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LAMPIRAN

Lampiran 1. Jadwal Pasar/Pengambilan Ikan Gabus (*Channa striata*) sekitar Danau Buaya Kabupaten Wajo Sulawesi Selatan

No.	Hari	Tempat
1.	Rabu dan Minggu	Pasar Lajokka
2.	Senin, Kamis dan Minggu	Pasar Tancung

Lampiran 2. Analisis nisbah kelamin ikan gabus *Channa striata*

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
JK * TKG	630	100.0%	0	0.0%	630	100.0%

JK * TKG Crosstabulation

Count

		TKG			Total
		TKG II	TKG III	TKG IV	
JK	Betina	6	53	42	101
	Jantan	221	278	30	529
Total		227	331	72	630



Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	125.936 ^a	2	.000
Likelihood Ratio	110.211	2	.000
Linear-by-Linear Association	105.271	1	.000
N of Valid Cases	630		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11,54.

$$X^2_{\text{tabel}} (0,05:3) = 7,8147$$

$X^2_{\text{hitung}} > X^2_{\text{tabel}}$, maka jumlah ikan gabus (*Channa striata*) jantan dan betina yang tertangkap selama penelitian berdasarkan waktu pengambilan sampel di Danau Buaya adalah berbeda nyata (nisbah kelamin tidak seimbang $1 \neq 1$)



Optimization Software:
www.balesio.com

Lampiran 3. Hubungan panjang – bobot ikan gabus *Channa striata*

1. Jantan

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,7139
R Square	0,5097
Adjusted R Square	0,5088
Standard Error	0,0674
Observations	529

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	2,4880	2,4880	547,8465	1,33E-83
Residual	527	2,3933	0,0045		
Total	528	4,8813			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95,0%	Upper 95,0%
Intercept	-0,9510	0,1290	-7,3714	6,57E-13	-1,2044	-0,6975	-1,2044	-0,6975
X Variable 1	1,2799	0,0546	23,4061	1,33E-83	1,17255	1,3874	1,1725	1,3874

$$\frac{-b_0}{sb_1} = \frac{1,2799-3}{0,0546} = -31,5036$$

a/2; n-k-1 atau df residual)

529 – 1 -1)

527)



= 2,2478

Kesimpulan = $t_{hitung} > t_{tabel}$ maka nilai $b \neq 3$ (ikan memiliki pola pertumbuhan allometrik negatif)

2. Betina

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,6699
R Square	0,4488
Adjusted R Square	0,4432
Standard Error	0,0800
Observations	101

ANOVA

	df	SS	MS	F	Significance F
Regression	1	0,5158	0,5158	80,6128	1,85E-14
Residual	99	0,6334	0,0064		
Total	100	1,1491			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95,0%	Upper 95,0%
Intercept	-1,3966	0,4052	-3,4470	0,0008	-2,2006	-0,5927	-2,2006	-0,5927
X Variable 1	1,4985	0,1669	8,9785	0,0000	1,1673	1,8297	1,1673	1,8297



$$\frac{1 - b_0}{Sb_1} = \frac{1,4985 - 3}{0,1669} = -8,9964$$

a/2; n-k-1 atau df residual)

$$= (0,05/2; 101 - 1 - 1)$$

$$= (0,025 ; 99)$$

$$= 2, 2760$$

Kesimpulan = $t_{hitung} > t_{tabel}$ maka nilai $b \neq 3$ (ikan memiliki pola pertumbuhan allometrik negatif)

3. Gabungan Jantan dan Betina

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,9165
R Square	0,8399
Adjusted R Square	0,8397
Standard Error	0,0467
Observations	630

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	7,1877	7,1877	3295,4636	4,9E-252
Residual	628	1,3697	0,0022		
Total	629	8,5574			

Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper		Lower 95,0%	Upper 95,0%
					95%	95,0%		
-2,2395	0,0755	-29,6468	0,0000	-2,3878	-2,0911	-2,3878	-2,0911	
1,8295	0,0319	57,4061	0,0000	1,7669	1,8921	1,7669	1,8921	

$$\frac{t - b_0}{Sb_1} = \frac{1,8295 - 3}{0,0319} = -36,6927$$



$t_{\text{tabel}} = (a/2; n-k-1 \text{ atau df residual})$

$= (0,05/2; 630 - 1 - 1)$

$= (0,025 ; 628)$

$= 2,2467$

Kesimpulan = $t_{\text{hitung}} > t_{\text{tabel}}$ maka nilai $b \neq 3$ (ikan memiliki pola pertumbuhan allometrik negatif)



