

Lampiran 1. Hubungan Panjang dan Lingkar Badan

A. Hasil Regresi

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.8415
R Square	0.7081
Adjusted R Square	0.7075
Standard Error	0.0207
Observations	501

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	0.5195	0.5195193	1210.69	1.5504E-135
Residual	499	0.2141	0.0004291		
Total	500	0.7336			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-0.38411872	0.03845389	-9.9891	1.53E-21	-0.459670207	-0.30856723
X Variable 1	1.055260034	0.030327942	34.795	1.6E-135	0.995673836	1.114846232

<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
-0.45967021	-0.308567233
0.995673836	1.114846232

Lampiran 2. Perhitungan Ikan Pertama Kali Tertangkap (Lc)

A. Rumus Penurunan

$$F_c(L) = \frac{n \cdot \Delta L}{S \sqrt{2\pi}} \times e^{-\left\langle \frac{(L - \bar{L})^2}{2xS^2} \right\rangle}$$

$$\Delta \ln F_c(z) = \left(\frac{\Delta L x L_{50}}{S^2} \right) x \left(L + \frac{\Delta L}{2} \right) - \frac{\Delta L}{S^2} x \left(L + \frac{\Delta L}{2} \right)^2$$

$$\Delta \ln F_c(z) = \frac{\Delta L x L_{50}}{S^2} - \frac{\Delta L}{S^2} x \left(L + \frac{\Delta L}{2} \right)$$

$$\Delta \ln F_c(z) = a - bx \left(L + \frac{\Delta L}{2} \right)$$

$$L_c = \frac{\Delta L x L_c}{S^2} x \frac{S^2}{\Delta L} = \frac{a}{b}$$

B. Data Masukan

No	L	F	LnF	ΔLnF	L+ΔL/2
1	12.5	1	0	#NUM!	13.1256
2	13.75119	0	#NUM!	#NUM!	14.37679
3	15.00239	2	0.693147181	1.791759	15.62798
4	16.25358	12	2.48490665	2.079442	16.87918
5	17.50477	96	4.564348191	0.820147	18.13037
6	18.75597	218	5.384495063	-0.47184	19.38157
7	20.00716	136	4.912654886	-1.82161	20.63276
8	21.25836	22	3.091042453	-1.4816	21.88395
9	22.50955	5	1.609437912	-0.22314	23.13515
10	23.76074	4	1.386294361	0.223144	24.38634
11	25.01194	5	1.609437912	-1.60944	25.63753

Y X

n	501
Lmin	12.5
Lmax	25
Rentang	12.5
Banyak Kelas	9.99046
Interval	1.251194

C. Hasil Regresi

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.706085
R Square	0.498557
Adjusted R Square	0.426922
Standard Error	1.089808
Observations	9

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	8.265903	8.265903	6.9596997	0.033514667
Residual	7	8.313767	1.187681		
Total	8	16.57967			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	6.043700468	2.348368967	2.573574	0.0368156	0.490690258	11.59671068
X Variable 1	-0.29665043	0.112447481	-2.63812	0.0335147	-0.562546471	-0.03075439

<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
0.490690258	11.59671068
-0.562546471	-0.03075439

D. Hasil Perhitungan

Intercept (a) = 6.044

Slope (b) = -0.297

Lc = Abs (a/b)

= 20.373 cm

Lampiran 3. Perhitungan Ikan Pertama Kali Matang Gonad; 3.1 Layang Betina; 3.2 Layang Jantan

3.1 Perhitungan Pertama Kali Matang Gonad Pada Ikan Layang Betina (*D. ruselli*)

A. Rumus Penurunan

$$Q = \frac{1}{(1 + e^{-a(L-L_{50})})}$$

$$\frac{1}{Q} = 1 + e^{-a(L-L_{50})}$$

$$\frac{1}{Q} - 1 = e^{-a(L-L_{50})}$$

$$\ln\left(\frac{1}{Q} - 1\right) = -a(L - L_{50})$$

$$\ln\left(\frac{Q}{1-Q}\right) = -aL_{50} + aL$$

$$Y = -a + bx$$

$$a = aL_{50}$$

$$b = a$$

$$L_{50} = \frac{-a}{b}$$

B. Data Masukan

L	F(L)	UN-MAT	MAT	%-MAT	(Q/ (1-Q))	Ln(Z)
(mm)	(#)	(#)	(#)	(Q)	(z)	
12.5	1	0	1	1	#DIV/0!	#DIV/0!
13.77186	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!
15.04372	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!
16.31559	5	5	0	0	0	#NUM!
17.58745	41	37	4	0.097561	0.108108	-2.22462
18.85931	114	46	68	0.596491	1.478261	0.390866
20.13117	78	16	62	0.794872	3.875	1.354546
21.40303	16	1	15	0.9375	15	2.70805
22.6749	2	0	2	1	#DIV/0!	#DIV/0!
23.94676	1	0	1	1	#DIV/0!	#DIV/0!
25.21862	2	0	2	1	#DIV/0!	#DIV/0!

X

Y

n	260
Lmin	12.5
Lmax	24
Rentang	11.5
Banyak Kelas	9.041861
Interval	1.271862

C. Hasil Regresi

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.976443
R Square	0.953442
Adjusted R Square	0.930163
Standard Error	0.550711
Observations	4

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	12.42156	12.42156	40.95703	0.023556535
Residual	2	0.606566	0.303283		
Total	3	13.02813			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-23.60249851	3.785120401	-6.2356	0.024767	-39.88855713	-7.31643988
X Variable 1	1.239261826	0.193641692	6.399768	0.023557	0.40608887	2.07243478

<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
-39.88855713	-7.31643988
0.40608887	2.072434782

D. Hasil Perhitungan

$$\text{Intersept (a)} = -23.602$$

$$\text{Slope (b)} = 1.239$$

$$\begin{aligned} \text{Lm Betina} &= \text{Abs} (-a/b) \\ &= 19.046 \text{ cm} \end{aligned}$$

3.2 Perhitungan Pertama Kali Matang Gonad Pada Ikan Layang Jantan (*D.ruselli*)

A. Data Masukan

L (mm)	F(L) (#)	UN-MAT (#)	MAT (#)	%-MAT (Q)	(Q/(1-Q)) (z)	Ln(Z)
14.2	1	1	0	0	0	#NUM!
15.41576507	2	2	0	0	0	#NUM!
16.63153013	15	15	0	0	0	#NUM!
17.8472952	57	42	15	0.263158	0.357142857	-1.02961942
19.06306027	99	55	44	0.444444	0.8	-0.22314355
20.27882533	48	17	31	0.645833	1.823529412	0.60077386
21.4945904	5	1	4	0.8	4	1.38629436
22.71035547	1	0	1	1	#DIV/0!	#DIV/0!
23.92612053	4	0	4	1	#DIV/0!	#DIV/0!
25.1418856	1	0	1	1	#DIV/0!	#DIV/0!

X

Y

n	233
Lmin	14.2
Lmax	25
Rentang	10.8
Banyak Kelas	8.883295
Interval	1.215765

B. Hasil Regresi

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.999959224
R Square	0.99991845
Adjusted R Square	0.999877675
Standard Error	0.011525591
Observations	4

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	3.257583746	3.257584	24522.75	4.0776E-05
Residual	2	0.000265678	0.000133		
Total	3	3.257849425			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-12.876277	0.0835965	-154.029	4.21E-05	-13.23596397	-12.5165906
X Variable 1	0.663916	0.004239636	156.5974	4.08E-05	0.645674316	0.68215768

<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
-13.23596397	-12.5165906
0.645674316	0.682157676

C. Hasil Perhitungan

Intercept (a) = -12.876

Slope (b) = 0.663

Lm Jantan = Abs (-a/b)
= 19.394 cm

Lampiran 4. Data Sampling Ikan Layang (*D. ruselli*)

