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LAMPIRAN

Lampiran 1. Hasil uji statistik *Kruskal-Wallis test* jumlah somit embrio *Oryzias celebensis*

Table Analyzed	JUMLAH SOMIT
Kruskal-Wallis test	
P value	0.9260
Exact or approximate P value?	Exact
P value summary	ns
Do the medians vary signif. (P < 0.05)?	No
Number of groups	4
Kruskal-Wallis statistic	0.5681
Data summary	
Number of treatments (columns)	4
Number of values (total)	12

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	1.667	No	ns	>0.9999	B	0,05
Kontrol vs. 0,1	1.667	No	ns	>0.9999	C	0,1
Kontrol vs. 0,15	2.000	No	ns	>0.9999	D	0,15
Test details	Mean rank 1	Mean rank 2	Mean rank diff.	n1	n2	
Kontrol vs. 0,05	7.833	6.167	1.667	3	3	
Kontrol vs. 0,1	7.833	6.167	1.667	3	3	
Kontrol vs. 0,15	7.833	5.833	2.000	3	3	

Lampiran 2. Hasil uji statistik *Kruskal-Wallis test* detak jantung embrio *Oryzias celebensis*

Stadia 24

Kruskal-Wallis test	
P value	0.0052
Exact or approximate P value?	Approximate
P value summary	**
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	4
Kruskal-Wallis statistic	12.74

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	9.050	No	ns	0.2462	B	0,05
Kontrol vs. 0,1	13.05	Yes	*	0.0365	C	0,1
Kontrol vs. 0,15	17.90	Yes	**	0.0018	D	0,15

Stadia 25

Kruskal-Wallis test	
P value	0.0004
Exact or approximate P value?	Approximate
P value summary	***
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	4
Kruskal-Wallis statistic	18.11

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	9.750	No	ns	0.1782	B	0,05
Kontrol vs. 0,1	18.70	Yes	***	0.0009	C	0,1
Kontrol vs. 0,15	18.95	Yes	***	0.0007	D	0,15

Stadia 26

Kruskal-Wallis test	
P value	<0.0001
Exact or approximate P value?	Approximate
P value summary	****
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	4
Kruskal-Wallis statistic	22.26

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	18.25	Yes	**	0.0013	B	0,05
Kontrol vs. 0,1	13.20	Yes	*	0.0322	C	0,1
Kontrol vs. 0,15	23.15	Yes	****	<0.0001	D	0,15

Stadia 27

Kruskal-Wallis test	
P value	<0.0001
Exact or approximate P value?	Approximate
P value summary	****
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	4
Kruskal-Wallis statistic	25.13

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	24.25	Yes	****	<0.0001	B	0,05
Kontrol vs. 0,1	15.05	Yes	*	0.0112	C	0,1
Kontrol vs. 0,15	20.30	Yes	***	0.0003	D	0,15

Stadia 28

Kruskal-Wallis test	
P value	0.0092
Exact or approximate P value?	Approximate
P value summary	**
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	4
Kruskal-Wallis statistic	11.52

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	12.50	Yes	*	0.0147	B	0,05
Kontrol vs. 0,1	7.450	No	ns	0.2809	C	0,1
Kontrol vs. 0,15	13.45	Yes	**	0.0074	D	0,15

Stadia 29

Kruskal-Wallis test	
P value	0.0001
Exact or approximate P value?	Approximate
P value summary	***
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	4
Kruskal-Wallis statistic	20.42

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	22.75	Yes	****	<0.0001	B	0,05
Kontrol vs. 0,1	9.950	No	ns	0.1480	C	0,1
Kontrol vs. 0,15	12.30	Yes	*	0.0453	D	0,15
Kontrol vs. 0,15	31.75	19.45	12.30	10	10	

Stadia 30

Kruskal-Wallis test	
P value	0.0476
Exact or approximate P value?	Approximate
P value summary	*
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	4
Kruskal-Wallis statistic	7.924

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	-0.5000	No	ns	>0.9999	B	0,05
Kontrol vs. 0,1	-11.55	No	ns	0.0518	C	0,1
Kontrol vs. 0,15	-0.7500	No	ns	>0.9999	D	0,15

Stadia 31

Kruskal-Wallis test	
P value	0.0004
Exact or approximate P value?	Approximate
P value summary	***
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	4
Kruskal-Wallis statistic	18.20

