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LAMPIRAN

Lampiran 1. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* jantan pada Juni 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,7521
R Square	0,4812
Adjusted R Square	0,5536
Standard Error	0,0637
Observations	38,0000

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	0,1903	0,1903	46,8940	0,0000
Residual	36,0000	0,1461	0,0041		
Total	37,0000	0,3365			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-3,6875	0,7750	-4,7584	0,0000	-5,2592	-2,1159
X Variable 1	2,3700	0,3461	6,8479	0,0000	1,6681	3,0719

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-2{,}3700)}{0.0361}$

$= 1{,}8203$

$T_{0,05} = 2{,}0281$

Karena $t_{hitung} < t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis jantan pada bulan Juni 2023 bersifat isometrik

Lampiran *2*. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* betina pada Juni 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,7831
R Square	0,6079
Adjusted R Square	0,6086
Standard Error	0,0558
Observations	85,0000

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	0,4105	0,4105	131,6179	0,0000
Residual	83,0000	0,2589	0,0031		
Total	84,0000	0,6693			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-2,8542	0,4027	-7,0881	0,0000	-3,6551	-2,0533
X Variable 1	2,0256	0,1766	11,4725	0,0000	1,6745	2,3768

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-2,0256)}{0.1766}$

$= 5,5183$

$T_{0,05} = 1,9890$

Karena $t_{hitung} > t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis betina pada bulan Juni 2023 bersifat Hipoalometrik

Lampiran 3. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* gabungan pada Juni 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,8345
R Square	0,6934
Adjusted R Square	0,6939
Standard Error	0,0627
Observations	123,0000

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	1,0914	1,0914	277,5879	0,0000
Residual	121,0000	0,4757	0,0039		
Total	122,0000	1,5671			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-3,8801	0,3362	-11,5425	0,0000	-4,5456	-3,2146
X Variable 1	2,4696	0,1482	16,6610	0,0000	2,1761	2,7630

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-2,4696)}{0.1482}$

$= 3,5785$

$T_{0,05} = 1,9798$

Karena $t_{hitung} > t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis gabungan pada bulan Juni 2023 bersifat Hipoalometrik

Lampiran 4. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* jantan pada Juli 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,8932
R Square	0,7373
Adjusted R Square	0,7917
Standard Error	0,0496
Observations	35,0000

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	0,3207	0,3207	130,2205	0,0000
Residual	33,0000	0,0813	0,0025		
Total	34,0000	0,4020			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-5,0171	0,5868	-8,5497	0,0000	-6,2110	-3,8232
X Variable 1	2,9817	0,2613	11,4114	0,0000	2,4501	3,5133

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-2,9817)}{0.2613}$

$= 0,0702$

$T_{0,05} = 2,0345$

Karena $t_{hitung} < t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis jantan pada bulan Juli 2023 bersifat Isometrik

Lampiran 5. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* betina pada Juli 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,8907
R Square	0,7535
Adjusted R Square	0,7889
Standard Error	0,0596
Observations	49,0000

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	0,6409	0,6409	180,3673	0,0000
Residual	47,0000	0,1670	0,0036		
Total	48,0000	0,8079			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-4,7338	0,4902	-9,6574	0,0000	-5,7199	-3,7477
X Variable 1	2,8622	0,2131	13,4301	0,0000	2,4334	3,2909

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-2{,}8622)}{0.2131}$

$= 0{,}6467$

$T_{0,05} = 2{,}0117$

Karena $t_{hitung} < t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis betina pada bulan Juli 2023 bersifat isometrik

Lampiran 6. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* gabungan pada Juli 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,9276
R Square	0,8376
Adjusted R Square	0,8587
Standard Error	0,0553
Observations	84,0000

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	1,5469	1,5469	505,5897	0,0000
Residual	82,0000	0,2509	0,0031		
Total	83,0000	1,7978			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*
Intercept	-5,0129	0,3021	-16,5960	0,0000	-5,6138
X Variable 1	2,9820	0,1326	22,4853	0,0000	2,7182

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-2,9820)}{0.1326}$

= 0,1356

$T_{0,05}$ = 1,9893

Karena $t_{hitung} < t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis gabungan pada bulan Juli 2023 bersifat isometrik

Lampiran 7. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* jantan pada Agustus 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,8809
R Square	0,8273
Adjusted R Square	0,7674
Standard Error	0,0635
Observations	28,0000

