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LAMPIRAN

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

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.9327
R Square	0.8700
Adjusted R Square	0.8697
Standard Error	0.0899
Observations	504

ANOVA

	Df	SS	MS	F	Significance F
Regression	1	27.1503	27.1503	3359.3390	1.5378E-224
Residual	502	4.0572	0.0081		
Total	503	31.2075			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-4.5586	0.0706	-64.5571	2.904E-24	-4.6973	-4.4198
X Variable 1	2.5216	0.0435	57.9598	1.5378E-22	2.4361	2.6071

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

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.9325
R Square	0.8696
Adjusted R Square	0.8687
Standard Error	0.1053
Observations	155

ANOVA

	Df	SS	MS	F	Significance F
Regression	1	11.3188	11.3188	1019.8787	1.48E-69
Residual	153	1.6980	0.0111		
Total	154	13.0168			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-4.5748	0.1265	-36.1631	7.430E-77	-4.8248	-4.3249
X Variable 1	2.5288	0.0792	31.9355	1.479E-69	2.3724	2.6853

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

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.9440
R Square	0.8911
Adjusted R Square	0.8900
Standard Error	0.0980
Observations	101

ANOVA

	Df	SS	MS	F	Significance F
Regression	1	7.7800	7.7800	810.4586	1.79E-49
Residual	99	0.9503	0.0096		
Total	100	8.7303			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-4.5153	0.1412	-31.9882	5.34E-54	-4.7954	-4.2352
X Variable 1	2.5020	0.0879	28.4686	1.79E-49	2.3276	2.6764

Lampiran 4. Analisis regresi hubungan panjang - bobot ikan julung-julung paruh panjang (*Dermogenys orientalis* Weber, 1894) bulan Juni di Sungai Pucak, Kabupaten Maros.

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.9381
R Square	0.8800
Adjusted R Square	0.8792
Standard Error	0.0664
Observations	164

ANOVA

	Df	SS	MS	F	Significance F
Regression	1	5.2318	5.2318	1187.5894	1.77E-76
Residual	162	0.7137	0.0044		
Total	163	5.9455			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-4.8646	0.1244	-39.0941	2.10E-84	-5.1103	-4.6188
X Variable 1	2.6959	0.0782	34.4614	1.77E-76	2.5414	2.8504

Lampiran 5. Analisis regresi hubungan panjang - bobot ikan julung-julung paruh panjang (*Dermogenys orientalis* Weber, 1894) bulan Juli di Sungai Pucak, Kabupaten Maros.

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.9513
R Square	0.9050
Adjusted R Square	0.9046
Standard Error	0.0852
Observations	198

ANOVA

	Df	SS	MS	F	Significance F
Regression	1	13.5670	13.5670	1868.1311	3.75E-102
Residual	196	1.4234	0.0073		
Total	197	14.9904			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-4.4277	0.0908	-48.7499	1.58E-111	-4.6068	-4.2486
X Variable 1	2.4668	0.0571	43.2219	3.75E-102	2.3543	2.5794

Lampiran 6. Analisis regresi hubungan panjang - bobot ikan julung-julung paruh panjang (*Dermogenys orientalis* Weber, 1894) bulan Agustus di Sungai Pucak, Kabupaten Maros.

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.9320
R Square	0.8685
Adjusted R Square	0.8682
Standard Error	0.1005
Observations	398

ANOVA

	Df	SS	MS	F	Significance F
Regression	1	26.4380	26.4380	2616.3984	1.42E-176
Residual	396	4.0015	0.0101		
Total	397	30.4395			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-4.6350	0.0821	-56.4816	1.43E-19	-4.7964	-4.4737
X Variable 1	2.5630	0.0501	51.1507	1.42E-17	2.4645	2.6616

Lampiran 7. Uji statistik koefisien regresi keseluruhan ikan julung-julung paruh panjang, (*Dermogenys orientalis* Weber, 1894) Stasiun 1 dan 2 di Sungai Pucak, Kabupaten Maros

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

$$= \sum (31.2075) - \frac{\sum (10.7671)}{\sum (4.2700)}$$

$$= 4.0572$$

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

$$= \sum (13.0168) - \frac{\sum (4.4759)}{\sum (1.7699)}$$

$$= 1.6980$$

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

$$= \frac{4.0572 + 1.6980}{(504 - 2) + (155 - 2)}$$

$$= 0.0088$$

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

$$= \frac{0.0088}{4.2700} + \frac{0.0088}{1.7699}$$

$$= 0.0070$$

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

$$= \frac{(2.5216 - 2.5288)}{0.0838}$$

$$= -0.0866$$

$t_{0.05(330)} = 1.9636$

Lampiran 8. Uji statistik koefisien regresi keseluruhan ikan julung-julung paruh panjang (*Dermogenys orientalis* Weber, 1894) Stasiun 2 dan 3 di Sungai Pucak, Kabupaten Maros

