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LAMPIRAN

Lampiran 1. Pengambilan data di lapangan





Lampiran 3. Hasil uji statistik simpanan karbon per spesies

Tukey's multiple comparisons test	95.00% CI of diff.	Below threshold?	Summary	Adjusted P Value			
Cr vs. Hp	-0.4925 to 1.320	No	ns	0.7033			
Cr vs. Hu	0.01720 to 1.178	Yes	*	0.0405			
Cr vs. Th	-0.7780 to 0.1833	No	ns	0.4195			
Cr vs. Ea	-1.470 to -0.5404	Yes	****	<0.0001			
Hp vs. Hu	-0.8004 to 1.168	No	ns	0.9845			
Hp vs. Th	-1.640 to 0.2178	No	ns	0.2126			
Hp vs. Ea	-2.340 to -0.4981	Yes	***	0.0005			
Hu vs. Th	-1.510 to -0.2799	Yes	**	0.0012			
Hu vs. Ea	-2.206 to -1.000	Yes	****	<0.0001			
Th vs. Ea	-1.215 to -0.2004	Yes	**	0.0020			
Test details	Mean 2	Mean Diff.	SE of diff.	n1	n2	q	DF
Cr vs. Hp	0.6266	0.4138	0.3229	23	3	1.812	64
Cr vs. Hu	0.4427	0.5977	0.2068	23	9	4.087	64
Cr vs. Th	1.338	-0.2973	0.1712	23	16	2.456	64
Cr vs. Ea	2.045	-1.005	0.1655	23	18	8.587	64
Hp vs. Hu	0.4427	0.1839	0.3507	3	9	0.7418	64
Hp vs. Th	1.338	-0.7111	0.3309	3	16	3.039	64
Hp vs. Ea	2.045	-1.419	0.3280	3	18	6.117	64
Hu vs. Th	1.338	-0.8951	0.2192	9	16	5.776	64
Hu vs. Ea	2.045	-1.603	0.2147	9	18	10.56	64
Th vs. Ea	2.045	-0.7077	0.1807	16	18	5.538	64

Table Analyzed	Transform of Karbon per spesies			
Data sets analyzed	A-E			
ANOVA summary				
F	17.63			
P value	<0.0001			
P value summary	****			
Significant diff. among means (P < 0.05)?	Yes			
R squared	0.5242			
Brown-Forsythe test				
F (DFn, DFd)	5.617 (4, 64)			
P value	0.0006			
P value summary	***			
Are SDs significantly different (P < 0.05)?	Yes			
Bartlett's test				
Bartlett's statistic (corrected)				
P value				
P value summary				
Are SDs significantly different (P < 0.05)?				

Lampiran 4. Hasil uji statistik simpanan karbon per stasiun

Table Analyzed	Karbon per stasiun		
Kruskal-Wallis test			
P value	0.0007		
Exact or approximate P value?	Approximate		
P value summary	***		
Do the medians vary signif. (P < 0.05)	Yes		
Number of groups	3		
Kruskal-Wallis statistic	14.67		
Data summary			
Number of treatments (columns)	3		
Number of values (total)	87		

Number of families	1					
Number of comparisons per family	3					
Alpha	0.05					
Dunn's multiple comparisons test						
	Mean rank diff.	Significant?	Summary	Adjusted P Value		
St I vs. St II	-20.19	Yes	**	0.0094	A-B	
St I vs. St III	-23.62	Yes	***	0.0009	A-C	
St II vs. St III	-3.431	No	ns	>0.9999	B-C	
Test details						
	Mean rank 1	Mean rank 2	Mean rank diff.	n1	n2	Z
St I vs. St II	28.78	48.96	-20.19	27	27	2.954
St I vs. St III	28.78	52.39	-23.62	27	33	3.625
St II vs. St III	48.96	52.39	-3.431	27	33	0.5266

Lampiran 5 Hasil uji statistik biomassa per stasiun

Table Analyzed	Biomassa per species		
Kruskal-Wallis test			
P value	<0.0001		
Exact or approximate P value?	Approximate		
P value summary	****		
Do the medians vary signif. (P < 0.05)	Yes		
Number of groups	5		
Kruskal-Wallis statistic	59.04		
Data summary			
Number of treatments (columns)	5		
Number of values (total)	90		