Lampiran 4. Ukuran pertama kali matang gonad (Lm) ikan gabus *Channa striata*

1. Jantan

SK	Nt	Xi	Ni	Nb	Pi	Qi=1-pi	X(i-Xi)	Pi*Qi	Ni-1	(Pi*Qi)/Ni-1
196-211	221,5	2,3454	5	5	1	0	0,01	0	4	0
212-227	227,5	2,3570	7	3	0,43	0,5714	0,03	0,24	6	0,04
228-243	243,5	2,3865	8	7	0,88	0,1250	0,03	0,11	7	0,02
244-259	259,5	2,4141	11	11	1	0	0,03	0	10	0
260-275	275,5	2,4401	20	19	0,95	0,05	0,02	0,05	19	0,00
276-291	291,5	2,4646	26	26	1	0	0,02	0	25	0
292-307	307,5	2,4878	23	23	1	0	0,02	0	22	0
308-323	323,5	2,5099	1	1	1	0	0	0	0	0
Jumlah			101	95	7,2536	0,7464	0,1645	0,4018	93	0,0589

$$\text{Log } m = (Xk + \left(\frac{x}{2}\right)) - (x \sum pi)$$

$$= (2, 50+0,01) - (0,02*7,25)$$

$$= 2,36$$

$$M = \text{antilog } 2,36 = 229,6671$$

$$Lm = \text{antilog} \left[m \pm 1,96 \sqrt{x^2 \sum \left(\frac{pi-qi}{ni-1}\right)} \right]$$

$$\text{antilog} [2,36 \pm 1,96 \sqrt{0,02^2 \times 0,0589}]$$

$$\text{antilog} [2,36 \pm 1,96 \times \sqrt{0,00002356}]$$

$$\text{antilog} [2,36 \pm 1,96 \times 0,0048]$$

$$\text{antilog} [2,36 \pm 0,0094]$$

Jadi batas bawah adalah :

$$\text{Antilog} [2,36 - 0,0094] = \text{antilog } 2,3506 = 224,19 \text{ mm}$$

Jadi batas atas adalah :

$$\text{Antilog} [2,36 + 0,0094] = \text{antilog } 2,3694 = 235,27 \text{ mm}$$



2. Betina

SK	Nt	Xi	Ni	Nb	Pi	Qi=1-pi	X(i-Xi)	Pi*Qi	Ni-1	(Pi*Qi)/Ni-1
172-185	185,5	2,2683	13	8	0,62	0,38	0,03	0,24	12	0,02
186-199	199,5	2,2999	75	37	0,49	0,51	0,03	0,25	74	0,00
200-213	213,5	2,3294	71	28	0,39	0,61	0,03	0,24	70	0,00
214-227	227,5	2,3570	124	55	0,44	0,56	0,03	0,25	123	0,00
228-241	241,5	2,3829	88	49	0,56	0,44	0,02	0,25	87	0,00
242-255	255,5	2,4074	40	29	0,73	0,28	0,02	0,20	39	0,01
256-269	269,5	2,4306	50	39	0,78	0,22	0,02	0,17	49	0,00
270-283	283,5	2,4526	36	32	0,89	0,11	0,02	0,10	35	0,00
284-297	297,5	2,4735	29	28	0,97	0,03	0,02	0,03	28	0,00
298-311	311,5	2,4935	3	3	1,00	0,00	0	0,00	2	0,00
Jumlah			529	308	6,8629	3,1371	0,2251	1,7221	519	0,0440

$$\begin{aligned} \text{Log } m &= (Xk + \left(\frac{x}{2}\right)) - (x \sum pi) \\ &= (2,49 + 0,01) - (0,02 * 6,86) \\ &= 2,37 \end{aligned}$$

$$M = \text{antilog } 2,37 = 232,4796$$

$$Lm = \text{antilog} \left[m \pm 1,96 \sqrt{x^2 \sum \left(\frac{pi - qi}{ni - 1}\right)} \right]$$

$$\text{antilog} \left[2,37 \pm 1,96 \sqrt{0,02^2 * 0,0440} \right]$$

$$\text{antilog} \left[2,37 \pm 1,96 * \sqrt{0,0000176} \right]$$

$$\text{antilog} \left[2,37 \pm 1,96 * 0,0042 \right]$$

$$\text{antilog} \left[2,37 \pm 0,0082 \right]$$

Jadi batas bawah adalah:

