	mencit														
	1			2			3			4			5		
	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	1	0	0	2	0	0	0	0	0	0	0	0	1	0	0
4	1	0	0	2	0	0	0	0	0	0	0	0	1	0	0
5	1	0	0	2	0	0	0	0	0	0	0	0	1	0	0
6	1	0	0	2	0	0	0	0	0	0	0	0	1	1	0
7	1	0	0	2	0	0	0	0	0	1	0	0	1	1	0
8	1	0	0	2	1	0	2	0	0	1	1	1	1	1	0
9	2	1	1	3	1	1	2	1	1	1	1	1	1	1	0
10	2	1	1	3	1	2	2	1	1	1	1	2	1	2	1
rata-rata	1	0.2	0.2	1.8	0.3	0.3	0.6	0.2	0.2	0.4	0.3	0.4	0.8	0.6	0.1
st dev	0.666667	0.421637	0.421637	1.032796	0.483046	0.674949	0.966092	0.421637	0.421637	0.516398	0.483046	0.699206	0.421637	0.699206	0.316228

Perlakuan 1 10x40

lapang pandang	mencit														
	1			2			3			4			5		
	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
5	1	0	0	2	0	0	0	0	0	0	0	0	1	0	0
6	1	0	0	2	0	0	0	0	0	1	1	0	1	0	0
7	1	0	0	2	0	0	1	0	1	1	1	0	1	0	0
8	1	1	1	2	0	0	1	1	1	1	1	1	1	1	1
9	2	1	1	2	0	2	1	1	1	1	1	1	1	1	1
10	2	1	1	2	1	2	1	1	1	1	1	1	1	1	1
rata-rata	0.8	0.3	0.3	1.8	0.1	0.4	0.4	0.3	0.4	0.5	0.5	0.3	0.6	0.3	0.3
st dev	0.788811	0.483046	0.483046	0.632456	0.316228	0.843274	0.516398	0.483046	0.516398	0.527046	0.527046	0.483046	0.516398	0.483046	0.483046

Perlakuan 2 10x10

lapang pandang	mencit														
	1			2			3			4			5		
	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
6	0	1	1	0	0	0	0	0	0	0	0	1	0	1	0
7	0	1	1	0	0	1	0	0	0	0	0	1	1	1	1
8	1	1	1	1	0	1	1	0	0	0	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1
rata-rata	0.3	0.5	0.6	0.3	0.2	0.4	0.3	0.2	0.2	0.2	0.3	0.5	0.5	0.5	0.4
st dev	0.483046	0.527046	0.516398	0.483046	0.421637	0.516398	0.483046	0.421637	0.421637	0.421637	0.483046	0.527046	0.707107	0.527046	0.516398

Perlakuan 2 10x40

lapang pandang	mencit														
	1			2			3			4			5		
	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	1	1	0	0	1	1	0	0	0	0	0	1	0	0	0
6	1	1	1	0	1	1	1	0	1	0	0	1	1	0	0
7	1	1	1	0	1	1	1	0	1	0	0	1	1	0	0
8	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1
9	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	2	1	1	2	1	1	2	1	1
rata-rata	0.6	0.6	0.5	0.3	0.6	0.6	0.7	0.2	0.5	0.3	0.3	0.6	0.6	0.3	0.3
st dev	0.516398	0.516398	0.527046	0.483046	0.516398	0.516398	0.823273	0.421637	0.527046	0.674949	0.483046	0.516398	0.699206	0.483046	0.483046

Perlakuan 3 10x10

lapang pandang	mencit														
	1			2			3			4			5		
	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
6	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0
7	0	1	0	0	0	0	1	0	0	1	1	0	1	0	0
8	1	1	0	0	1	0	1	0	0	1	1	0	1	0	0
9	1	1	0	1	1	0	1	0	0	1	1	1	1	1	1
10	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1
rata-rata	0.3	0.5	0	0.2	0.3	0.1	0.4	0	0.1	0.4	0.5	0.2	0.8	0.2	0.2
st dev	0.483046	0.527046	0	0.421637	0.483046	0.316228	0.516398	0	0.316228	0.516398	0.527046	0.421637	0.421637	0.421637	0.421637

Perlakuan 3 10x40

lapang pandang	mencit														
	1			2			3			4			5		
	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist	prox	med	dist
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
6	1	1	0	0	1	0	0	0	0	1	1	0	1	0	0
7	1	1	0	1	1	0	1	0	0	1	1	0	1	0	0
8	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
rata-rata	0.5	0.6	0.3	0.4	0.5	0.2	0.4	0.3	0.2	0.5	0.5	0.3	0.6	0.3	0.3
st dev	0.527046	0.516398	0.483046	0.516398	0.527046	0.421637	0.516398	0.483046	0.421637	0.527046	0.527046	0.483046	0.516398	0.483046	0.483046

## Lampiran 10

### Perhitungan Dosis

- **Dosis Brokoli**

Dosis manusia = 500 g

Dosis Untuk mencit 20 g =  $500 \times 0,0026 = 1,3 \text{ g} \approx 1,5 \text{ g}$

1,5 gr = 0,5 cc Sari Kukusan Brokoli

Perlakuan 1 = 1,5 gr = 0.5 cc

Perlakuan 2 = 3,0 gr = 1,0 cc

Perlakuan 3 = 6,0 gr = 1,5 cc

- **DSS**

Serbuk DSS yang digunakan adalah 2,5 g dilarutkan dengan akuades 100 ml sehingga didapatkan larutan DSS 2,5 %. Larutan ini diberikan pada mencit melalui air minum.



## Lampiran 11

### Alat dan Bahan yang Digunakan



Brokoli



Kandang Mencit



Penimbangan Brokoli



Pengukusan dengan Alumunium foil



Sari Kukusan brokoli



Pemberian Sari Kukusan Brokoli



Persiapan Pembedahan



Pembedahan Organ

## Lampiran 12

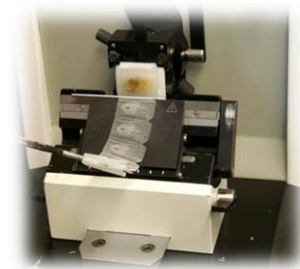
### Pembuatan Blok Parafin dan Pewarnaan Preparat



Inkubator



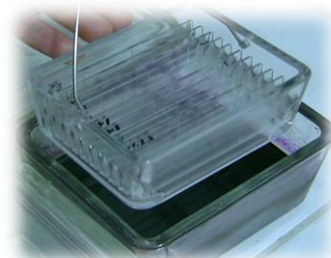
Blok Parafin



Microtom



Zat- zat pewarnaan HE



Pewarnaan Preparat

## RIWAYAT HIDUP

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  - SD Patra Dharma Tarakan (1995-2001)
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