No	Panjang (TL) (cm)	Log L	Berat (w) (g)	Log W	Lingkar Tubuh (cm)	Log LT	TKG (I-V)	Berat Gonad (g)	Sex	IKG (%)	Tanggal
1	12.5	1.097	21.09	1.324	7.5	0.875	III	0.45	1	2.134	13-Des-14
2	14.2	1.152	14.76	1.169	7.5	0.875	I	0.10	1	0.678	13-Des-14
3	14.4	1.158	18	1.255	7.3	0.863	I	0.01	1	0.056	13-Des-14
4	15.2	1.182	19.51	1.29	7.5	0.875	I	0.10	1	0.513	13-Des-14
5	15.4	1.188	20.75	1.317	7.5	0.875	I	0.37	2	1.783	25-Jan-15
6	15.5	1.19	49.17	1.692	7.4	0.869	I	0.11	1	0.224	13-Des-14
7	15.5	1.19	23.92	1.379	7.9	0.898	I	0.10	2	0.418	13-Des-14
8	15.5	1.19	20.52	1.312	7.5	0.875	I	0.07	1	0.341	25-Jan-15
9	16	1.204	30.27	1.481	8	0.903	I	0.19	2	0.628	25-Jan-15
10	16	1.204	22.36	1.349	8	0.903	I	0.11	1	0.492	25-Jan-15
11	16.1	1.207	24.73	1.393	7.9	0.898	I	0.06	1	0.243	25-Jan-15
12	16.1	1.207	23.22	1.366	8	0.903	I	0.19	2	0.818	25-Jan-15
13	16.2	1.21	20.74	1.317	7.5	0.875	I	0.18	2	0.868	25-Jan-15
14	16.2	1.21	24.10	1.382	7	0.845	I	0.03	1	0.124	25-Jan-15
15	16.2	1.21	26.46	1.423	7.5	0.875	I	0.07	1	0.265	25-Jan-15
16	16.3	1.212	18.62	1.27	7.4	0.869	I	0.05	1	0.269	27-Des-14
17	16.4	1.215	24.12	1.382	8	0.903	I	0.03	1	0.124	25-Jan-15
18	16.4	1.215	19.60	1.292	7.5	0.875	I	0.13	2	0.663	25-Jan-15
19	16.4	1.215	20.97	1.322	7.8	0.892	I	0.11	1	0.525	16-Feb-15
20	16.5	1.217	21.45	1.331	7.8	0.892	III	1.15	2	5.361	27-Des-14
21	16.5	1.217	22.73	1.357	7.8	0.892	I	0.24	1	1.056	25-Jan-15
22	16.5	1.217	20.75	1.317	7.2	0.857	I	0.09	1	0.434	27-Des-14
23	16.6	1.22	24.38	1.387	8	0.903	I	0.36	2	1.477	25-Jan-15
24	16.6	1.22	22.09	1.344	7.9	0.898	I	0.14	1	0.634	27-Des-14
25	16.6	1.22	24.68	1.392	7.9	0.898	I	0.21	2	0.851	25-Jan-15
26	16.6	1.22	25.44	1.406	7.9	0.898	II	0.25	1	0.983	25-Jan-15
27	16.6	1.22	30.15	1.479	8.4	0.924	I	0.15	1	0.498	25-Jan-15
28	16.6	1.22	24.25	1.385	8	0.903	I	0.14	1	0.577	25-Jan-15
29	16.7	1.223	27.34	1.437	8.5	0.929	II	0.72	2	2.634	31-Jan-15
30	16.7	1.223	21.64	1.335	8.5	0.929	III	1.59	2	7.348	31-Jan-15
31	16.7	1.223	23.15	1.365	7.8	0.892	II	0.34	2	1.469	16-Feb-15
32	16.8	1.225	29.73	1.473	7.8	0.892	IV	0.32	1	1.076	16-Feb-15
33	16.9	1.228	27.44	1.438	7.8	0.892	I	0.03	1	0.109	03-Mar-15

Lampiran 4 (Lanjutan)

No	Panjang (TL) (cm)	Log L	Berat (w) (g)	Log W	Lingkar Tubuh (cm)	Log LT	TKG (I-V)	Berat Gonad (g)	Sex	IKG (%)	Tanggal
34	17	1.23	36.96	1.568	9	0.954	II	1.13	2	3.057	27-Des-14
35	17	1.23	52.53	1.72	9	0.954	I	0.20	1	0.381	27-Des-14
36	17	1.23	35.91	1.555	8.5	0.929	I	0.20	1	0.557	27-Des-14
37	17	1.23	30.88	1.49	7.5	0.875	I	0.45	2	1.457	27-Des-14
38	17	1.23	35.16	1.546	7.7	0.886	I	0.09	1	0.256	25-Jan-15
39	17.1	1.233	26.74	1.427	8.4	0.924	I	0.20	2	0.748	25-Jan-15
40	17.1	1.233	25	1.398	8.4	0.924	I	0.36	2	1.44	25-Jan-15
41	17.2	1.236	25.85	1.412	8.4	0.924	I	0.14	1	0.542	25-Jan-15
42	17.2	1.236	24.65	1.392	7.8	0.892	I	0.18	1	0.73	25-Jan-15
43	17.2	1.236	25.87	1.413	8.5	0.929	I	0.24	1	0.928	25-Jan-15
44	17.2	1.236	26.86	1.429	8.5	0.929	I	0.07	1	0.261	25-Jan-15
45	17.2	1.236	26.15	1.417	7.9	0.898	I	0.09	1	0.344	25-Jan-15
46	17.2	1.236	24.41	1.388	7.9	0.898	I	0.08	1	0.328	25-Jan-15
47	17.3	1.238	28.78	1.459	8.5	0.929	II	0.48	2	1.668	25-Jan-15
48	17.3	1.238	27.75	1.443	8.5	0.929	I	0.30	2	1.081	25-Jan-15
49	17.4	1.241	30.08	1.478	8.5	0.929	II	0.27	1	0.898	31-Jan-15
50	17.4	1.241	21.85	1.339	8.5	0.929	I	0.34	2	1.556	31-Jan-15
51	17.4	1.241	26.66	1.426	7.9	0.898	II	0.58	2	2.176	16-Feb-15
52	17.4	1.241	25.16	1.401	8.5	0.929	II	0.60	2	2.385	16-Feb-15
53	17.4	1.241	26.41	1.422	7.9	0.898	II	0.32	1	1.212	16-Feb-15
54	17.4	1.241	24.55	1.39	8.5	0.929	II	0.14	2	0.57	16-Feb-15
55	17.4	1.241	21.33	1.329	7.9	0.898	II	0.10	1	0.469	16-Feb-15
56	17.4	1.241	25.27	1.403	8.5	0.929	II	0.63	2	2.493	18-Feb-15
57	17.4	1.241	27.29	1.436	7.9	0.898	II	0.26	1	0.953	18-Feb-15
58	17.4	1.241	24.20	1.384	8.3	0.919	II	0.13	2	0.537	18-Feb-15
59	17.4	1.241	26.95	1.431	8.3	0.919	II	0.35	2	1.299	03-Mar-15
60	17.4	1.241	27.73	1.443	8.3	0.919	II	0.14	1	0.505	03-Mar-15
61	17.5	1.243	23.63	1.373	8.3	0.919	II	0.53	1	2.243	13-Des-14
62	17.5	1.243	31.15	1.493	8.9	0.949	II	1.78	2	5.714	13-Des-14
63	17.5	1.243	31.2	1.494	8.5	0.929	II	1.2	2	3.846	13-Des-14
64	17.5	1.243	39.93	1.601	8.9	0.949	III	1.78	2	4.458	13-Des-14
65	17.5	1.243	49.49	1.695	8.5	0.929	I	0.11	1	0.222	13-Des-14
66	17.5	1.243	48.37	1.685	9.5	0.978	II	0.32	1	0.662	13-Des-14
67	17.5	1.243	40.39	1.606	8.5	0.929	I	0.09	1	0.223	13-Des-14
68	17.5	1.243	54.25	1.734	8.9	0.949	II	0.34	1	0.627	13-Des-14

Lampiran 4 (Lanjutan)