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	0,3635	0,3635	90,0607	0,0000
Residual	26,0000	0,1049	0,0040		
Total	27,0000	0,4685			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*
Intercept	-5,1519	0,7174	-7,1814	0,0000	-6,6266
X Variable 1	3,0561	0,3220	9,4900	0,0000	2,3942

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-3,0561)}{0.3220}$

$= -0,1743$

$T_{0,05} = 2,0555$

Karena $t_{hitung} < t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis jantan pada bulan Agustus 2023 bersifat isometrik

Lampiran 8. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* betina pada Agustus 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,8893
R Square	0,7836
Adjusted R Square	0,7866
Standard Error	0,0681
Observations	52,0000

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	0,8769	0,8769	189,0194	0,0000
Residual	50,0000	0,2320	0,0046		
Total	51,0000	1,1088			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-4,5329	0,4624	-9,8019	0,0000	-5,4617	-3,6040
X Variable 1	2,7886	0,2028	13,7484	0,0000	2,3812	3,1960

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-2,7886)}{0.2028}$

$= 1,0424$

$T_{0,05} = 2,0086$

Karena $t_{hitung} < t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis betina pada bulan Agustus 2023 bersifat isometrik

Lampiran 9. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* gabungan pada Agustus 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,9141
R Square	0,8423
Adjusted R Square	0,8335
Standard Error	0,0664
Observations	80,0000

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	1,7498	1,7498	396,5179	0,0000
Residual	78,0000	0,3442	0,0044		
Total	79,0000	2,0940			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-4,9045	0,3350	-14,6400	0,0000	-5,5714	-4,2375
X Variable 1	2,9493	0,1481	19,9128	0,0000	2,6545	3,2442

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-2,9493)}{0.1481}$

= 0,3421

$T_{0,05}$ = 1,9908

Karena $t_{hitung} < t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis gabungan pada bulan Agustus 2023 bersifat isometrik

Lampiran 10. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* jantan pada September 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,9569
R Square	0,9156
Adjusted R Square	0,9112
Standard Error	0,0389
Observations	21,0000

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	0,3115	0,3115	206,2104	0,0000
Residual	19,0000	0,0287	0,0015		
Total	20,0000	0,3402			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-5,0976	0,4678	-10,8961	0,0000	-6,0768	-4,1184
X Variable 1	3,0175	0,2101	14,3600	0,0000	2,5777	3,4573

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-3{,}0175)}{0.2101}$

= -0,0833

$T_{0,05}$ = 2,0930

Karena $t_{hitung} < t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis jantan pada bulan September 2023 bersifat isometrik

Lampiran 11. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* betina pada September 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,9580
R Square	0,9178
Adjusted R Square	0,9157
Standard Error	0,0530
Observations	42,0000

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	1,2558	1,2558	446,3793	0,0000
Residual	40,0000	0,1125	0,0028		
Total	41,0000	1,3683			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-5,3445	0,3359	-15,9131	0,0000	-6,0233	-4,6657
X Variable 1	3,1181	0,1476	21,1277	0,0000	2,8198	3,4163

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-3,1181)}{0.1476}$

= -0,07999

$T_{0,05}$ = 2,0211

Karena $t_{hitung} < t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis betina pada bulan September 2023 bersifat isometrik

Lampiran 12. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* gabungan pada September 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,9614
R Square	0,9243
Adjusted R Square	0,9231
Standard Error	0,0491
Observations	63,0000

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	1,7971	1,7971	745,1699	0,0000
Residual	61,0000	0,1471	0,0024		
Total	62,0000	1,9442			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-5,1164	0,2500	-20,4656	0,0000	-5,6163	-4,6165
X Variable 1	3,0205	0,1106	27,2978	0,0000	2,7992	3,2417

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-3,0205)}{0.1106}$

= -0,0849

$T_{0,05}$ = 1,9996

Karena $t_{hitung} < t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis gabungan pada bulan September 2023 bersifat isometrik

Lampiran 13. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* jantan pada Oktober 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,7505
R Square	0,5633
Adjusted R Square	0,5521
Standard Error	0,0555
Observations	41,0000

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	0,1548	0,1548	50,3067	0,0000
Residual	39,0000	0,1200	0,0031		
Total	40,0000	0,2749			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-3,7106	0,7427	-4,9964	0,0000	-5,2128	-2,2085
X Variable 1	2,3800	0,3356	7,0927	0,0000	1,7013	3,0588