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

$$= \sum (13.0168) - \frac{\sum (4.4759)}{\sum (1.7699)}$$

$$= 1.6980$$

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

$$= \sum (8.7303) - \frac{\sum (3.1095)}{\sum (1.2428)}$$

$$= 0.9503$$

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

$$= \frac{1.6980 + 0.9503}{(155 - 2) + (101 - 2)}$$

$$= 0.0105$$

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

$$= \frac{0.0105}{1.7699} + \frac{0.0105}{1.2428}$$

$$= 0.0143$$

$$t = \frac{(b_1 - b_2)}{\sqrt{\text{Var}(b_{1-}b_2)}}$$

$$= \frac{(2.5288 - 2.5020)}{0.1200}$$

$$= 0.2239$$

$$t_{0.05(330)} = 1.9693$$

Lampiran 9. Uji statistik koefisien regresi keseluruhan ikan julung-julung paruh panjang (*Dermogenys orientalis* Weber, 1894) Stasiun 1 dan 3 di Sungai Pucak, Kabupaten Maros

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

$$= \sum (31.2075) - \frac{\sum (10.7671)}{\sum (4.2700)}$$

$$= 4.0572$$

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

$$= \sum (8.7303) - \frac{\sum (3.1095)}{\sum (1.2428)}$$

$$= 0.9503$$

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

$$= \frac{4.0572 + 0.9503}{(504 - 2) + (101 - 2)}$$

$$= 0.0083$$

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

$$= \frac{0.0083}{4.2700} + \frac{0.0083}{1.2428}$$

$$= 0.0086$$

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

$$= \frac{(2.5215 - 2.5020)}{0.0930}$$

$$= 0.2108$$

$$t_{0.05(330)} = 1.9639$$

Lampiran 10. Uji statistik koefisien regresi keseluruhan ikan julung-julung paruh panjang (*Dermogenys orientalis* Weber, 1894) bulan Juni dan Juli di Sungai Pucak, Kabupaten Maros

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

$$= \sum (5.9455) - \frac{\sum (1.9407)}{\sum (0.7199)}$$

$$= 0.7137$$

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

$$= \sum (14.9904) - \frac{\sum (5.4988)}{\sum (2.2295)}$$

$$= 1.4232$$

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

$$= \frac{0.7137 + 1.5310}{(164 - 2) + (198 - 2)}$$

$$= 0.0060$$

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

$$= \frac{0.0060}{0.7199} + \frac{0.0060}{2.2134}$$

$$= 0.0110$$

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

$$= \frac{(2.69588 - 2.4668)}{0.1074}$$

$$= 2.1869$$

$t_{0.05(330)} = 1.9665$

Lampiran 11. Uji statistik koefisien regresi keseluruhan ikan julung-julung paruh panjang (*Dermogenys orientalis* Weber, 1894) bulan Juli dan Agustus di Sungai Pucak, Kabupaten Maros

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

$$= \sum (14.9904) - \frac{\sum (5.4998)}{\sum (2.2295)}$$

$$= 1.4234$$

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

$$= \sum (30.4395) - \frac{\sum (10.3151)}{\sum (4.0245)}$$

$$= 4.0015$$

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

$$= \frac{1.4234 + 4.0015}{(198 - 2) + (398 - 2)}$$

$$= 0.0092$$

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

$$= \frac{0.0092}{2.2295} + \frac{0.0092}{4.0245}$$

$$= 0.0063$$

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

$$= \frac{(2.4668 - 2.5630)}{0.0799}$$

$$= -1.2038$$

$t_{0.05(330)} = 1.9640$

Lampiran 12. Uji statistik koefisien regresi keseluruhan ikan julung-julung paruh panjang (*Dermogenys orientalis* Weber, 1894) bulan Juni dan Agustus di Sungai Pucak, Kabupaten Maros

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

$$= \sum (5.9455) - \frac{\sum (1.9407)}{\sum (0.7199)}$$

$$= 0.7137$$

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

$$= \sum (30.4395) - \frac{\sum (10.3151)}{\sum (4.0245)}$$

$$= 4.0015$$

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

$$= \frac{0.7137 + 4.0015}{(164 - 2) + (198 - 2)}$$

$$= 0.0132$$

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

$$= \frac{0.0132}{0.7199} + \frac{0.0132}{4.0245}$$

$$= 0.0216$$

$$t = \frac{(b_1 - b_2)}{\sqrt{Var(b_{1-}b_2)}}$$

$$= \frac{(2.6958 - 2.5630)}{0.1469}$$

$$= 0.9045$$

$t_{0.05(330)} = 1.9665$