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## LAMPIRAN

Lampiran 1. Analisis regresi hubungan panjang bobot ikan julung-julung, *Dermogenys orientalis* (Weber, 1894) di Stasiun 1 Sungai Leang-leang, Kecamatan Bantimurung, Kabupaten Maros

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.934224197
R Square	0.87277485
Adjusted R Square	0.872501834
Standard Error	0.082434897
Observations	468

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	21.72388	21.72388	3196.798	9.2E-211
Residual	466	3.166709	0.006796		
Total	467	24.89059			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-4.261535129	0.067121	-63.4907	1.6E-231	-4.39343	-4.12964
X Variable 1	2.301871419	0.040712	56.54023	9.2E-211	2.221869	2.381873

Lampiran 2. Analisis regresi hubungan panjang bobot ikan julung-julung, *Dermogenys orientalis* (Weber, 1894) di Stasiun 2 Sungai Leang-leang, Kecamatan Bantimurung, Kabupaten Maros

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.941202
R Square	0.885861
Adjusted R Square	0.885371
Standard Error	0.082222
Observations	235

<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	12.2254171	12.22542	1808.367	8.6E-112
Residual	233	1.57519029	0.00676		
Total	234	13.80060739			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-4.86878	0.102960717	-47.2877	2E-121	-5.07163	-4.66592343
X Variable 1	2.678208	0.062979765	42.5249	8.6E-112	2.554126	2.802290704

Lampiran 3. Analisis regresi hubungan panjang bobot ikan julung-julung, *Dermogenys orientalis* (Weber, 1894) di Stasiun 3 Sungai Leang-leang, Kecamatan Bantimurung, Kabupaten Maros

SUMMARY  
OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.939153866
R Square	0.882009983
Adjusted R Square	0.881476092
Standard Error	0.102793685
Observations	223

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	17.45635	17.45635	1652.039821	1.5673E-104
Residual	221	2.335206	0.010567		
Total	222	19.79155			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	4.638131105	0.104235	-44.4968	2.8088E-112	-4.843552993	-4.43271
X Variable 1	2.555324293	0.062869	40.64529	1.5673E-104	2.431425041	2.679224

Lampiran 4. Uji statistik koefisien regresi keseluruhan ikan julung-julung *Dermogenys orientalis* (Weber, 1894) antara Stasiun 1 dan 2 di perairan Sungai Leang-leang, Kecamatan Bantimurung, Kabupaten Maros.

$$t = \frac{(b_1 - b_2)}{\sqrt{\text{Var}(b_1 - b_2)}}$$

$$= \frac{(2.3019 - 2.6782)}{\sqrt{0.0056}}$$

$$= -5.0135$$

$$\text{var}(b_1 - b_2) = \frac{S_p^2}{\sum(X_1 - \bar{X}_1)^2} + \frac{S_p^2}{\sum(X_2 - \bar{X}_2)^2}$$

$$= \frac{0.0068}{4.0999} + \frac{0.0068}{1.7044}$$

$$= 0.0068$$

$$S_p^2 = \frac{JKS_1 + JKS_2}{(n_1 - 2) + (n_2 - 2)}$$

$$= \frac{3.1667 + 1.5752}{468 - 2 + 235 - 2}$$

$$= 0.0068$$

$$JKS_1 = \sum(Y_1 - \bar{Y}_1)^2 - \frac{\sum(X_1 - \bar{X}_1)(Y_1 - \bar{Y}_1)}{\sum(X_1 - \bar{X}_1)^2}$$

$$= \sum(24.8906) - \frac{\sum(9.4375)}{\sum 4.0999}$$

$$= 3.1667$$

$$JKS_2 = \sum(Y_2 - \bar{Y}_2)^2 - \frac{(\sum(X_2 - \bar{X}_2)(Y_2 - \bar{Y}_2))^2}{\sum(X_2 - \bar{X}_2)^2}$$

$$= \sum(13.8006) - \frac{\sum 4.5648}{\sum 1.7044}$$

$$= 1.5752$$

$$t_{0.05(330)} = 1.9634$$



Lampiran 5. Uji statistik koefisien regresi keseluruhan ikan julung-julung *Dermogenys orientalis* (Weber, 1894) antara Stasiun 2 dan 3 di perairan Sungai Leang-leang, Kecamatan Bantimurung, Kabupaten Maros.