No	Panjang (TL) (cm)	Log L	Berat (w) (g)	Log W	Lingkar Tubuh (cm)	Log LT	TKG (I-V)	Berat Gonad (g)	Sex	IKG (%)	Tanggal
69	17.5	1.243	36.5	1.562	8.9	0.949	II	0.88	2	2.411	13-Des-14
70	17.5	1.243	43.44	1.638	8.9	0.949	I	0.16	1	0.368	13-Des-14
71	17.5	1.243	33.25	1.522	8.5	0.929	I	0.01	1	0.03	25-Jan-15
72	17.5	1.243	44.66	1.65	8.5	0.929	I	0.22	1	0.493	25-Jan-15
73	17.5	1.243	38.57	1.586	7.9	0.898	I	0.35	2	0.907	25-Jan-15
74	17.5	1.243	27.92	1.446	8.9	0.949	I	0.16	1	0.573	25-Jan-15
75	17.5	1.243	29.53	1.47	8.9	0.949	I	0.37	2	1.253	25-Jan-15
76	17.5	1.243	29.63	1.472	8.9	0.949	I	0.33	2	1.114	25-Jan-15
77	17.5	1.243	24.76	1.394	7.9	0.898	I	0.05	1	0.202	25-Jan-15
78	17.5	1.243	27.57	1.44	8.5	0.929	I	0.16	1	0.58	25-Jan-15
79	17.5	1.243	33.86	1.53	8.5	0.929	III	1.82	2	5.375	27-Des-14
80	17.5	1.243	28.80	1.459	8.9	0.949	I	0.55	2	1.91	25-Jan-15
81	17.5	1.243	30.75	1.488	8.9	0.949	I	0.09	1	0.293	25-Jan-15
82	17.5	1.243	30.21	1.48	8.5	0.929	II	0.50	2	1.655	25-Jan-15
83	17.5	1.243	32.91	1.517	8.9	0.949	I	0.04	1	0.122	25-Jan-15
84	17.5	1.243	28.25	1.451	8.5	0.929	II	0.12	1	0.425	31-Jan-15
85	17.5	1.243	28.93	1.461	8.5	0.929	IV	0.24	1	0.83	31-Jan-15
86	17.5	1.243	31.18	1.494	8.9	0.949	II	0.71	2	2.277	31-Jan-15
87	17.5	1.243	32.15	1.507	8.9	0.949	II	0.32	1	0.995	31-Jan-15
88	17.5	1.243	26.78	1.428	8.9	0.949	II	0.12	1	0.448	31-Jan-15
89	17.5	1.243	24.19	1.384	8.5	0.929	III	0.25	1	1.033	16-Feb-15
90	17.5	1.243	22.71	1.356	7.9	0.898	II	0.25	1	1.101	16-Feb-15
91	17.5	1.243	22.57	1.354	8.5	0.929	I	0.27	1	1.196	16-Feb-15
92	17.5	1.243	26.66	1.426	8.5	0.929	II	0.18	1	0.675	16-Feb-15
93	17.5	1.243	26.54	1.424	8.5	0.929	II	0.80	2	3.014	16-Feb-15
94	17.5	1.243	25.41	1.405	7.9	0.898	I	0.15	1	0.59	16-Feb-15
95	17.5	1.243	31	1.491	8.5	0.929	II	0.96	2	3.097	16-Feb-15
96	17.5	1.243	26.89	1.43	8.5	0.929	II	0.17	1	0.632	18-Feb-15
97	17.5	1.243	22.55	1.353	7.9	0.898	II	0.13	1	0.576	18-Feb-15
98	17.5	1.243	25.14	1.4	8.5	0.929	II	0.27	2	1.074	18-Feb-15
99	17.5	1.243	28.96	1.462	8.5	0.929	II	0.69	2	2.383	18-Feb-15
100	17.5	1.243	26.62	1.425	8.5	0.929	II	0.62	2	2.329	18-Feb-15
101	17.5	1.243	26.15	1.417	8.5	0.929	II	0.51	2	1.95	18-Feb-15
102	17.5	1.243	22.86	1.359	8.5	0.929	II	0.61	2	2.668	18-Feb-15
103	17.5	1.243	26	1.415	8.4	0.924	II	0.16	1	0.615	18-Feb-15

Lampiran 4 (Lanjutan)

No	Panjang (TL) (cm)	Log L	Berat (w) (g)	Log W	Lingkar Tubuh (cm)	Log LT	TKG (I-V)	Berat Gonad (g)	Sex	IKG (%)	Tanggal
104	17.5	1.243	25.91	1.413	7.8	0.892	III	0.32	1	1.235	18-Feb-15
105	17.5	1.243	29.01	1.463	8.5	0.929	III	0.18	1	0.62	18-Feb-15
106	17.5	1.243	25.90	1.413	8.5	0.929	II	0.12	1	0.463	18-Feb-15
107	17.5	1.243	28.27	1.451	8.5	0.929	II	0.13	1	0.46	03-Mar-15
108	17.5	1.243	43.08	1.634	8.9	0.949	II	0.24	2	0.557	03-Mar-15
109	17.5	1.243	28.02	1.447	8.5	0.929	I	0.34	2	1.213	03-Mar-15
110	17.5	1.243	28.76	1.459	9	0.954	II	0.17	1	0.591	03-Mar-15
111	17.5	1.243	27.91	1.446	8.5	0.929	I	0.23	2	0.824	25-Jan-15
112	17.6	1.246	27.28	1.436	8.5	0.929	IV	0.32	1	1.173	16-Feb-15
113	17.6	1.246	28.45	1.454	7.9	0.898	IV	1.45	2	5.097	16-Feb-15
114	17.6	1.246	26.74	1.427	8	0.903	III	0.27	1	1.01	16-Feb-15
115	17.6	1.246	30.39	1.483	8.5	0.929	III	1.05	2	3.455	31-Jan-15
116	17.6	1.246	26.43	1.422	8.5	0.929	IV	0.50	1	1.892	18-Feb-15
117	17.6	1.246	27.28	1.436	8.5	0.929	IV	0.32	1	1.173	27-Dec-14
118	17.6	1.246	28.45	1.454	8	0.903	IV	1.45	2	5.097	27-Dec-14
119	17.6	1.246	26.74	1.427	8	0.903	III	0.27	1	1.01	27-Dec-14
120	17.7	1.248	30.39	1.483	8.5	0.929	III	1.05	2	3.455	27-Dec-14
121	17.7	1.248	26.43	1.422	8.5	0.929	IV	0.50	1	1.892	27-Dec-14
122	17.7	1.248	26.01	1.415	8.1	0.908	IV	0.33	1	1.269	18-Feb-15
123	17.7	1.248	27.80	1.444	8.1	0.908	III	0.73	2	2.626	18-Feb-15
124	17.7	1.248	32.51	1.512	8.5	0.929	III	0.27	1	0.831	03-Mar-15
125	17.7	1.248	34.43	1.537	7.8	0.892	IV	1.44	2	4.182	16-Feb-15
126	17.7	1.248	25.23	1.402	7.9	0.898	III	0.96	2	3.805	16-Feb-15
127	17.8	1.25	22.30	1.348	7.9	0.898	IV	0.38	1	1.704	16-Feb-15
128	17.8	1.25	28.26	1.451	8.4	0.924	III	0.20	1	0.708	16-Feb-15
129	17.8	1.25	26.31	1.42	8.4	0.924	III	1.04	2	3.953	16-Feb-15
130	17.8	1.25	23.52	1.371	8	0.903	II	0.24	1	1.02	16-Feb-15
131	17.9	1.253	31.33	1.496	8.5	0.929	IV	0.96	2	3.064	16-Feb-15
132	18	1.255	32.53	1.512	8.7	0.94	I	0.15	1	0.461	13-Dec-14
133	18	1.255	32.51	1.512	8.7	0.94	I	0.08	1	0.246	13-Dec-14
134	18	1.255	31.6	1.5	8.7	0.94	II	0.39	2	1.234	13-Dec-14
135	18	1.255	34.62	1.539	8.7	0.94	I	0.13	1	0.376	13-Dec-14

Lampiran 4 (Lanjutan)

