Intermediate Disturbance Hypothesis Lab Report

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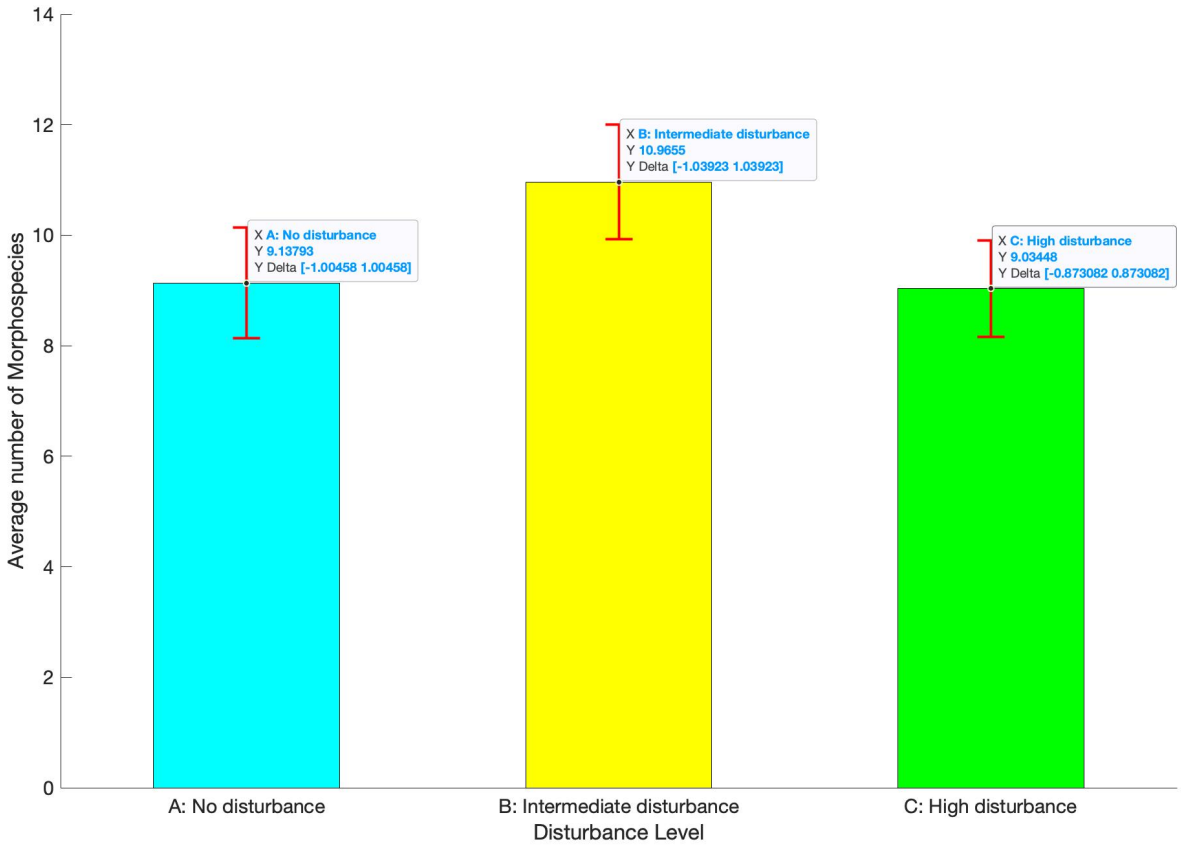
Table 1: $Morphospecies_{A,B,C}$

M_A: No disturbance	M_B: Mid disturbance	M_C: High disturbance
7	13	3
7	9	4
2	4	4
4	4	2
11	14	10
13	14	8
4	10	8
10	7	8
4	7	6
4	7	4
6	5	5
7	6	5
7	3	5
1	5	8
11	15	9
4	9	8
21	15	14
19	14	15
9	13	10
7	14	20
8	11	17
6	10	14
15	12	18
7	11	5
12	15	10
11	14	9
23	30	13
12	7	8
13	20	12

$$
\begin{aligned}
n &= 29 \\
\overline{x} &= \frac{x_1 + x_2 + \cdots + x_n}{n} \\
\sigma_x &= \sqrt{\frac{|x_1 - \overline{x}|^2 + |x_2 - \overline{x}|^2 + \cdots + |x_n - \overline{x}|^2}{n-1}} \\
\epsilon_x &= \frac{\sigma_x}{\sqrt{n}} \\
\overline{A},\ \overline{B},\ \overline{C} &= 9.1379, 10.9655, 9.0345 \\
\sigma_A,\ \sigma_B,\ \sigma_C &= 5.4098, 5.5964, 4.7017 \\
\epsilon_A,\ \epsilon_B,\ \epsilon_C &= 0.1865, 0.1930, 0.1621
\end{aligned}
\tag{1}
$$



In the bar chart above, are the averages of morphospecies with no disturbance, intermediate disturbance and high disturbance. The error bar for A (no disturbance) has no significant difference compared to C (high disturbance). However, B (intermediate disturbance) has significant difference with both A (no disturbance) and C (high disturbance).