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-2,3800)}{0.3356}$

= 1,8475

$T_{0,05}$ = 2,0277

Karena $t_{hitung} < t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis Jantan pada bulan Oktober 2023 bersifat isometrik

Lampiran 14. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* betina pada Oktober 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,7505
R Square	0,5633
Adjusted R Square	0,5521
Standard Error	0,0555
Observations	41,0000

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	0,8141	0,8141	348,4669	0,0000
Residual	64,0000	0,1495	0,0023		
Total	65,0000	0,9636			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-5,1176	0,3639	-14,0649	0,0000	-5,8445	-4,3907
X Variable 1	3,0070	0,1611	18,6673	0,0000	2,6852	3,3288

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-3{,}0070)}{0.1611}$

= -0,0435

$T_{0,05}$ = 1,9977

Karena $t_{hitung} < t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis betina pada bulan Oktober 2023 bersifat isometrik

Lampiran 15. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* gabungan pada Oktober 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,9072
R Square	0,8230
Adjusted R Square	0,8213
Standard Error	0,0517
Observations	107,0000

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	1,3052	1,3052	488,2539	0,0000
Residual	105,0000	0,2807	0,0027		
Total	106,0000	1,5859			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-4,5881	0,2814	-16,3047	0,0000	-5,1461	-4,0301
X Variable 1	2,7741	0,1255	22,0965	0,0000	2,5251	3,0230

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-2,7741)}{0.1255}$

$= 1,7998$

$T_{0,05} = 1,9828$

Karena $t_{hitung} < t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis gabungan pada bulan Oktober 2023 bersifat isometrik

Lampiran 16. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* jantan pada November 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,7821
R Square	0,6117
Adjusted R Square	0,6033
Standard Error	0,0605
Observations	48,0000

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	0,2654	0,2654	72,4656	0,0000
Residual	46,0000	0,1684	0,0037		
Total	47,0000	0,4338			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-3,8771	0,6451	-6,0101	0,0000	-5,1756	-2,5786
X Variable 1	2,4567	0,2886	8,5127	0,0000	1,8758	3,0376

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-2,4567)}{0.2886}$

$= 1,8825$

$T_{0,05} = 2,0129$

Karena $t_{hitung} < t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis jantan pada bulan November 2023 bersifat isometrik

Lampiran 17. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* betina pada November 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,9037
R Square	0,8167
Adjusted R Square	0,8142
Standard Error	0,0673
Observations	74,0000

ANOVA

	Df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	1,4525	1,4525	320,8958	0,0000
Residual	72,0000	0,3259	0,0045		
Total	73,0000	1,7784			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-4,5188	0,3462	-13,0535	0,0000	-5,2089	-3,8287
X Variable 1	2,7418	0,1531	17,9136	0,0000	2,4367	3,0469

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-2,7418)}{0.1531}$

$= 1,6872$

$T_{0,05} = 1,9935$

Karena $t_{hitung} < t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis betina pada bulan November 2023 bersifat isometrik

Lampiran 18. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* gabungan pada November 2023

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,8875
R Square	0,7876
Adjusted R Square	0,7858
Standard Error	0,0644
Observations	122,0000

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	1,8450	1,8450	444,9931	0,0000
Residual	120,0000	0,4975	0,0041		
Total	121,0000	2,3425			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-4,3766	0,2860	-15,3047	0,0000	-4,9428	-3,8104
X Variable 1	2,6794	0,1270	21,0949	0,0000	2,4279	2,9309

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-2,6794)}{0.1270}$

$= 2,5241$

$T_{0,05} = 1,9799$

Karena $t_{hitung} > t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis gabungan pada bulan November 2023 bersifat Hipoalometrik

Lampiran 19. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* jantan gabungan

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,8230
R Square	0,6773
Adjusted R Square	0,6758
Standard Error	0,0630
Observations	211,0000

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	1,7388	1,7388	438,6711	0,0000
Residual	209,0000	0,8285	0,0040		
Total	210,0000	2,5673			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-4,3932	0,2872	-15,2989	0,0000	-4,9593	-3,8271
X Variable 1	2,6949	0,1287	20,9445	0,0000	2,4413	2,9486

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-2,6949)}{0.1287}$

$= 2,3711$

$T_{0,05} = 1,9714$

Karena $t_{hitung} > t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis jantan gabungan bersifat Hipoalometrik

Lampiran 20. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* betina gabungan