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	-11.10	No	ns	0.0735	B	0,05
Kontrol vs. 0,1	-6.000	No	ns	0.6723	C	0,1
Kontrol vs. 0,15	-20.30	Yes	***	0.0001	D	0,15

Stadia 32

Kruskal-Wallis test	
P value	<0.0001
Exact or approximate P value?	Approximate
P value summary	****
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	4
Kruskal-Wallis statistic	22.64

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	23.30	Yes	****	<0.0001	B	0,05
Kontrol vs. 0,1	16.10	Yes	**	0.0044	C	0,1
Kontrol vs. 0,15	15.80	Yes	**	0.0054	D	0,15

Stadia 33

Kruskal-Wallis test	
P value	<0.0001
Exact or approximate P value?	Approximate
P value summary	****
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	4
Kruskal-Wallis statistic	27.01

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	23.40	Yes	****	<0.0001	B	0,05
Kontrol vs. 0,1	6.250	No	ns	0.6293	C	0,1
Kontrol vs. 0,15	17.35	Yes	**	0.0015	D	0,15

Stadia 34

Kruskal-Wallis test	
P value	<0.0001
Exact or approximate P value?	Approximate
P value summary	****
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	4
Kruskal-Wallis statistic	22.71

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	-12.75	Yes	*	0.0323	B	0,05
Kontrol vs. 0,1	0.7500	No	ns	>0.9999	C	0,1
Kontrol vs. 0,15	-19.00	Yes	***	0.0004	D	0,15

Stadia 35

Kruskal-Wallis test	
P value	>0.9999
Exact or approximate P value?	Approximate
P value summary	ns
Do the medians vary signif. (P < 0.05)?	No
Number of groups	4
Kruskal-Wallis statistic	0.000

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	0.000	No	ns	>0.9999	B	0,05
Kontrol vs. 0,1	0.000	No	ns	>0.9999	C	0,1
Kontrol vs. 0,15	0.000	No	ns	>0.9999	D	0,15

Stadia 36

Kruskal-Wallis test	
P value	<0.0001
Exact or approximate P value?	Approximate
P value summary	****
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	4
Kruskal-Wallis statistic	33.05

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	18.30	Yes	***	0.0008	B	0,05
Kontrol vs. 0,1	4.000	No	ns	>0.9999	C	0,1
Kontrol vs. 0,15	24.90	Yes	****	<0.0001	D	0,15

Stadia 37

Kruskal-Wallis test	
P value	<0.0001
Exact or approximate P value?	Approximate
P value summary	****
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	4
Kruskal-Wallis statistic	27.46

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	-16.30	Yes	**	0.0020	B	0,05
Kontrol vs. 0,1	-16.20	Yes	**	0.0022	C	0,1
Kontrol vs. 0,15	-24.50	Yes	****	<0.0001	D	0,15

Lampiran 3. Hasil uji statistik *Kruskal-Wallis test* gerakan rahang embrio *Oryzias celebensis*

Stadia 36

Kruskal-Wallis test	
P value	0.0616
Exact or approximate P value?	Approximate
P value summary	ns
Do the medians vary signif. (P < 0.05)?	No
Number of groups	4
Kruskal-Wallis statistic	7.346

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	4.450	No	ns	>0.9999	B	0,05
Kontrol vs. 0,1	6.400	No	ns	0.6273	C	0,1
Kontrol vs. 0,15	13.94	Yes	*	0.0232	D	0,15

Stadia 37

Kruskal-Wallis test	
P value	0.0240
Exact or approximate P value?	Approximate
P value summary	*
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	4

Kruskal-Wallis statistic	9.434

Number of families	1					
Number of comparisons per family	3					
Alpha	0.05					
Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	-1.200	No	ns	>0.9999	B	0,05
Kontrol vs. 0,1	2.100	No	ns	>0.9999	C	0,1
Kontrol vs. 0,15	-12.70	Yes	*	0.0459	D	0,15

Lampiran 4. Hasil uji statistik *Kruskal-Wallis test* laju penyerapan kuning telur embrio *Oryzias celebensis*

Kruskal-Wallis test	
P value	0.0413
Exact or approximate P value?	Approximate
P value summary	*
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	4
Kruskal-Wallis statistic	8.238

Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	-3.950	No	ns	>0.9999	B	0,05
Kontrol vs. 0,1	-6.500	No	ns	0.6255	C	0,1
Kontrol vs. 0,15	-14.35	Yes	*	0.0165	D	0,15

