

1. An entomologist measures egg deposition by the elm spanworm *Ennomos subsignaria* on trees that have heavily attacked, lightly attacked, or not attacked by spanworm caterpillars. The measurements are made in 4 different locations.

a) Write a symbol for egg deposition, state a measurement protocol, and assign units appropriate to your protocol.

b) Write a general linear model to analyze egg deposition as it depends on attack level, taking into account differences in location. Use the symbols X_{attack} and X_{location} for your explanatory variables.

b). Complete an ANOVA table for the analysis, assuming $n = 2 \times 3 \times 4 = 24$ trees, $SS_{\text{total}} = 1000$, $SS_{\text{location}} = 300$, $SS_{\text{attack}} = 200$, and $SS_{\text{attack} \times \text{location}} = 200$.

Source	df	SS	MS	F
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