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,8920
R Square	0,7956
Adjusted R Square	0,7951
Standard Error	0,0677
Observations	368,0000

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	6,5314	6,5314	1424,7879	0,0000
Residual	366,0000	1,6778	0,0046		
Total	367,0000	8,2092			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-4,8804	0,1757	-27,7811	0,0000	-5,2258	-4,5349
X Variable 1	2,9149	0,0772	37,7464	0,0000	2,7630	3,0667

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-2,9149)}{0.0772}$

= 1,1025

$T_{0,05}$ = 1,9665

Karena $t_{hitung} > t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis jantan gabungan bersifat isometrik

Lampiran 21. Analisis regresi hubungan panjang-bobot udang mantis *Harpiosquilla harpax* jantan dan betina gabungan

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,8979
R Square	0,8063
Adjusted R Square	0,8059
Standard Error	0,0661
Observations	579,0000

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1,0000	10,4821	10,4821	2401,1980	0,0000
Residual	577,0000	2,5188	0,0044		
Total	578,0000	13,0009			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-4,8248	0,1332	-36,2140	0,0000	-5,0864	-4,5631
X Variable 1	2,8897	0,0590	49,0020	0,0000	2,7738	3,0055

$t_{hitung} = \left|\frac{3-b}{s_b}\right| = \frac{(3-2,8897)}{0.0590}$

$= 1,8712$

$T_{0,05} = 1,9641$

Karena $t_{hitung} > t_{tabel}$ maka kesimpulannya adalah pola pertumbuhan udang mantis jantan dan betina gabungan bersifat isometrik

Lampiran 22. Uji *chi-square* nisbah kelamin udang mantis *Harpiosquilla harpax* berdasarkan waktu pengambilan sampel

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
JK * BULAN	579	100.0%	0	0.0%	579	100.0%

JK * BULAN Crosstabulation

Count

		BULAN						Total
		JUNI	JULI	AGUSTUS	SEPTEMBER	OKTOBER	NOVEMBER	
JK	JANTAN	38	35	28	21	41	48	211
	BETINA	85	49	52	42	66	74	368
Total		123	84	80	63	107	122	579

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.565[a]	5	.614
Likelihood Ratio	3.586	5	.610
Linear-by-Linear Association	1.039	1	.308
N of Valid Cases	579		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 22.96.

Lampiran 23. Uji *chi-square* nisbah kelamin udang mantis *Harpiosquilla harpax* berdasarkan tingkat kematangan gonad

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
JK * TKG	579	100.0%	0	0.0%	579	100.0%

JK * TKG Crosstabulation

Count

		TKG				Total
		TKG 1	TKG 2	TKG 3	TKG 4	
JK	JANTAN	168	28	4	11	211
	BETINA	195	71	39	63	368
Total		363	99	43	74	579

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	46.566[a]	3	.000
Likelihood Ratio	51.583	3	.000
Linear-by-Linear Association	41.660	1	.000
N of Valid Cases	579		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 15.67.

Lampiran 24. Distribusi frekuensi panjang total dan tingkat kematangan gonad serta perhitungan pendugaan rata-rata panjang total pertama kali matang gonad udang mantis *Harpiosquilla harpax* Jantan pada Juni hingga Agustus

SK	Tengah Kelas	Logaritma Tengah Kelas	Jumlah Sampel Ikan (ni)	Jumlah Ikan Belum Matang Gonad	Jumlah Ikan Matang gonad (ri)	Proporsi Ikan Matang Gonad (Pi)	Xi+1 - Xi = X	qi = 1-pi	$\frac{pi \times qi}{ni-1}$
135-144	140	2,1446	2	2	0	0,0000	0,0301	1,0000	0,0000
145-154	150	2,1746	8	8	0	0,0000	0,0281	1,0000	0,0000
155-164	160	2,2028	9	8	1	0,1111	0,0264	0,8889	0,0123
165-174	170	2,2292	31	31	0	0,0000	0,0249	1,0000	0,0000
175-184	180	2,2541	34	33	1	0,0294	0,0235	0,9706	0,0009
185-194	190	2,2776	13	12	1	0,0769	0,0223	0,9231	0,0059
195-204	200	2,2999	3	2	1	0,3333	0,0212	0,6667	0,1111
205-214	210	2,3212	1	0	1	1,0000	0,0000	0,0000	0,0000

