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Eco602: Week12_Reading_Assignment

Q1 Answer:

Complicated models are good fit to the data set with many parameters and minimize variations but they are complex to understand. In contrast, the simple models are not usually the good fit for the dataset but they are easy to interpret and use.

For example, variability in ciliates morphology in a specific population with every feature, which could be very good fit model to analyze the data but hard to interpret. On the other hand, using a simple model with the same dataset makes it very easy to understand, which could be a trade off in this scenario.

Q2 Answer:

Water and Nitrogen

Q3 Answer:

The expected biomass- 1.7.

Calculation: Multiplying the given expected biomass by the expected value and then adding the intercept value to the sum of the column.

Q4 Answer:

The expected biomass- 3.95

Calculation: (Amount of each variable x Values from the coefficient table) + Intercept value.

Q5 Answer:

Key difference between simple linear regression and a 1-way analysis of variance:

Simple linear regression model used with the categorical predictor variables but the another one is used with the continuous predictor variables.

Q6 Answer:

Deterministic components- $a + bx$

Q7 Answer:

Stochastic component- Epsilon (ϵ)