

Analysis of Coral Growth Lab Report

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#	TREATMENT (°C)	INITIAL (mg/cm ²)	FINAL (mg/cm ²)	CHANGE (mg/cm ²)
1	26	552	563	11
2	26	341	352	11
3	26	461	467	6
4	26	430	437	7
5	26	312	320	8
6	26	364	374	10
7	26	468	479	11
8	26	449	460	11
9	26	398	415	17
10	26	394	401	7
11	26	360	369	9
12	28	517	528	11
13	28	428	443	15
14	28	407	415	8
15	28	441	452	11
16	28	472	488	16
17	28	383	391	8
18	28	466	479	13
19	28	345	354	9
20	28	382	393	11
21	28	494	503	9
22	30	573	585	12
23	30	354	369	15
24	30	532	545	13
25	30	393	410	17
26	30	269	277	8
27	30	517	526	9
28	30	469	484	15
29	30	306	322	16
30	30	431	446	15
31	26-30	306	312	6
32	26-30	372	378	6
33	26-30	333	344	11
34	26-30	567	578	11

#	TREATMENT (°C)	INITIAL (mg/cm ²)	FINAL (mg/cm ²)	CHANGE (mg/cm ²)
35	26-30	379	392	13
36	26-30	490	505	15
37	26-30	391	401	10
38	26-30	509	523	14
39	26-30	369	377	8
40	26-30	337	351	14
41	26-30	365	373	8

Sample Size, N
Final - Initial, CHANGE (C)
Average Change, MEAN (\bar{C})
Standard Deviation, STD (σ)
Standard Error, ERR (ϵ)

N	MEAN	STD	ERR
26°C _{01-11} = 11	$\frac{C_{01} + \dots + C_{11}}{11} = 09.82$	$\sqrt{\frac{ C_{01} - \bar{C} ^2 + \dots + C_{11} - \bar{C} ^2}{11-1}} = 03.03$	$\frac{\bar{\sigma}_{\{01-11\}}}{\sqrt{11}} = 00.91$
28°C _{12-21} = 10	$\frac{C_{12} + \dots + C_{21}}{10} = 11.10$	$\sqrt{\frac{ C_{12} - \bar{C} ^2 + \dots + C_{21} - \bar{C} ^2}{10-1}} = 02.81$	$\frac{\bar{\sigma}_{\{12-21\}}}{\sqrt{10}} = 00.89$
30°C _{22-30} = 09	$\frac{C_{22} + \dots + C_{30}}{09} = 13.33$	$\sqrt{\frac{ C_{22} - \bar{C} ^2 + \dots + C_{30} - \bar{C} ^2}{09-1}} = 03.12$	$\frac{\bar{\sigma}_{\{22-30\}}}{\sqrt{09}} = 01.04$
26-30°C _{31-41} = 11	$\frac{C_{31} + \dots + C_{41}}{11} = 10.55$	$\sqrt{\frac{ C_{31} - \bar{C} ^2 + \dots + C_{41} - \bar{C} ^2}{11-1}} = 03.24$	$\frac{\bar{\sigma}_{\{31-41\}}}{\sqrt{11}} = 00.98$