No	Panjang (TL) (cm)	Log L	Berat (w) (g)	Log W	Lingkar Tubuh (cm)	Log LT	TKG (I-V)	Berat Gonad (g)	Sex	IKG (%)	Tanggal
136	18	1.255	30.9	1.49	8.7	0.94	II	1.37	2	4.434	13-Des-14
137	18	1.255	58.66	1.768	8.7	0.94	II	0.39	1	0.665	13-Des-14
138	18	1.255	54.58	1.737	8.7	0.94	II	1.14	2	2.089	13-Des-14
139	18	1.255	54.3	1.735	8.7	0.94	II	0.62	2	1.142	13-Des-14
140	18	1.255	42.3	1.626	8.7	0.94	II	0.23	1	0.544	13-Des-14
141	18	1.255	30.43	1.483	9.3	0.968	II	1.47	2	4.831	13-Des-14
142	18	1.255	37.92	1.579	8.8	0.944	III	1.19	2	3.138	13-Des-14
143	18	1.255	46.39	1.666	9	0.954	I	0.53	2	1.142	13-Des-14
144	18	1.255	55.3	1.743	9.5	0.978	II	0.98	2	1.772	13-Des-14
145	18	1.255	42.53	1.629	8.8	0.944	I	0.16	1	0.376	13-Des-14
146	18	1.255	43.65	1.64	8.8	0.944	II	0.34	1	0.779	13-Des-14
147	18	1.255	50.72	1.705	9.3	0.968	III	2.72	2	5.363	13-Des-14
148	18	1.255	41.65	1.62	8.9	0.949	I	0.20	2	0.48	25-Jan-15
149	18	1.255	41.23	1.615	7.8	0.892	I	0.19	1	0.461	25-Jan-15
150	18	1.255	40.67	1.609	8.3	0.919	I	0.39	2	0.959	25-Jan-15
151	18	1.255	30.29	1.481	8.3	0.919	I	0.08	1	0.264	25-Jan-15
152	18	1.255	30.54	1.485	8.3	0.919	I	0.15	1	0.491	25-Jan-15
153	18	1.255	37.84	1.578	8.3	0.919	I	0.24	1	0.634	25-Jan-15
154	18	1.255	32.35	1.51	9	0.954	II	0.65	2	2.009	31-Jan-15
155	18	1.255	33.06	1.519	9	0.954	II	1.11	2	3.358	25-Jan-15
156	18	1.255	33.03	1.519	9	0.954	II	0.80	2	2.422	25-Jan-15
157	18.2	1.26	24.93	1.397	8.5	0.929	I	0.11	2	0.441	16-Feb-15
158	18.2	1.26	22.64	1.355	8.5	0.929	III	0.29	1	1.281	16-Feb-15
159	18.2	1.26	23.78	1.376	8.5	0.929	II	0.62	2	2.607	16-Feb-15
160	18.2	1.26	33.67	1.527	8.5	0.929	III	1.15	2	3.416	16-Feb-15
161	18.2	1.26	25.80	1.412	8.5	0.929	II	0.55	2	2.132	16-Feb-15
162	18.2	1.26	27.89	1.445	8.5	0.929	II	0.26	1	0.932	16-Feb-15
163	18.2	1.26	19.23	1.284	9	0.954	III	1.39	2	7.228	16-Feb-15
164	18.2	1.26	26	1.415	8.3	0.919	III	1.13	2	4.346	16-Feb-15
165	18.2	1.26	28.29	1.452	8.7	0.94	III	1.61	2	5.691	31-Jan-15
166	18.2	1.26	25.83	1.412	8.7	0.94	II	0.13	1	0.503	31-Jan-15
167	18.2	1.26	32.17	1.507	9.4	0.973	III	1.73	2	5.378	31-Jan-15

Lampiran 4 (Lanjutan)

No	Panjang (TL) (cm)	Log L	Berat (w) (g)	Log W	Lingkar Tubuh (cm)	Log LT	TKG (I-V)	Berat Gonad (g)	Sex	IKG (%)	Tanggal
168	18.2	1.26	32.82	1.516	8.3	0.919	I	0.53	2	1.615	25-Jan-15
169	18.2	1.26	28.44	1.454	8.3	0.919	I	0.55	2	1.934	31-Jan-15
170	18.2	1.26	39.15	1.593	8.8	0.944	III	2.03	2	5.185	31-Jan-15
171	18.2	1.26	38.80	1.589	9.4	0.973	III	1.7	2	4.381	31-Jan-15
172	18.2	1.26	33.02	1.519	9.4	0.973	III	1.90	2	5.754	31-Jan-15
173	18.2	1.26	30.16	1.479	9	0.954	III	1.28	2	4.244	31-Jan-15
174	18.2	1.26	39.21	1.593	10	1	I	0.51	2	1.301	31-Jan-15
175	18.2	1.26	28.26	1.451	8.5	0.929	IV	0.3	1	1.062	27-Dec-14
176	18.2	1.26	43.36	1.637	9	0.954	II	0.21	1	0.484	31-Jan-15
177	18.2	1.26	28.11	1.449	9	0.954	II	0.13	1	0.462	31-Jan-15
178	18.3	1.262	28.38	1.453	9.2	0.964	IV	0.22	1	0.775	31-Jan-15
179	18.3	1.262	30.01	1.477	9.2	0.964	III	0.21	1	0.7	31-Jan-15
180	18.3	1.262	28	1.447	9.2	0.964	IV	0.28	1	1	31-Jan-15
181	18.3	1.262	33.06	1.519	9.2	0.964	II	0.47	2	1.422	31-Jan-15
182	18.3	1.262	34.42	1.537	9.5	0.978	IV	1.23	2	3.574	31-Jan-15
183	18.3	1.262	31.80	1.502	8.7	0.94	II	0.69	2	2.17	31-Jan-15
184	18.3	1.262	26.75	1.427	8.8	0.944	IV	0.28	1	1.047	31-Jan-15
185	18.3	1.262	33.15	1.52	8.3	0.919	II	0.24	1	0.724	03-Mar-15
186	18.3	1.262	31.11	1.493	8.3	0.919	I	0.08	1	0.257	03-Mar-15
187	18.3	1.262	26.71	1.427	8.3	0.919	I	0.10	1	0.374	03-Mar-15
188	18.3	1.262	36.82	1.566	8.9	0.949	I	0.28	2	0.76	03-Mar-15
189	18.3	1.262	30.78	1.488	8.9	0.949	I	0.34	2	1.105	03-Mar-15
190	18.3	1.262	26.76	1.427	8.9	0.949	II	0.25	1	0.934	03-Mar-15
191	18.3	1.262	33.93	1.531	8.4	0.924	II	0.23	1	0.678	03-Mar-15
192	18.3	1.262	30.01	1.477	8.9	0.949	II	0.25	1	0.833	03-Mar-15
193	18.3	1.262	30.95	1.491	8.9	0.949	III	0.32	1	1.034	03-Mar-15
194	18.3	1.262	28.46	1.454	8.3	0.919	I	0.13	1	0.457	03-Mar-15
195	18.3	1.262	29.71	1.473	9	0.954	II	0.25	1	0.841	03-Mar-15
196	18.3	1.262	31.57	1.499	9.3	0.968	II	1.37	2	4.34	27-Dec-14
197	18.3	1.262	36.76	1.565	9.3	0.968	II	0.24	1	0.653	27-Dec-14
198	18.3	1.262	25.49	1.406	9	0.954	I	0.08	1	0.314	27-Dec-14
199	18.3	1.262	32.91	1.517	9.3	0.968	II	0.12	1	0.365	27-Dec-14

Lampiran 4 (Lanjutan)

No	Panjang (TL) (cm)	Log L	Berat (w) (g)	Log W	Lingkar Tubuh (cm)	Log LT	TKG (I-V)	Berat Gonad (g)	Sex	IKG (%)	Tanggal
200	18.3	1.262	40.42	1.607	9.3	0.968	II	1	2	2.474	27-Dec-14
201	18.3	1.262	36.71	1.565	8.8	0.944	II	0.38	1	1.035	27-Dec-14
202	18.3	1.262	39.87	1.601	8.8	0.944	II	0.27	1	0.677	27-Dec-14
203	18.4	1.265	29.92	1.476	8.8	0.944	IV	0.49	1	1.638	16-Feb-15
204	18.4	1.265	28.48	1.455	8.8	0.944	IV	1.57	2	5.513	16-Feb-15
205	18.4	1.265	26.74	1.427	8	0.903	II	0.25	1	0.935	16-Feb-15
206	18.4	1.265	26.19	1.418	8.3	0.919	III	0.37	1	1.413	16-Feb-15
207	18.4	1.265	31	1.491	8.3	0.919	III	0.99	2	3.194	16-Feb-15
208	18.4	1.265	29.62	1.472	8.9	0.949	III	0.89	2	3.005	16-Feb-15
209	18.4	1.265	32.09	1.506	8.9	0.949	IV	0.42	1	1.309	16-Feb-15
210	18.4	1.265	28.22	1.451	8.4	0.924	II	0.16	1	0.567	16-Feb-15
211	18.4	1.265	29	1.462	8.9	0.949	III	1.04	2	3.586	16-Feb-15
212	18.4	1.265	32.41	1.511	8.4	0.924	III	0.25	1	0.771	16-Feb-15
213	18.4	1.265	31.90	1.504	8.9	0.949	IV	0.52	1	1.63	16-Feb-15
214	18.4	1.265	27.24	1.435	8	0.903	III	0.25	1	0.918	16-Feb-15
215	18.4	1.265	29.65	1.472	8.5	0.929	II	0.40	2	1.349	16-Feb-15
216	18.4	1.265	31.40	1.497	8.9	0.949	II	0.76	2	2.42	16-Feb-15
217	18.4	1.265	30.78	1.488	8.9	0.949	III	1.11	2	3.606	16-Feb-15
218	18.4	1.265	30.12	1.479	8.9	0.949	IV	0.41	1	1.361	18-Feb-15
219	18.4	1.265	28.49	1.455	8.4	0.924	III	0.88	2	3.089	18-Feb-15
220	18.4	1.265	28.96	1.462	8.4	0.924	IV	0.29	1	1.001	27-Dec-14
221	18.4	1.265	32.71	1.515	8.4	0.924	III	0.99	2	3.027	18-Feb-15
222	18.4	1.265	27.74	1.443	8.9	0.949	III	0.81	2	2.92	18-Feb-15
223	18.4	1.265	29.32	1.467	8.4	0.924	II	0.08	1	0.273	18-Feb-15
224	18.4	1.265	28.57	1.456	8.5	0.929	II	0.11	1	0.385	18-Feb-15
225	18.4	1.265	32.92	1.517	8.5	0.929	III	0.72	2	2.187	18-Feb-15
226	18.4	1.265	31.13	1.493	8.5	0.929	II	0.11	1	0.353	18-Feb-15
227	18.4	1.265	25.35	1.404	8	0.903	III	0.25	1	0.986	18-Feb-15
228	18.4	1.265	32.19	1.508	8.5	0.929	III	0.87	2	2.703	18-Feb-15
229	18.4	1.265	25.49	1.406	9	0.954	IV	0.31	1	1.216	18-Feb-15
230	18.4	1.265	29	1.462	8.5	0.929	III	0.21	1	0.724	18-Feb-15

