

Analysis of Keener/Bashor data on
Opening paragraph?

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Statistical analysis for the study examined possible plant and site effects on bacterial counts. A nested, fixed effects model was fit using PROC GLM of the SAS statistical software package (SAS Institute, 2001.) The response variable in the analysis was daily mean bacterial count after \log_{10} transformation. The model used for the mean μ_{ijk} of the transformed count y_{ijk} is written $\mu_{ijk} = \mu + \alpha_i + \beta_{j(i)}$ where μ denotes an overall average log-bacterial count, α_i denote fixed plant effects for $i = 1, 2, 3, 4$, $\beta_{j(i)}$ denote site effects nested in plant for $j = 1, 2, 3, 4, 5$ in plants 1,2,4 or $j = 1, 2$ in plant 3. At each site, ten carcass counts were averaged on each of three days for a total of $N = 3 \times (5 + 5 + 2 + 5) = 51$ observations in the analysis. Where multiple comparisons among plants or sites were appropriate, a Bonferroni adjustment for all pairwise comparisons was made to control the experimentwise error rate at $\alpha = 0.05$.