Number of comparisons per family	10					
Alpha	0.05					
Dunn's multiple comparisons test						
	Mean rank diff.	Significant?	Summary	Adjusted P Value		
Cr vs. Hp	23.81	No	ns	0.1712	A-B	
Cr vs. Hu	18.23	No	ns	0.2097	A-C	
Cr vs. Th	-11.10	No	ns	>0.9999	A-D	
Cr vs. Ea	-39.41	Yes	****	<0.0001	A-E	
Hp vs. Hu	-5.583	No	ns	>0.9999	B-C	
Hp vs. Th	-34.92	Yes	**	0.0098	B-D	
Hp vs. Ea	-83.22	Yes	****	<0.0001	B-E	
Hu vs. Th	-29.33	Yes	**	0.0070	C-D	
Hu vs. Ea	-57.64	Yes	****	<0.0001	C-E	
Th vs. Ea	-28.31	Yes	*	0.0107	D-E	
Test details						
	Mean rank 1	Mean rank 2	Mean rank diff.	n1	n2	Z
Cr vs. Hp	41.43	17.61	23.81	27	9	2.384
Cr vs. Hu	41.43	23.19	18.23	27	18	2.309
Cr vs. Th	41.43	52.53	-11.10	27	18	1.406
Cr vs. Ea	41.43	80.83	-39.41	27	18	4.990
Hp vs. Hu	17.61	23.19	-5.583	9	18	0.5270
Hp vs. Th	17.61	52.53	-34.92	9	18	3.295
Hp vs. Ea	17.61	80.83	-83.22	9	18	5.967
Hu vs. Th	23.19	52.53	-29.33	18	18	3.391
Hu vs. Ea	23.19	80.83	-57.64	18	18	6.663
Th vs. Ea	52.53	80.83	-28.31	18	18	3.272

Lampiran 6. Hasil uji statistik biomassa per stasiun

Table Analyzed	Biomassa per stasiun			
Brown-Forsythe ANOVA test				
F* (DFn, DFd)	6.921 (2.000, 61.85)			
P value	0.0019			
P value summary	**			
Significant diff. among means (P < 0.05)	Yes			
Welch's ANOVA test				
W (DFn, DFd)	13.72 (2.000, 42.78)			
P value	<0.0001			
P value summary	****			
Significant diff. among means (P < 0.05)	Yes			
Data summary				
Number of treatments (columns)	3			
Number of values (total)	90			

Number of families	1						
Number of comparisons per family	3						
Alpha	0.05						
Dunnett's T3 multiple comparisons test							
	Mean Diff.	95.00% CI of diff.	Below threshold?	Summary	Adjusted P Value		
St I vs. St II	-353.1	-601.3 to -104.8	Yes	**	0.0036	A-B	
St I vs. St III	-366.2	-594.6 to -137.8	Yes	***	0.0009	A-C	
St II vs. St III	-13.10	-336.1 to 309.9	No	ns	0.9995	B-C	
Test details							
	Mean 1	Mean 2	Mean Diff.	SE of diff.	n1	n2	t
St I vs. St II	66.20	419.3	-353.1	98.03	27	27	3.601
St I vs. St III	66.20	432.4	-366.2	91.62	27	36	3.997
St II vs. St III	419.3	432.4	-13.10	131.5	27	36	0.09961

Lampiran 7. Hasil uji statistik karbon lamun per bagian.

Unpaired t test	
P value	0.0020
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=3.366, df=32
How big is the difference?	
Mean of column A	0.3296
Mean of column B	0.7138
Difference between means (B - A) ± SEM	0.3842 ± 0.1141
95% confidence interval	0.1517 to 0.6167
R squared (eta squared)	0.2615
F test to compare variances	
F, DFn, Dfd	2.396, 16, 16
P value	0.0901
P value summary	ns
Significantly different (P < 0.05)?	No
Data analyzed	
Sample size, column A	17
Sample size, column B	17

Lampiran 8. Hasil uji statistik biomassa per bagian

Table Analyzed	Transform of Biomassa bagian St I	
Column B	Bg	
vs.	vs.	
Column A	Ab	
Unpaired t test		
P value	0.0127	
P value summary	*	
Significantly different (P < 0.05)?	Yes	
One- or two-tailed P value?	Two-tailed	
t, df	t=2.642, df=32	
How big is the difference?		
Mean of column A	1.380	
Mean of column B	1.789	
Difference between means (B - A) ±	0.4082 ± 0.1545	
95% confidence interval	0.09345 to 0.7230	
R squared (eta squared)	0.1790	
F test to compare variances		
F, DFn, Dfd	2.198, 16, 16	
P value	0.1257	
P value summary	ns	
Significantly different (P < 0.05)?	No	