Lampiran 4 (Lanjutan)

No	Panjang (TL) (cm)	Log L	Berat (w) (g)	Log W	Lingkar Tubuh (cm)	Log LT	TKG (I-V)	Berat Gonad (g)	Sex	IKG (%)	Tanggal
231	18.4	1.265	28.23	1.451	9	0.954	III	0.83	2	2.94	18-Feb-15
232	18.4	1.265	30.54	1.485	8.5	0.929	III	0.26	1	0.851	18-Feb-15
233	18.4	1.265	32.71	1.515	8.9	0.949	II	0.51	2	1.559	18-Feb-15
234	18.4	1.265	26.60	1.425	8	0.903	II	0.56	2	2.105	18-Feb-15
235	18.4	1.265	31.02	1.492	8.9	0.949	III	1.05	2	3.385	18-Feb-15
236	18.4	1.265	27.26	1.436	8.5	0.929	IV	0.31	1	1.137	18-Feb-15
237	18.4	1.265	31.86	1.503	8.9	0.949	III	0.77	2	2.417	18-Feb-15
238	18.4	1.265	32.74	1.515	8.9	0.949	IV	0.32	1	0.977	18-Feb-15
239	18.4	1.265	30.20	1.48	8.9	0.949	IV	0.30	1	0.993	03-Mar-15
240	18.5	1.267	52.37	1.719	9.5	0.978	II	1.27	2	2.425	27-Dec-14
241	18.5	1.267	46.72	1.67	9	0.954	II	1.11	2	2.376	27-Dec-14
242	18.5	1.267	41.58	1.619	9	0.954	II	0.29	1	0.697	27-Dec-14
243	18.5	1.267	31.47	1.498	9	0.954	II	0.4	1	1.271	27-Dec-14
244	18.5	1.267	33.65	1.527	10	1	IV	0.34	1	1.01	27-Dec-14
245	18.5	1.267	52.45	1.72	9.6	0.982	I	0.61	2	1.163	27-Dec-14
246	18.5	1.267	59.3	1.773	10	1	III	1.86	2	3.137	27-Dec-14
247	18.5	1.267	47.21	1.674	8.5	0.929	I	0.25	2	0.53	25-Jan-15
248	18.5	1.267	30.78	1.488	8.5	0.929	I	0.34	2	1.105	25-Jan-15
249	18.5	1.267	32.08	1.506	9	0.954	I	0.36	2	1.122	27-Dec-14
250	18.5	1.267	35.55	1.551	9	0.954	I	0.17	1	0.478	25-Jan-15
251	18.5	1.267	34.20	1.534	9.4	0.973	III	1.50	2	4.386	25-Jan-15
252	18.5	1.267	31.32	1.496	9	0.954	I	0.10	1	0.319	25-Jan-15
253	18.5	1.267	36.82	1.566	9	0.954	III	1.19	2	3.232	25-Jan-15
254	18.5	1.267	25.64	1.409	9	0.954	I	0.45	2	1.755	31-Jan-15
255	18.5	1.267	47.06	1.673	9.4	0.973	I	0.4	2	0.85	03-Mar-15
256	18.5	1.267	36.63	1.564	9	0.954	III	0.53	1	1.447	03-Mar-15
257	18.5	1.267	37.65	1.576	9	0.954	IV	1.12	2	2.975	03-Mar-15
258	18.5	1.267	37.65	1.576	9	0.954	II	0.31	1	0.823	03-Mar-15
259	18.5	1.267	37.70	1.576	8.3	0.919	II	0.28	1	0.743	03-Mar-15
260	18.5	1.267	31.50	1.498	8.3	0.919	II	0.17	1	0.54	03-Mar-15
261	18.5	1.267	29.63	1.472	9	0.954	I	0.14	1	0.472	03-Mar-15
262	18.5	1.267	37.35	1.572	9	0.954	II	0.48	2	1.285	03-Mar-15

Lampiran 4 (Lanjutan)

No	Panjang (TL) (cm)	Log L	Berat (w) (g)	Log W	Lingkar Tubuh (cm)	Log LT	TKG (1-5)	Berat Gonad (g)	Sex	IKG (%)	Tanggal
263	18.5	1.267	38.22	1.582	9.4	0.973	II	0.23	1	0.602	03-Mar-15
264	18.5	1.267	27.68	1.442	9	0.954	III	0.25	1	0.903	03-Mar-15
265	18.5	1.267	35.34	1.548	9.3	0.968	IV	1.19	2	3.367	03-Mar-15
266	18.5	1.267	30.89	1.49	9	0.954	II	0.21	1	0.68	03-Mar-15
267	18.5	1.267	33.13	1.52	9	0.954	II	0.21	1	0.634	03-Mar-15
268	18.5	1.267	26.61	1.425	9	0.954	III	0.73	2	2.743	03-Mar-15
269	18.5	1.267	44	1.643	9.6	0.982	III	1.76	2	4	27-Dec-14
270	18.5	1.267	49.52	1.695	10	1	I	0.22	1	0.444	27-Dec-14
271	18.5	1.267	48.36	1.684	9.2	0.964	I	0.20	2	0.414	27-Dec-14
272	18.5	1.267	43.75	1.641	9	0.954	II	0.47	2	1.074	27-Dec-14
273	18.5	1.267	56.22	1.75	9.4	0.973	III	1.43	2	2.544	27-Dec-14
274	18.5	1.267	48.13	1.682	9.2	0.964	II	0.33	1	0.686	27-Dec-14
275	18.5	1.267	51.14	1.709	9	0.954	II	0.89	2	1.74	27-Dec-14
276	18.5	1.267	29.60	1.471	9	0.954	II	0.61	2	2.061	18-Feb-15
277	18.5	1.267	31.31	1.496	9	0.954	III	0.86	2	2.747	18-Feb-15
278	18.5	1.267	32.37	1.51	9	0.954	IV	1.06	2	3.275	18-Feb-15
279	18.5	1.267	28	1.447	8.2	0.914	II	0.69	2	2.464	18-Feb-15
280	18.5	1.267	28.45	1.454	8.2	0.914	III	0.74	2	2.601	18-Feb-15
281	18.5	1.267	30.31	1.482	9	0.954	III	0.79	2	2.606	18-Feb-15
282	18.5	1.267	36.73	1.565	9.5	0.978	IV	1.53	2	4.166	31-Jan-15
283	18.5	1.267	35.74	1.553	9	0.954	IV	0.18	1	0.504	31-Jan-15
284	18.5	1.267	37.45	1.573	9.5	0.978	IV	2.45	2	6.542	31-Jan-15
285	18.5	1.267	30.63	1.486	9	0.954	III	0.35	1	1.143	31-Jan-15
286	18.5	1.267	31.89	1.504	9.5	0.978	III	1.05	2	3.293	31-Jan-15
287	18.5	1.267	33.36	1.523	10	1	IV	0.66	2	1.978	31-Jan-15
288	18.5	1.267	30.39	1.483	9	0.954	II	0.21	1	0.691	16-Feb-15
289	18.5	1.267	35.67	1.552	9.5	0.978	IV	0.69	1	1.934	31-Jan-15
290	18.5	1.267	35	1.544	9.5	0.978	IV	2.44	2	6.971	31-Jan-15
291	18.5	1.267	31.70	1.501	9	0.954	III	0.22	1	0.694	31-Jan-15
292	18.5	1.267	34.49	1.538	9	0.954	IV	0.30	1	0.87	31-Jan-15
293	18.5	1.267	28.90	1.461	9.5	0.978	IV	2.30	2	7.958	31-Jan-15
294	18.5	1.267	36.10	1.558	9.5	0.978	III	2.07	2	5.734	31-Jan-15