Jantan Juni hingga Agustus (Panjang)

$$m = X_k + \frac{x}{2} - (\mathrm{X} \sum Pi)$$

= 2,3212 + (0,0212/2) – (0,0212 X 1,5508)

= 2,3212 + 0,0106 – 0,0328

= 2,2990

M = antilog 2,2990

= 199,0673

$$M = antilog \left[m \pm 1{,}96 \sqrt{X^2 \sum \frac{(p_1 - q_1)}{(n_1 - 1)}} \right]$$

$$M = antilog \left[2{,}2990 \pm 1{,}96 \sqrt{(0{,}0212^2)\,(0{,}1302)} \right]$$

$$M = antilog\ [2{,}2990 \pm 0{,}0150]$$

Jadi, batas bawah adalah

Antilog [2,2990 – 0,0150] = antilog 2,2840 = 192,3091

Sedangkan batas atas adalah

Antilog [2,2990 + 0,0150] = antilog 2,3140 = 206,0630

Sehingga panjang ukuran pertama kali udang ronggeng *Harpiosquilla Harpax* jantan pada Juni hingga Agustus yang matang gonad adalah 199 mm atau pada kisaran 192-206 mm.

Lampiran 25. Distribusi frekuensi panjang total dan tingkat kematangan gonad serta perhitungan pendugaan rata-rata panjang total pertama kali matang gonad udang mantis *Harpiosquilla harpax* Betina pada Juni hingga Agustus

SK	Tengah Kelas	Logaritma Tengah Kelas	Jumlah Sampel Ikan (ni)	Jumlah Ikan Belum Matang Gonad	Jumlah Ikan Matang gonad (ri)	Proporsi Ikan Matang Gonad (Pi)	Xi+1 - Xi = X	qi = 1-pi	$\frac{pi \times qi}{ni-1}$
140-150	145	2,1614	3	3	0	0,0000	0,0318	1,0000	0,0000
151-161	156	2,1931	10	10	0	0,0000	0,0296	1,0000	0,0000
162-172	167	2,2227	9	7	2	0,2222	0,0277	0,7778	0,0216
173-183	178	2,2504	25	19	6	0,2400	0,0260	0,7600	0,0076
184-194	189	2,2765	37	26	11	0,2973	0,0246	0,7027	0,0058
195-205	200	2,3010	57	37	20	0,3509	0,0233	0,6491	0,0041
206-216	211	2,3243	34	18	16	0,4706	0,0221	0,5294	0,0075
217-227	222	2,3464	10	4	6	0,6000	0,0210	0,4000	0,0267
228-238	233	2,3674	1	0	1	1,0000	0,0000	0,0000	0,0000

Betina Juni hingga Agustus (Panjang)

$$m = X_k + \frac{x}{2} - (\mathrm{X} \sum Pi)$$

= 2,3674 + (0,0210/2) – (0,0210 X 3,1810)

= 2,3674 + 0,0105 – 0,0668

= 2,3110

M = antilog 2,3110

= 204,6444

$$M = antilog \left[m \pm 1{,}96 \sqrt{X^2 \sum \frac{(p_1 - q_1)}{(n_1 - 1)}} \right]$$

$$M = antilog \left[2{,}3110 \pm 1{,}96 \sqrt{(0{,}0210^2)\,(0{,}0733)} \right]$$

$$M = antilog\,[2{,}3110 \pm 0{,}0111]$$

Jadi, batas bawah adalah

Antilog [2,3110 – 0,0111] = antilog 2,2999 = 199,4802

Sedangkan batas atas adalah

Antilog [2,3110 + 0,0111] = antilog 2,3222 = 209,9906

Sehingga panjang ukuran pertama kali udang ronggeng *Harpiosquilla Harpax* betina pada Juni hingga Agustus yang matang gonad adalah 204 mm atau pada kisaran 199-209 mm.

Lampiran 26. Distribusi frekuensi panjang total dan tingkat kematangan gonad serta perhitungan pendugaan rata-rata panjang total pertama kali matang gonad udang mantis *Harpiosquilla harpax* Jantan pada September hingga November