Lampiran 9. Hasil uji statistik karbon di sedimen lamun

Table Analyzed	Karbon Sedimen
Kruskal-Wallis test	
P value	0.0001
Exact or approximate P value?	Approximate
P value summary	***
Do the medians vary signif. (P < 0.05)?	Yes
Number of groups	3
Kruskal-Wallis statistic	18.27
Data summary	
Number of treatments (columns)	3
Number of values (total)	81

Number of families	1					
Number of comparisons per family	3					
Alpha	0.05					
Dunn's multiple comparisons test	Mean rank diff.	Significant?	Summary	Adjusted P Value		
St I vs. St II	-15.37	Yes	*	0.0491	A-B	
St I vs. St III	-27.30	Yes	****	<0.0001	A-C	
St II vs. St III	-11.93	No	ns	0.1875	B-C	
Test details	Mean rank 1	Mean rank 2	Mean rank diff.	n1	n2	Z
St I vs. St II	26.78	42.15	-15.37	27	27	2.401
St I vs. St III	26.78	54.07	-27.30	27	27	4.263
St II vs. St III	42.15	54.07	-11.93	27	27	1.863

Lampiran 10. Hasil uji statistik simpanan karbon sedimen berdasarkan interval kedalaman

Number of families	1					
Number of comparisons per family	3					
Alpha	0.05					
Tukey's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Below threshold?	Summary	Adjusted P Value	
Atas vs. Tengah	-4.084	-6.486 to -1.681	Yes	***	0.0008	A-B
Atas vs. Bawah	-2.037	-4.440 to 0.3652	No	ns	0.1074	A-C
Tengah vs. Bawah	2.046	-0.3564 to 4.449	No	ns	0.1055	B-C
Test details	Mean 1	Mean 2	Mean Diff.	SE of diff.	n1	n2
Atas vs. Tengah	2.789	6.872	-4.084	0.9621	9	9
Atas vs. Bawah	2.789	4.826	-2.037	0.9621	9	9
Tengah vs. Bawah	6.872	4.826	2.046	0.9621	9	9

Number of families	1					
Number of comparisons per family	3					
Alpha	0.05					
Tukey's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Below threshold?	Summary	Adjusted P Value	
Atas vs. Tengah	-0.06174	-0.3405 to 0.2170	No	ns	0.8458	A-B
Atas vs. Bawah	-0.08005	-0.3588 to 0.1987	No	ns	0.7558	A-C
Tengah vs. Bawah	-0.01831	-0.2971 to 0.2604	No	ns	0.9853	B-C
Test details	Mean 1	Mean 2	Mean Diff.	SE of diff.	n1	n2
Atas vs. Tengah	0.8605	0.9222	-0.06174	0.1116	9	9
Atas vs. Bawah	0.8605	0.9406	-0.08005	0.1116	9	9
Tengah vs. Bawah	0.9222	0.9406	-0.01831	0.1116	9	9

Number of families	1					
Number of comparisons per family	3					
Alpha	0.05					
Tukey's multiple comparisons test	Mean Diff.	95.00% CI of diff.	Below threshold?	Summary	Adjusted P Value	
Atas vs. Tengah	-2.061	-11.89 to 7.765	No	ns	0.8606	A-B
Atas vs. Bawah	-1.843	-11.67 to 7.982	No	ns	0.8866	A-C
Tengah vs. Bawah	0.2171	-9.608 to 10.04	No	ns	0.9983	B-C
Test details	Mean 1	Mean 2	Mean Diff.	SE of diff.	n1	n2
Atas vs. Tengah	11.83	13.89	-2.061	3.934	9	9
Atas vs. Bawah	11.83	13.67	-1.843	3.934	9	9
Tengah vs. Bawah	13.89	13.67	0.2171	3.934	9	9

Lampiran 11. Hasil uji statistik kepadatan lamun berdasarkan spesies

Table Analyzed	Transform of Kerapatan				
Data sets analyzed	A-E				
ANOVA summary					
F	49.44				
P value	<0.0001				
P value summary	****				
Significant diff. among means (P < 0.05)?	Yes				
R squared	0.6468				
Brown-Forsythe test					
F (DFn, DFd)	0.5274 (4, 108)				
P value	0.7158				
P value summary	ns				
Are SDs significantly different (P < 0.05)?	No				
Bartlett's test					
Bartlett's statistic (corrected)	1.318				
P value	0.8582				
P value summary	ns				
Are SDs significantly different (P < 0.05)?	No				
ANOVA table					
	SS	DF	MS	F (DFn, DFd)	P value
Treatment (between columns)	16.37	4	4.093	F (4, 108) = 49.44	P<0.0001
Residual (within columns)	8.940	108	0.08278		
Total	25.31	112			
Data summary					
Number of treatments (columns)	5				
Number of values (total)	113				