Lampiran 4 (Lanjutan)

No	Panjang (TL) (cm)	Log L	Berat (w) (g)	Log W	Lingkar Tubuh (cm)	Log LT	TKG (I-V)	Berat Gonad (g)	Sex	IKG (%)	Tanggal
295	18.5	1.267	28.71	1.458	9.5	0.978	IV	0.37	1	1.289	31-Jan-15
296	18.5	1.267	31.10	1.493	9.5	0.978	III	2.07	2	6.656	31-Jan-15
297	18.5	1.267	35.21	1.547	9	0.954	I	0.44	2	1.25	31-Jan-15
298	18.5	1.267	33.45	1.524	9	0.954	IV	0.42	1	1.256	31-Jan-15
299	18.5	1.267	24.37	1.387	8.5	0.929	II	0.28	1	1.149	16-Feb-15
300	18.5	1.267	32.32	1.509	9.5	0.978	III	1.37	2	4.239	16-Feb-15
301	18.5	1.267	27.40	1.438	8.5	0.929	III	0.97	2	3.54	16-Feb-15
302	18.5	1.267	30.20	1.48	8.5	0.929	II	0.23	1	0.762	16-Feb-15
303	18.6	1.27	23	1.362	8.4	0.924	III	1.05	2	4.565	16-Feb-15
304	18.6	1.27	26.52	1.424	8.4	0.924	III	1.02	2	3.846	16-Feb-15
305	18.6	1.27	27.01	1.432	9	0.954	IV	0.47	1	1.74	16-Feb-15
306	18.6	1.27	37.35	1.572	8.5	0.929	IV	0.49	1	1.312	16-Feb-15
307	18.6	1.27	29.75	1.473	9	0.954	IV	0.44	1	1.479	16-Feb-15
308	18.6	1.27	30.32	1.482	9	0.954	IV	0.60	1	1.979	16-Feb-15
309	18.6	1.27	31.99	1.505	8.4	0.924	III	0.26	1	0.813	16-Feb-15
310	18.6	1.27	28.22	1.451	8.4	0.924	II	0.16	1	0.567	27-Dec-14
311	18.6	1.27	21.77	1.338	8.4	0.924	IV	0.31	1	1.424	18-Feb-15
312	18.6	1.27	28.08	1.448	9	0.954	II	0.84	2	2.991	18-Feb-15
313	18.6	1.27	29.19	1.465	8.5	0.929	IV	0.36	1	1.233	18-Feb-15
314	18.6	1.27	29	1.462	9	0.954	III	1	2	3.448	18-Feb-15
315	18.6	1.27	39.54	1.597	9	0.954	III	1.4	2	3.541	27-Dec-14
316	18.6	1.27	35.40	1.549	9	0.954	IV	1.04	2	2.938	18-Feb-15
317	18.6	1.27	28.11	1.449	9	0.954	IV	0.50	1	1.779	18-Feb-15
318	18.6	1.27	31.59	1.5	9	0.954	IV	0.28	1	0.886	31-Jan-15
319	18.6	1.27	31.64	1.5	9.5	0.978	IV	3.81	2	12.04	31-Jan-15
320	18.6	1.27	31.22	1.494	9.5	0.978	III	1.98	2	6.342	31-Jan-15
321	18.6	1.27	26.73	1.427	8.7	0.94	II	0.21	1	0.786	31-Jan-15
322	18.6	1.27	29.14	1.464	7.8	0.892	I	0.11	1	0.377	16-Feb-15
323	18.7	1.272	30.03	1.478	8.5	0.929	III	0.30	1	0.999	16-Feb-15
324	18.7	1.272	34.26	1.535	9	0.954	III	1.20	2	3.503	16-Feb-15
325	18.7	1.272	35.17	1.546	9	0.954	IV	1.22	2	3.469	16-Feb-15
326	18.7	1.272	30.69	1.487	9	0.954	IV	1.2	1	3.91	27-Dec-14
327	18.7	1.272	31.92	1.504	10	1	II	1.72	2	5.388	27-Dec-14

Lampiran 4 (Lanjutan)

No	Panjang (TL) (cm)	Log L	Berat (w) (g)	Log W	Lingkar Tubuh (cm)	Log LT	TKG (I-V)	Berat Gonad (g)	Sex	IKG (%)	Tanggal
328	18.7	1.272	30.47	1.484	9.5	0.978	III	1.32	2	4.332	27-Des-14
329	18.7	1.272	32.82	1.516	9	0.954	III	1.63	2	4.966	27-Des-14
330	18.8	1.274	30.67	1.487	9.5	0.978	II	1.52	2	4.956	27-Des-14
331	18.8	1.274	34.58	1.539	9.5	0.978	III	2.7	2	7.808	27-Des-14
332	18.9	1.276	45.54	1.658	9.5	0.978	III	1.52	2	3.338	27-Des-14
333	18.9	1.276	59.46	1.774	9	0.954	III	1.52	2	2.556	27-Des-14
334	18.9	1.276	57.49	1.76	9.5	0.978	IV	0.73	1	1.27	27-Des-14
335	18.9	1.276	51.8	1.714	9.5	0.978	III	1.76	2	3.398	27-Des-14
336	19	1.279	44.3	1.646	9.6	0.982	III	1.4	2	3.16	27-Des-14
337	19	1.279	65.72	1.818	9.6	0.982	II	0.57	1	0.867	27-Des-14
338	19	1.279	61	1.785	9.6	0.982	II	0.1	1	0.164	27-Des-14
339	19	1.279	62.08	1.793	7.8	0.892	II	0.31	1	0.499	27-Des-14
340	19	1.279	50.35	1.702	10	1	III	1.65	2	3.277	27-Des-14
341	19.2	1.283	40	1.602	9	0.954	II	0.23	1	0.575	27-Des-14
342	19.3	1.286	40.13	1.603	9.5	0.978	III	2.04	2	5.083	27-Des-14
343	19.3	1.286	44.83	1.652	9.5	0.978	III	0.27	1	0.602	27-Des-14
344	19.3	1.286	46.01	1.663	9.5	0.978	III	1.31	2	2.847	27-Des-14
345	19.3	1.286	49.78	1.697	9.5	0.978	II	1.07	2	2.149	27-Des-14
346	19.3	1.286	33.46	1.525	9	0.954	I	0.27	1	0.807	27-Des-14
347	19.3	1.286	52.56	1.721	9	0.954	I	0.16	1	0.304	27-Des-14
348	19.3	1.286	53.48	1.728	9.5	0.978	III	0.88	1	1.645	27-Des-14
349	19.3	1.286	42.3	1.626	9.5	0.978	II	0.31	1	0.733	27-Des-14
350	19.3	1.286	48.2	1.683	10	1	II	0.28	1	0.581	27-Des-14
351	19.3	1.286	47.73	1.679	9	0.954	II	1.17	2	2.451	25-Jan-15
352	19.3	1.286	30.78	1.488	10	1	IV	2.15	2	6.985	31-Jan-15
353	19.3	1.286	34.98	1.544	9	0.954	III	0.29	1	0.829	31-Jan-15
354	19.3	1.286	37.72	1.577	9.5	0.978	IV	1.52	2	4.03	31-Jan-15
355	19.3	1.286	47.22	1.674	10.5	1.021	IV	1.94	2	4.108	31-Jan-15
356	19.3	1.286	33	1.519	9.5	0.978	IV	0.27	1	0.818	31-Jan-15
357	19.3	1.286	30.80	1.489	10.5	1.021	IV	2.01	2	6.526	31-Jan-15
358	19.3	1.286	40.38	1.606	10	1	II	0.87	2	2.155	31-Jan-15
359	19.3	1.286	31.07	1.492	9.5	0.978	II	0.21	1	0.676	31-Jan-15

Lampiran 4 (Lanjutan)