SK	Tengah Kelas	Logaritma Tengah Kelas	Jumlah Sampel Ikan (ni)	Jumlah Ikan Belum Matang Gonad	Jumlah Ikan Matang gonad (ri)	Proporsi Ikan Matang Gonad (Pi)	Xi+1 - Xi = X	qi = 1-pi	pi x qi / ni-1
133-141	137	2,1367	3	3	0	0,0000	0,0276	1,0000	0,0000
142-150	146	2,1644	2	2	0	0,0000	0,0260	1,0000	0,0000
151-159	155	2,1903	20	20	0	0,0000	0,0245	1,0000	0,0000
160-168	164	2,2148	31	27	4	0,1290	0,0232	0,8710	0,0037
169-177	173	2,2380	25	23	2	0,0800	0,0220	0,9200	0,0031
178-186	182	2,2601	20	19	1	0,0500	0,0210	0,9500	0,0025
187-195	191	2,2810	8	6	2	0,2500	0,0200	0,7500	0,0268
196-204	200	2,3010	1	0	1	1,0000	0,0000	0,0000	0,0000

Jantan September hingga November (Panjang)

$$m = X_k + \frac{x}{2} - (\mathrm{X} \sum Pi)$$

= 2,3010 + (0,0200/2) – (0,0200 X 1,5090)

= 2,3010 + 0,0100 – 0,0302

= 2,2809

M = antilog 2,2809

= 190,9413

$$M = antilog \left[m \pm 1{,}96 \sqrt{X^2 \sum \frac{(p_1 - q_1)}{(n_1 - 1)}} \right]$$

$$M = antilog \left[2{,}2809 \pm 1{,}96 \sqrt{(0{,}0200^2)\,(0{,}0361)} \right]$$

$$M = antilog\,[2{,}2809 \pm 0{,}0074]$$

Jadi, batas bawah adalah

Antilog [2,2809 – 0,0074] = antilog 2,2734 = 187,6722

Sedangkan batas atas adalah

Antilog [2,2809 + 0,0074] = antilog 2,2883 = 194,2227

Sehingga panjang ukuran pertama kali udang ronggeng *Harpiosquilla Harpax* jantan pada September hingga November yang matang gonad adalah 190 mm atau pada kisaran 187-194 mm.

Lampiran 27. Distribusi frekuensi panjang total dan tingkat kematangan gonad serta perhitungan pendugaan rata-rata panjang total pertama kali matang gonad udang mantis *Harpiosquilla harpax* Betina pada September hingga November

SK	Tengah Kelas	Logaritma Tengah Kelas	Jumlah Sampel Ikan (ni)	Jumlah Ikan Belum Matang Gonad	Jumlah Ikan Matang gonad (ri)	Proporsi Ikan Matang Gonad (Pi)	Xi+1 - Xi = X	qi = 1-pi	pi x qi / ni-1
140-149	145	2,1599	9	9	0	0,0000	0,0291	1,0000	0,0000
150-159	155	2,1889	13	13	0	0,0000	0,0272	1,0000	0,0000
160-169	165	2,2162	20	19	1	0,0500	0,0256	0,9500	0,0025
170-179	175	2,2418	29	26	3	0,1034	0,0242	0,8966	0,0033
180-189	185	2,2660	27	25	2	0,0741	0,0229	0,9259	0,0026
190-199	195	2,2889	38	25	13	0,3421	0,0218	0,6579	0,0061
200-209	205	2,3107	26	15	11	0,4231	0,0207	0,5769	0,0098
210-219	215	2,3314	16	11	5	0,3125	0,0198	0,6875	0,0143
220-229	225	2,3512	4	0	4	1,0000	0,0000	0,0000	0,0000

Betina September hingga November (Panjang)

$$m = X_k + \frac{x}{2} - (\mathrm{X} \sum Pi)$$

= 2,3512 + (0,0198/2) – (0,0198 X 2,3052)

= 2,3512 + 0,0099 – 0,0456

= 2,3155

M = antilog 2,3155

= 206,7759

$$M = antilog \left[m \pm 1{,}96 \sqrt{X^2 \sum \frac{(p_1 - q_1)}{(n_1 - 1)}} \right]$$

$$M = antilog \left[2{,}3155 \pm 1{,}96 \sqrt{(0{,}0198^2)\,(0{,}0386)} \right]$$

$$M = antilog\,[2{,}3155 \pm 0{,}0076]$$

Jadi, batas bawah adalah

Antilog [2,3155 – 0,0076] = antilog 2,3079 = 203,1889

Sedangkan batas atas adalah

Antilog [2,3155 + 0,0076] = antilog 2,3231 = 210,4263

Sehingga panjang ukuran pertama kali udang ronggeng *Harpiosquilla Harpax* betina pada September hingga November yang matang gonad adalah 206 mm atau pada kisaran 203-210 mm.