Tukey's multiple comparisons	Mean Diff.	95.00% CI of diff.	Below threshold?	Summary	Adjusted P Value			
Hp vs. Hu	-0.3076	-0.6207 to 0.005472	No	ns	0.0566	A-B		
Hp vs. Cr	-0.3048	-0.5727 to -0.03688	Yes	*	0.0173	A-C		
Hp vs. Th	0.07441	-0.1906 to 0.3395	No	ns	0.9362	A-D		
Hp vs. Ea	0.6727	0.4063 to 0.9391	Yes	****	<0.0001	A-E		
Hu vs. Cr	0.002838	-0.2651 to 0.2707	No	ns	>0.9999	B-C		
Hu vs. Th	0.3820	0.1170 to 0.6471	Yes	**	0.0011	B-D		
Hu vs. Ea	0.9803	0.7139 to 1.247	Yes	****	<0.0001	B-E		
Cr vs. Th	0.3792	0.1694 to 0.5889	Yes	****	<0.0001	C-D		
Cr vs. Ea	0.9775	0.7660 to 1.189	Yes	****	<0.0001	C-E		
Th vs. Ea	0.5983	0.3904 to 0.8062	Yes	****	<0.0001	D-E		
Test details								
	Mean 1	Mean 2	Mean Diff.	SE of diff.	n1	n2	q	DF
Hp vs. Hu	1.184	1.491	-0.3076	0.1129	13	13	3.855	108
Hp vs. Cr	1.184	1.488	-0.3048	0.09656	13	28	4.464	108
Hp vs. Th	1.184	1.109	0.07441	0.09553	13	30	1.102	108
Hp vs. Ea	1.184	0.5109	0.6727	0.09603	13	29	9.907	108
Hu vs. Cr	1.491	1.488	0.002838	0.09656	13	28	0.04156	108
Hu vs. Th	1.491	1.109	0.3820	0.09553	13	30	5.655	108
Hu vs. Ea	1.491	0.5109	0.9803	0.09603	13	29	14.44	108
Cr vs. Th	1.488	1.109	0.3792	0.07560	28	30	7.093	108
Cr vs. Ea	1.488	0.5109	0.9775	0.07623	28	29	18.13	108
Th vs. Ea	1.109	0.5109	0.5983	0.07492	30	29	11.29	108

Lampiran 12. Hasil uji statistik persen tutupan lamun

ANOVA summary					
F	36.97				
P value	<0.0001				
P value summary	****				
Significant diff. among means (P < 0.05)?	Yes				
R squared	0.4595				
Brown-Forsythe test					
F (DFn, DFd)	0.08239 (2, 87)				
P value	0.9210				
P value summary	ns				
Are SDs significantly different (P < 0.05)?	No				
Bartlett's test					
Bartlett's statistic (corrected)	0.6006				
P value	0.7406				
P value summary	ns				
Are SDs significantly different (P < 0.05)?	No				
ANOVA table					
	SS	DF	MS	F (DFn, DFd)	P value
Treatment (between columns)	21426	2	10713	F (2, 87) = 36.97	P<0.0001
Residual (within columns)	25207	87	289.7		
Total	46632	89			

Number of families	1							
Number of comparisons per family	3							
Alpha	0.05							
Tukey's multiple comparisons test								
	Mean Diff.	95.00% CI of diff.	Below threshold?	Summary	Adjusted P Value			
St I vs. St II	-21.34	-31.82 to -10.86	Yes	****	<0.0001 A-B			
St I vs. St III	-37.68	-48.16 to -27.20	Yes	****	<0.0001 A-C			
St II vs. St III	-16.34	-26.82 to -5.862	Yes	**	0.0010 B-C			
Test details								
	Mean 1	Mean 2	Mean Diff.	SE of diff.	n1	n2	q	DF
St I vs. St II	31.05	52.39	-21.34	4.395	30	30	6.867	87
St I vs. St III	31.05	68.73	-37.68	4.395	30	30	12.13	87
St II vs. St III	52.39	68.73	-16.34	4.395	30	30	5.258	87