No	Panjang (TL) (cm)	Log L	Berat (w) (g)	Log W	Lingkar Tubuh (cm)	Log LT	TKG (I-V)	Berat Gonad (g)	Sex	IKG (%)	Tanggal
360	19.3	1.286	43.37	1.637	10	1	IV	2.37	2	5.465	31-Jan-15
361	19.3	1.286	37	1.568	10	1	IV	1.17	2	3.162	31-Jan-15
362	19.3	1.286	44.83	1.652	10	1	IV	1.90	2	4.238	31-Jan-15
363	19.3	1.286	37.87	1.578	10	1	IV	1.92	2	5.07	31-Jan-15
364	19.3	1.286	33.75	1.528	9.5	0.978	IV	0.28	1	0.83	31-Jan-15
365	19.3	1.286	35.71	1.553	9.5	0.978	III	0.34	1	0.952	31-Jan-15
366	19.3	1.286	32.17	1.507	9.5	0.978	IV	0.54	1	1.679	31-Jan-15
367	19.3	1.286	35.42	1.549	9.5	0.978	IV	0.20	1	0.565	31-Jan-15
368	19.3	1.286	32.58	1.513	9	0.954	IV	0.40	1	1.228	31-Jan-15
369	19.3	1.286	32.09	1.506	9.5	0.978	II	0.59	2	1.839	16-Feb-15
370	19.3	1.286	34.79	1.541	9	0.954	II	1.31	2	3.765	16-Feb-15
371	19.3	1.286	38.29	1.583	9.5	0.978	IV	0.60	1	1.567	16-Feb-15
372	19.3	1.286	29.72	1.473	9	0.954	IV	1.46	2	4.913	16-Feb-15
373	19.3	1.286	34.03	1.532	8.5	0.929	I	0.33	2	0.97	16-Feb-15
374	19.3	1.286	36.43	1.561	9	0.954	III	1.20	2	3.294	16-Feb-15
375	19.3	1.286	29.4	1.468	9.5	0.978	IV	1.67	2	5.68	16-Feb-15
376	19.3	1.286	34.77	1.541	9	0.954	III	1.21	2	3.48	16-Feb-15
377	19.3	1.286	30.90	1.49	9.5	0.978	III	1.23	2	3.981	16-Feb-15
378	19.3	1.286	36.22	1.559	9	0.954	IV	1.92	2	5.301	16-Feb-15
379	19.3	1.286	36.17	1.558	9.5	0.978	III	1.01	2	2.792	16-Feb-15
380	19.3	1.286	30.61	1.486	9.5	0.978	III	1.23	2	4.018	16-Feb-15
381	19.3	1.286	37.76	1.577	9	0.954	III	1.53	2	4.052	16-Feb-15
382	19.3	1.286	34.36	1.536	9	0.954	III	1.24	2	3.609	16-Feb-15
383	19.3	1.286	25.40	1.405	9.5	0.978	IV	1.50	2	5.906	16-Feb-15
384	19.3	1.286	40.39	1.606	10	1	IV	1.75	2	4.333	16-Feb-15
385	19.3	1.286	28.11	1.449	9	0.954	IV	1.30	2	4.625	16-Feb-15
386	19.3	1.286	31.67	1.501	9.5	0.978	III	0.74	2	2.337	16-Feb-15
387	19.3	1.286	35.73	1.553	9.5	0.978	IV	1.61	2	4.506	16-Feb-15
388	19.3	1.286	39.79	1.6	9.5	0.978	III	1.12	2	2.815	16-Feb-15
389	19.3	1.286	39.60	1.598	9.5	0.978	II	1	2	2.525	18-Feb-15
390	19.3	1.286	29.96	1.477	9	0.954	IV	0.86	2	2.87	18-Feb-15
391	19.3	1.286	33.01	1.519	9	0.954	III	0.30	1	0.909	18-Feb-15
392	19.3	1.286	31.90	1.504	9	0.954	IV	0.38	1	1.191	18-Feb-15
393	19.3	1.286	31.03	1.492	9	0.954	II	0.20	1	0.645	18-Feb-15

Lampiran 4 (Lanjutan)

No	Panjang (TL) (cm)	Log L	Berat (w) (g)	Log W	Lingkar Tubuh (cm)	Log LT	TKG (I-V)	Berat Gonad (g)	Sex	IKG (%)	Tanggal
394	19.3	1.286	36.41	1.561	9	0.954	II	0.19	1	0.522	03-Mar-15
395	19.3	1.286	32.75	1.515	9.5	0.978	V	0.48	2	1.466	03-Mar-15
396	19.3	1.286	38.38	1.584	9	0.954	III	0.21	1	0.547	03-Mar-15
397	19.3	1.286	39.43	1.596	9.5	0.978	I	0.14	1	0.355	03-Mar-15
398	19.3	1.286	31.20	1.494	9.5	0.978	II	0.21	1	0.673	03-Mar-15
399	19.4	1.288	38.17	1.582	9	0.954	IV	1.33	2	3.484	03-Mar-15
400	19.4	1.288	43.84	1.642	9	0.954	III	0.23	1	0.525	03-Mar-15
401	19.4	1.288	37.43	1.573	10	1	IV	2.09	2	5.584	03-Mar-15
402	19.4	1.288	31.91	1.504	9	0.954	IV	1.41	2	4.419	03-Mar-15
403	19.4	1.288	37.37	1.573	9	0.954	III	0.29	1	0.776	03-Mar-15
404	19.4	1.288	37.75	1.577	9	0.954	IV	1.52	2	4.026	03-Mar-15
405	19.4	1.288	37.99	1.58	9.5	0.978	III	0.33	1	0.869	03-Mar-15
406	19.4	1.288	39.71	1.599	9.5	0.978	IV	1.60	2	4.029	03-Mar-15
407	19.4	1.288	40.02	1.602	9.5	0.978	III	0.30	1	0.75	03-Mar-15
408	19.5	1.29	47.68	1.678	9.5	0.978	I	0.18	1	0.378	27-Des-14
409	19.5	1.29	52.37	1.719	10	1	II	0.73	2	1.394	27-Des-14
410	19.5	1.29	44	1.643	10	1	IV	0.93	2	2.114	27-Des-14
411	19.5	1.29	43.24	1.636	9.5	0.978	III	0.59	1	1.364	27-Des-14
412	19.5	1.29	48.95	1.69	9.5	0.978	III	1.72	2	3.514	27-Des-14
413	19.5	1.29	49.38	1.694	10	1	III	1.81	2	3.665	27-Des-14
414	19.5	1.29	40.83	1.611	9.5	0.978	II	0.38	1	0.931	27-Des-14
415	19.5	1.29	53.3	1.727	10	1	II	0.43	1	0.807	27-Des-14
416	19.5	1.29	44.29	1.646	10	1	II	0.35	1	0.79	27-Des-14
417	19.5	1.29	55.42	1.744	10	1	II	1.35	2	2.436	27-Des-14
418	19.5	1.29	40	1.602	10	1	V	0.41	2	1.025	13-Des-14
419	19.5	1.29	44.84	1.652	10	1	III	2.17	2	4.839	13-Des-14
420	19.5	1.29	41.3	1.616	9.5	0.978	II	1.87	2	4.528	13-Des-14
421	19.5	1.29	42.3	1.626	10	1	II	0.36	1	0.851	13-Des-14
422	19.5	1.29	51.62	1.713	10	1	IV	2.05	2	3.971	13-Des-14
423	19.5	1.29	50.6	1.704	10	1	III	0.54	1	1.067	13-Des-14
424	19.5	1.29	51.6	1.713	9	0.954	V	0.4	1	0.775	13-Des-14
425	19.5	1.29	61.56	1.789	10.5	1.021	II	0.74	2	1.202	13-Des-14

Lampiran 4 (Lanjutan)