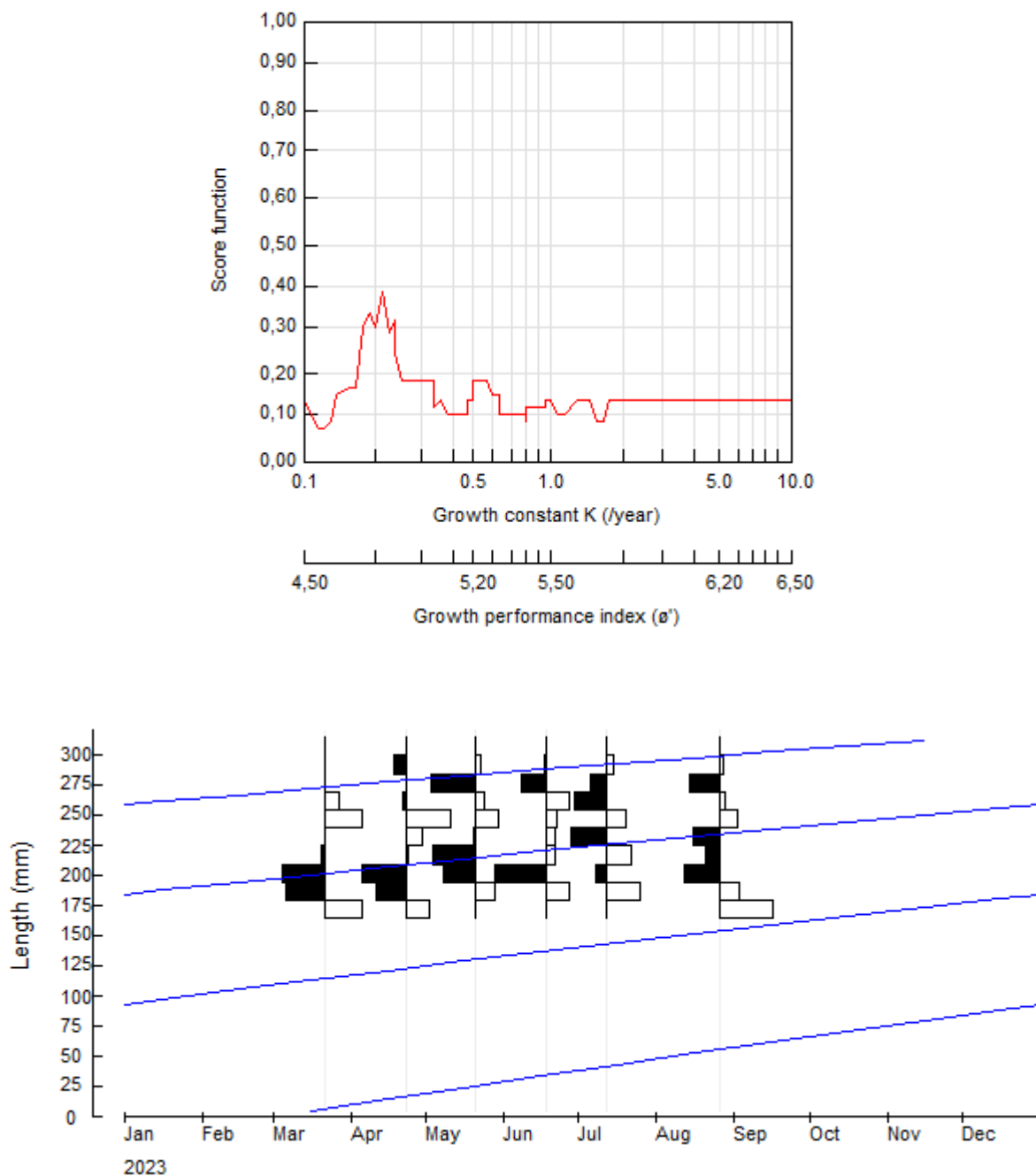
$$\text{Antilog} [2,37 - 0,0082] = \text{antilog } 2,3582 = 228,12 \text{ mm}$$

Jadi batas atas adalah :

$$\text{Antilog} [2,37 + 0,0082] = \text{antilog } 2,3745 = 236,91 \text{ mm}$$



Lampiran 5. Kurva pertumbuhan



Lampiran 6. Ukuran layak tangkap ikan gabus di Danau Buaya Kabupaten Wajo**1. Betina**

Kelas	Frekuensi
196-211	5
212-227	7
228-243	8
244-259	11
260-275	20
276-291	26
292-307	23
308-323	1
Total	101

2. Jantan

Kelas	Frekuensi
172-185	13
186-199	75
200-213	71
214-227	124
228-241	88
242-255	40
256-269	50
270-283	36
284-297	29
298-311	3
Total	529