$$\begin{aligned}
 t &= \frac{(b_1 - b_2)}{\sqrt{\text{Var}(b_1 - b_2)}} \\
 &= \frac{(2.3018 - 2.5553)}{\sqrt{0.0083}} \\
 &= -2.7862
 \end{aligned}$$

$$\begin{aligned}
 \text{var}(b_1 - b_2) &= \frac{S_p^2}{\sum(X_1 - \bar{X}_1)^2} + \frac{S_p^2}{\sum(X_2 - \bar{X}_2)^2} \\
 &= \frac{0.0086}{1.7044} + \frac{0.0086}{2.6734} \\
 &= 0.0083
 \end{aligned}$$

$$\begin{aligned}
 S_p^2 &= \frac{JKS_1 + JKS_2}{(n_1 - 2) + (n_2 - 2)} \\
 &= \frac{1.5753 + 2.3352}{(235 - 2) + (223 - 2)} \\
 &= 0.0086
 \end{aligned}$$

$$\begin{aligned}
 JKS_1 &= \sum(Y_1 - \bar{Y}_1)^2 - \frac{\sum(X_1 - \bar{X}_1)(Y_1 - \bar{Y}_1)}{\sum(X_1 - \bar{X}_1)^2} \\
 &= \sum(13.8006) - \frac{\sum 4.5648}{\sum 1.7044} \\
 &= 1.5753
 \end{aligned}$$

$$\begin{aligned}
 JKS_2 &= \sum(Y_2 - \bar{Y}_2)^2 - \frac{(\sum(X_2 - \bar{X}_2)(Y_2 - \bar{Y}_2))^2}{\sum(X_2 - \bar{X}_2)^2} \\
 &= \sum(8.8314) - \frac{\sum 4.5648}{\sum 2.6734} \\
 &= 2.3352
 \end{aligned}$$

$$t_{0.05(330)} = 1.9652$$

Lampiran 6. Uji statistik koefisien regresi keseluruhan ikan julung-julung *Dermogenys orientalis* (Weber, 1894) antara Stasiun 1 dan 3 di perairan Sungai Leang-leang, Kecamatan Bantimurung, Kabupaten Maros

$$t = \frac{(b_1 - b_2)}{\sqrt{\text{Var}(b_1 - b_2)}}$$

$$= \frac{(2.3019 - 2.5553)}{\sqrt{0.0049}}$$

$$= -3.6028$$

$$\text{var}(b_1 - b_2) = \frac{S_p^2}{\sum(X_1 - \bar{X}_1)^2} + \frac{S_p^2}{\sum(X_2 - \bar{X}_2)^2}$$

$$= \frac{0.0080}{4.0999} + \frac{0.0080}{2.6734}$$

$$= 0.0049$$

$$S_p^2 = \frac{JKS_1 + JKS_2}{(n_1 - 2) + (n_2 - 2)}$$

$$= \frac{3.1667 + 2.3352}{(468 - 2) + (223 - 2)}$$

$$= 0.0080$$

$$JKS_1 = \sum(Y_1 - \bar{Y}_1)^2 - \frac{\sum(X_1 - \bar{X}_1)(Y_1 - \bar{Y}_1)}{\sum(X_1 - \bar{X}_1)^2}$$

$$= \frac{\sum(24,8906) - \sum 9.4375}{\sum 4.0999}$$

$$= 3.1667$$

$$JKS_2 = \sum(Y_2 - \bar{Y}_2)^2 - \frac{(\sum(X_2 - \bar{X}_2)(Y_2 - \bar{Y}_2))^2}{\sum(X_2 - \bar{X}_2)^2}$$