No	Panjang (TL) (cm)	Log L	Berat (w) (g)	Log W	Lingkar Tubuh (cm)	Log LT	TKG (I-V)	Berat Gonad (g)	Sex	IKG (%)	Tanggal
426	19.7	1.294	63.53	1.803	10	1	III	2.23	2	3.51	13-Des-14
427	19.7	1.294	66.19	1.821	10	1	III	1.63	2	2.463	13-Des-14
428	19.7	1.294	40.45	1.607	10	1	I	0.53	2	1.31	13-Des-14
429	19.7	1.294	55.72	1.746	10	1	V	1.36	2	2.441	13-Des-14
430	19.7	1.294	36.53	1.563	10	1	IV	1.74	2	4.763	31-Jan-15
431	19.7	1.294	39.49	1.596	10	1	IV	0.29	1	0.734	31-Jan-15
432	19.7	1.294	36.88	1.567	9.5	0.978	IV	0.27	1	0.732	31-Jan-15
433	19.7	1.294	36.84	1.566	10	1	IV	2.15	2	5.836	31-Jan-15
434	19.7	1.294	32.35	1.51	9.6	0.982	III	0.37	1	1.144	25-Jan-15
435	19.7	1.294	34.26	1.535	10	1	II	1.21	2	3.532	31-Jan-15
436	19.8	1.297	42.8	1.631	9.5	0.978	IV	1.78	2	4.159	31-Jan-15
437	19.8	1.297	38.88	1.59	10	1	IV	2.18	2	5.607	31-Jan-15
438	19.8	1.297	36.78	1.566	10	1	IV	2.60	2	7.069	31-Jan-15
439	19.8	1.297	36.85	1.566	10	1	IV	2.30	2	6.242	31-Jan-15
440	19.8	1.297	38.77	1.588	9.5	0.978	IV	1.82	2	4.694	31-Jan-15
441	19.8	1.297	37.48	1.574	10	1	IV	2	2	5.336	31-Jan-15
442	19.8	1.297	29.10	1.464	9.5	0.978	IV	1.46	2	5.017	31-Jan-15
443	19.8	1.297	46.59	1.668	10	1	III	1.95	2	4.185	31-Jan-15
444	19.8	1.297	37.69	1.576	9.5	0.978	IV	0.28	1	0.743	31-Jan-15
445	19.8	1.297	32.34	1.51	9.5	0.978	III	0.51	1	1.577	16-Feb-15
446	19.8	1.297	31.73	1.501	9.5	0.978	IV	1.60	2	5.043	16-Feb-15
447	19.8	1.297	34.73	1.541	10	1	IV	1.60	2	4.607	16-Feb-15
448	19.8	1.297	40.48	1.607	9.5	0.978	IV	1.35	2	3.335	16-Feb-15
449	19.8	1.297	33.29	1.522	9	0.954	IV	0.41	1	1.232	16-Feb-15
450	19.8	1.297	34.19	1.534	9.5	0.978	III	0.23	1	0.673	18-Feb-15
451	19.8	1.297	36	1.556	9.5	0.978	IV	1.36	2	3.778	18-Feb-15
452	19.8	1.297	31.54	1.499	8.5	0.929	III	0.25	1	0.793	18-Feb-15
453	19.8	1.297	33.69	1.528	9	0.954	IV	0.29	1	0.861	18-Feb-15
454	19.8	1.297	68.37	1.835	9.5	0.978	III	0.26	1	0.38	03-Mar-15
455	19.8	1.297	40.87	1.611	10	1	III	0.89	2	2.178	03-Mar-15
456	19.8	1.297	37.31	1.572	9.5	0.978	II	0.24	1	0.643	03-Mar-15
457	19.8	1.297	38.82	1.589	9.5	0.978	IV	2.21	2	5.693	03-Mar-15
458	20	1.301	44.38	1.647	10.4	1.017	II	0.42	1	0.946	27-Des-14
459	20	1.301	45.01	1.653	10	1	IV	2.23	1	4.954	27-Des-14
460	20	1.301	48	1.681	10.4	1.017	IV	2.62	2	5.458	27-Des-14

Lampiran 4 (Lanjutan)

No	Panjang (TL) (cm)	Log L	Berat (w) (g)	Log W	Lingkar Tubuh (cm)	Log LT	TKG (I-V)	Berat Gonad (g)	Sex	IKG (%)	Tanggal
461	20	1.301	43.27	1.636	9.9	0.996	III	0.56	1	1.294	27-Des-14
462	20	1.301	58.36	1.766	9.9	0.996	III	1.75	2	2.999	27-Des-14
463	20	1.301	52.92	1.724	9.9	0.996	II	1.41	2	2.664	27-Des-14
464	20	1.301	52.7	1.722	10.3	1.013	II	0.82	2	1.556	27-Des-14
465	20	1.301	30.59	1.486	10	1	I	0.81	2	2.648	27-Des-14
466	20.3	1.307	37.50	1.574	10	1	IV	0.42	1	1.12	31-Jan-15
467	20.3	1.307	45.74	1.66	10	1	IV	2.27	2	4.963	31-Jan-15
468	20.3	1.307	41.39	1.617	10	1	V	1.11	2	2.682	31-Jan-15
469	20.3	1.307	42.38	1.627	10	1	V	0.24	1	0.566	31-Jan-15
470	20.3	1.307	37.21	1.571	9.5	0.978	IV	0.46	1	1.236	16-Feb-15
471	20.3	1.307	36.91	1.567	9.3	0.968	II	0.26	1	0.704	16-Feb-15
472	20.3	1.307	32.50	1.512	9.3	0.968	III	1.68	2	5.169	16-Feb-15
473	20.3	1.307	37.92	1.579	10	1	III	1.19	2	3.138	16-Feb-15
474	20.3	1.307	33.80	1.529	9	0.954	IV	1.85	2	5.473	16-Feb-15
475	20.3	1.307	37.55	1.575	9.4	0.973	IV	1.14	2	3.036	16-Feb-15
476	20.3	1.307	50	1.699	9.9	0.996	IV	0.50	1	1	18-Feb-15
477	20.3	1.307	43.28	1.636	9.5	0.978	V	0.79	2	1.825	03-Mar-15
478	20.3	1.307	40.63	1.609	10	1	III	0.36	1	0.886	03-Mar-15
479	20.7	1.316	51.21	1.709	10.9	1.037	IV	1.84	2	3.593	13-Des-14
480	20.7	1.316	59.43	1.774	9.9	0.996	IV	2.46	2	4.139	13-Des-14
481	20.7	1.316	58.43	1.767	9.4	0.973	II	1.16	2	1.985	13-Des-14
482	20.7	1.316	39.48	1.596	10	1	IV	2.28	2	5.775	31-Jan-15
483	20.7	1.316	42.03	1.624	10	1	III	1.50	2	3.569	16-Feb-15
484	20.7	1.316	42.32	1.627	9.5	0.978	III	1.24	2	2.93	16-Feb-15
485	20.7	1.316	52.41	1.719	10.3	1.013	IV	1.70	2	3.244	03-Mar-15
486	21	1.322	47.9	1.68	10.5	1.021	IV	2.44	2	5.094	27-Des-14
487	21	1.322	59.02	1.771	11	1.041	IV	3.74	2	6.337	27-Des-14
488	21.4	1.33	43.04	1.634	11.1	1.045	IV	2.89	2	6.715	31-Jan-15
489	21.4	1.33	48.39	1.685	11.1	1.045	IV	3.15	2	6.51	31-Jan-15
490	22	1.342	43.42	1.638	10.9	1.037	IV	3.95	2	9.097	13-Des-14
491	22.4	1.35	41.27	1.616	10.7	1.029	IV	0.67	1	1.623	16-Feb-15
492	22.5	1.352	50.22	1.701	12.2	1.086	IV	6.28	2	12.5	13-Des-14
493	23	1.362	63.28	1.801	12.4	1.093	III	2.31	2	3.65	13-Des-14
494	23	1.362	51.55	1.712	10.9	1.037	IV	0.49	1	0.951	13-Des-14

Lampiran 4 (Lanjutan)

No	Panjang (TL) (cm)	Log L	Berat (w) (g)	Log W	Lingkar Tubuh (cm)	Log LT	TKG (I-V)	Berat Gonad (g)	Sex	IKG (%)	Tanggal
495	23.3	1.367	51.58	1.712	11.6	1.064	IV	0.59	1	1.144	16-Feb-15
496	23.5	1.371	51.1	1.708	11.4	1.057	V	0.35	1	0.685	13-Des-14
497	23.8	1.377	53.24	1.726	12.5	1.097	IV	0.65	1	1.221	13-Des-14
498	23.8	1.377	52.05	1.716	11	1.041	III	0.81	1	1.556	13-Des-14
499	24	1.38	55.80	1.747	11.8	1.072	IV	3.15	2	5.645	13-Des-14
500	24	1.38	54.03	1.733	11.8	1.072	III	2.73	2	5.053	13-Des-14
501	25	1.398	70.05	1.845	12.7	1.104	IV	0.67	1	0.956	13-Des-14

Keterangan: Sex (2) = Ikan Layang Betina

Sex (1) = Ikan Layang Jantan

Lampiran 5. Komposisi TKG Ikan Layang (*D. russelli*) Jantan dan Betina

Bulan	Jumlah (ekor)	TINGKAT KEMATANGAN GONAD (TKG)									
		I		II		III		IV		V	
		X	Y	X	Y	X	Y	X	Y	X	Y
Desember	142	21	8	25	26	8	28	11	11	2	0
Januari	146	29	25	10	12	6	15	19	28	1	0
Februari	158	4	3	21	24	18	40	27	21	0	1
Maret	55	7	5	16	2	11	2	1	9	0	2
Jumlah	501	61	41	72	64	43	85	58	69	3	3

Keterangan: X = Ikan Layang Jantan
Y = Ikan Layang Betina

Gonad Layang Betina

6.1 Gonad Layang Jantan



TKG I



TKG II



TKG III



TKG IV

6.2 Gonad Layang Betina



TKG I



TKG II



TKG III



TKG IV



TKG V