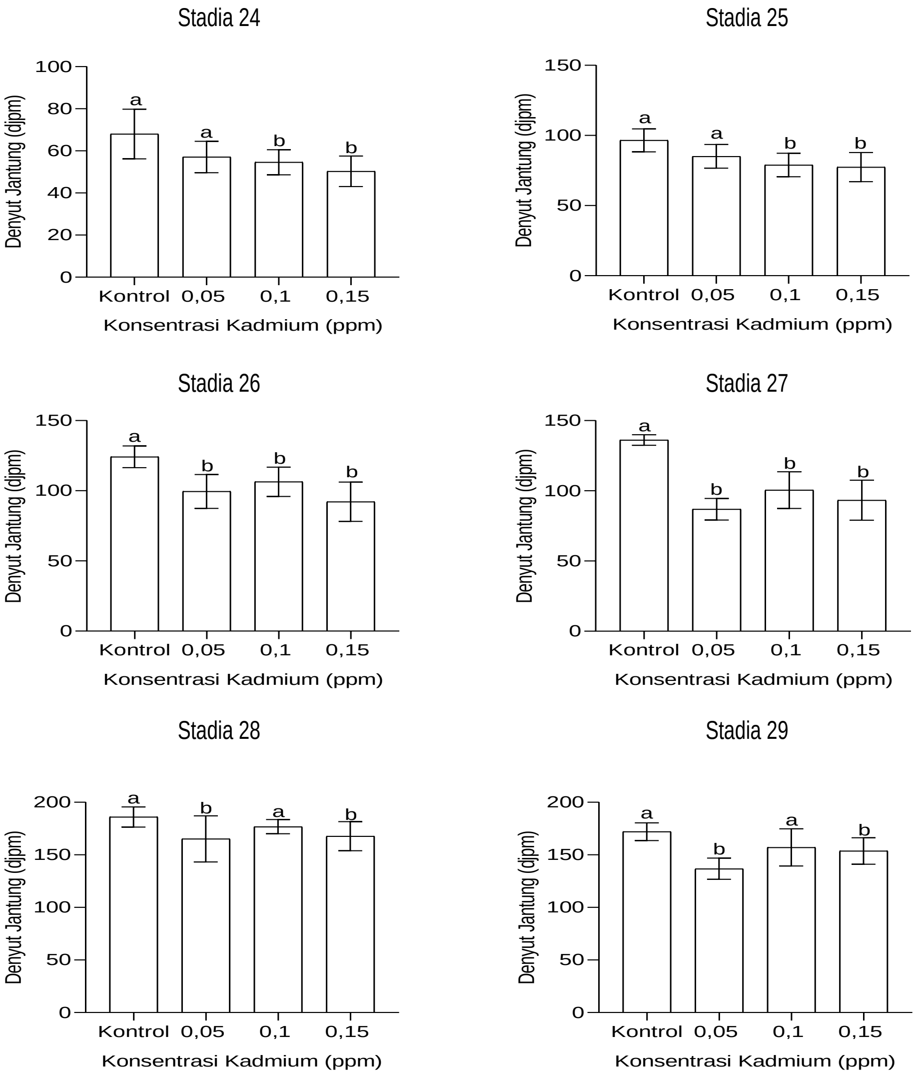
Lampiran 5. Hasil uji statistik *Kruskal-Wallis test* waktu penetasan embrio *Oryzias celebensis*

Kruskal-Wallis test	
P value	<0.0001
Exact or approximate P value?	Approximate
P value summary	****
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	4
Kruskal-Wallis statistic	33.80

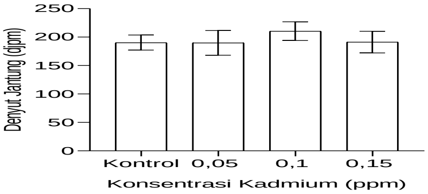
Number of families	1
Number of comparisons per family	3
Alpha	0.05

Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value	A-?	
Kontrol vs. 0,05	-3.600	No	ns	>0.9999	B	0,05
Kontrol vs. 0,1	-17.10	Yes	**	0.0017	C	0,1
Kontrol vs. 0,15	-25.30	Yes	****	<0.0001	D	0,15