Lampiran 13. Hasil uji korelasi

Correlation Tabular results	Simpanan karbon	Simpanan karbon vs. Biomassa	
Spearman r			
r		0.9033	
95% confidence interval		0.8548 to 0.9362	
P value			
P (two-tailed)		<0.0001	
P value summary		****	
Exact or approximate P value?		Approximate	
Significant? (alpha = 0.05)		Yes	
Number of XY Pairs		90	

Correlation Tabular results	Simpanan karbon	Simpanan karbon vs. Persen tutupan	
Spearman r			
r		0.2945	
95% confidence interval		0.08688 to 0.4775	
P value			
P (two-tailed)		0.0048	
P value summary		**	
Exact or approximate P value?		Approximate	
Significant? (alpha = 0.05)		Yes	
Number of XY Pairs		90	

Multiple lin. reg. Tabular results							
Dependent variable	Simpanan karbon						
Regression type	Least squares						
Model							
Analysis of Variance	SS	DF	MS	F (DFn, DFd)	P value		
Regression	14665	7	2081	F (7, 1) = 0.3002	P=0.8893		
Suhu	1779	1	1779	F (1, 1) = 0.2566	P=0.7015		
Salinitas	1932	1	1932	F (1, 1) = 0.2787	P=0.6908		
Kecerahan	955,1	1	955,1	F (1, 1) = 0.1378	P=0.7737		
Ph	382,5	1	382,5	F (1, 1) = 0.05519	P=0.8531		
Oksigen Terlarut	746,0	1	746,0	F (1, 1) = 0.1076	P=0.7982		
Nitrat	1505	1	1505	F (1, 1) = 0.2172	P=0.7224		
Posfat	27,48	1	27,48	F (1, 1) = 0.003965	P=0,9600		
Residual	6931	1	6931				
Total	21495	8					
Parameter estimates							
	Variable	Estimate	Standard error	95% CI (asymptotic)	 t 	P value	P value summary
β_0	Intercept	-6286	12952	-170855 to 158284	0.4853	0.7124	ns
β_1	Suhu	167.3	330.2	-4028 to 4363	0.5066	0.7015	ns
β_2	Salinitas	74.14	140.4	-1710 to 1858	0.5280	0.6908	ns
β_3	Kecerahan	3.452	9.299	-114.7 to 121.6	0.3712	0.7737	ns
β_4	Ph	-101.4	431.5	-5584 to 5381	0.2349	0.8531	ns
β_5	Oksigen Terlarut	-67.26	205.0	-2672 to 2538	0.3281	0.7982	ns
β_6	Nitrat	10482	22449	-274774 to 295697	0.4680	0.7224	ns
β_7	Posfat	-1765	28031	-357930 to 354400	0.06297	0.9600	ns

Correlation Tabular results		A	B	C	D	E	F	G	H	I	J
		SK Sedimen	SK Sedimen vs. Bg-Biomassa								
1	Pearson r										
2	r		0.2992								
3	95% confidence interval		0.06724 to 0.5004								
4	R squared		0.08949								
5											
6	P value										
7	P (two-tailed)		0.0125								
8	P value summary		*								
9	Significant? (alpha = 0.05)		Yes								
10											
11	Number of XY Pairs		69								
12											
13											
14											
15											
16											
17											
18											
19											

Correlation Tabular results		A	B	C	D	E	F	G	H	I	J
		SK Sedimen	SK Sedimen vs. Kerapatan								
1	Pearson r										
2	r		0.3723								
3	95% confidence interval		0.1676 to 0.5463								
4	R squared		0.1386								
5											
6	P value										
7	P (two-tailed)		0.0006								
8	P value summary		***								
9	Significant? (alpha = 0.05)		Yes								
10											
11	Number of XY Pairs		81								
12											
13											
14											
15											
16											
17											
18											
19											

Correlation Tabular results		A	B	C	D	E	F	G	H	I	J
		SK Sedimen	SK Sedimen vs. Persenutupan								
1	Pearson r										
2	r		0.4248								
3	95% confidence interval		0.2276 to 0.5886								
4	R squared		0.1805								
5											
6	P value										
7	P (two-tailed)		<0.0001								
8	P value summary		****								
9	Significant? (alpha = 0.05)		Yes								
10											
11	Number of XY Pairs		81								
12											
13											
14											
15											
16											
17											
18											
19											