$$= \frac{\sum 19.7916 - \sum 6.8314}{\sum 2,6734}$$

$$= 2.3352$$

$$t_{0.05(330)} = 1.9634$$

Lampiran 7. Hasil uji Koefisien regresi  $b = 3$  atau  $b \neq 3$ , ikan Julung-julung, *Dermogenys orientalis* (Weber, 1894) di stasiun 1, 2 dan 3, di perairan Sungai Leang-leang, Kecamatan Bantimurung, Kabupaten Maros.

#### Stasiun 1

$$\begin{aligned}t_{\text{hitung}} &= \frac{3-b}{S_b} \\ &= \frac{3 - 0.0671}{0.0407} \\ &= 3.1546\end{aligned}$$

$$t_{0.05} = 1.9651$$

( $t_{\text{hitung}} > t_{\text{tabel}}$ ) bersifat Hipoalometrik

#### Stasiun 2

$$\begin{aligned}t_{\text{hitung}} &= \frac{3-b}{S_b} \\ &= \frac{3 - 0.1029}{0.0629} \\ &= 4.6000\end{aligned}$$

$$t_{0.05} = 1.9651$$

( $t_{\text{hitung}} > t_{\text{tabel}}$ ) bersifat Hipoalometrik

#### Stasiun 3

$$\begin{aligned}t_{\text{hitung}} &= \frac{3-b}{S_b} \\ &= \frac{3 - 0.1046}{0.0629} \\ &= 2.9891\end{aligned}$$

$$t_{0.05} = 1.9708$$

( $t_{\text{hitung}} > t_{\text{tabel}}$ ) bersifat Hipoalometrik

Lampiran 8. Analisis regresi hubungan panjang bobot ikan Julung-julung, *Dermogenys orientalis* (Weber, 1894) pada bulan Juni di perairan Sungai Leang-leang, Kecamatan Bantimurung, Kabupaten Maros

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.951171646
R Square	0.904727501
Adjusted R Square	0.904311463
Standard Error	0.082681262
Observations	231

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	14.8662	14.8662	2174.631703	6.8372E-119
Residual	229	1.565488	0.006836		
Total	230	16.43169			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-4.812854764	0.093501	-51.4736	7.3362E-128	-4.997087841	-4.62862
X Variable 1	2.640700917	0.056627	46.63295	6.8372E-119	2.529123642	2.752278

Lampiran 9. Analisis regresi hubungan panjang bobot ikan julung-julung, *Dermogenys orientalis* (Weber, 1894) pada bulan Juli di perairan Sungai Leang-leang, Kecamatan Bantimurung, Kabupaten Maros

SUMMARY  
OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.934331607
R Square	0.872975551
Adjusted R Square	0.872650681
Standard Error	0.094008158
Observations	393

<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	23.74776	23.74776	2687.148	2.8E-177
Residual	391	3.455476	0.008838		
Total	392	27.20323			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	4.583482141	0.080628	-56.8476	4.1E-191	-4.742	4.42496
X Variable 1	2.517084279	0.048557	51.8377	2.8E-177	2.421619	2.61255

Lampiran 10. Analisis regresi hubungan panjang bobot ikan julung-julung, *Dermogenys orientalis* (Weber, 1894) pada bulan Agustus di perairan Sungai Leang-leang, Kecamatan Bantimurung, Kabupaten Maros

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.898348
R Square	0.80703
Adjusted R Square	0.806395
Standard Error	0.097762
Observations	306

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	12.15103	12.15103	1271.371685	1.3E-110
Residual	304	2.905454	0.009557		
Total	305	15.05648			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	-3.98282	0.097184	-40.9823	7.6129E-126	-4.17406	-3.79158
X Variable 1	2.121694	0.059504	35.6563	1.2616E-110	2.004602	2.238786