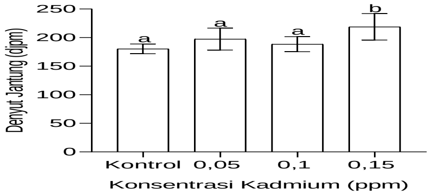
Lampiran 6. Grafik detak jantung embrio *Oryzias celebensis* pada setiap stadia



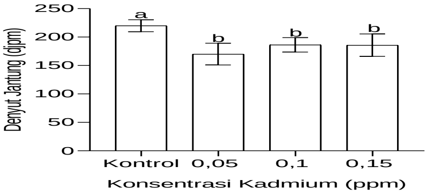
Stadia 30



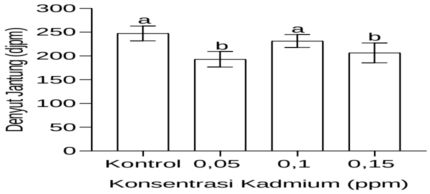
Stadia 31



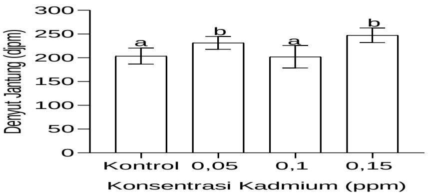
Stadia 32



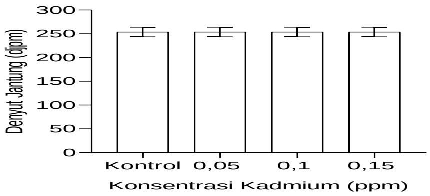
Stadia 33



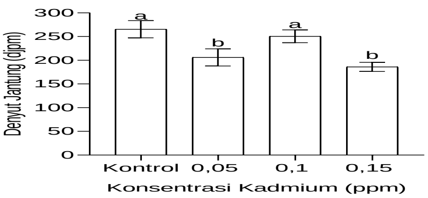
Stadia 34



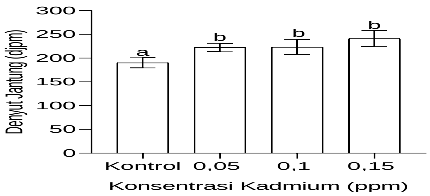
Stadia 35



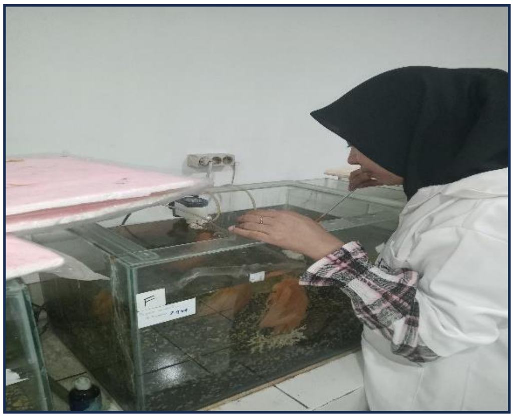
Stadia 36

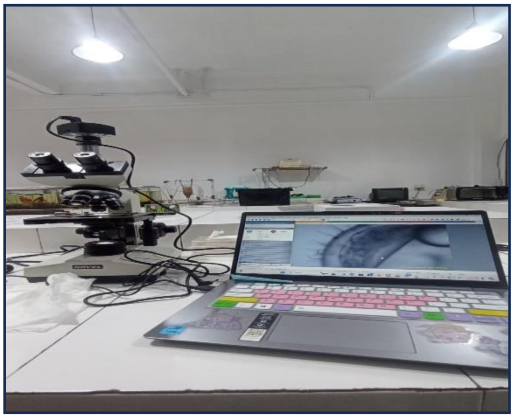


Stadia 37



Lampiran 7. Dokumentasi Penelitian





CURRICULUM VITAE

A. Data Pribadi

1. Nama : Dwi Aryani
2. Tempat, Tanggal Lahir : Barata, 1 Februari 2002
3. Alamat : Barata, Kec. Marioriwawo, Kab. Soppeng
4. Kewarganegaraan : Indonesia

B. Riwayat Pendidikan

1. Tamat SD tahun 2014 di SD Negeri 143 Limpotenga
2. Tamat SMP tahun 2017 di SMP Negeri 3 Marioriwawo
3. Tamat SMA tahun 2020 di SMA Negeri 5 Soppeng