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**APPENDIX**

**Statistical Analysis- ANOVA tests on Soy and Diadzein**

Stacked ANOVA tests by treatment and hour can be performed to analyze the statistical significance of data. In order to perform the ANOVA tests we must assume the population is normal, and that there is equal standard deviation among each treatment. The hypotheses for the test are: 1) The means of each treatment are equal; 2) At least one mean- is different from the other treatments. A P-value of 0.05 or lower will prove the second hypothesis and show that there is some statistical significance in the treatments.

By comparing the 95% confidence intervals, we can observe which treatments are significant. The bars in the 95% confidence intervals show the error in our experiment; If these experiments were to be repeated, there would be a 95% chance of getting values in those intervals.

**Key**

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| **Soy 1** = 0.6 µg soy / mL  **Soy 2** = 0.3 µg soy / mL  **Soy 3** = 0.06 µg soy / mL  **Soy 4** = 0.03 µg soy / mL  **Soy 5** = 0.006 µg soy / mL  **Dia 1** = 0.1 µg diadzein / mL  **Dia 2** = 0.05 µg diadzein / mL  **Dia 3** = 0.01 µg diadzein / mL  **Dia 4** = 0.005 µg diadzein / mL  **Dia 5** = 0.001 µg diadzein / mL  **CO** = Control (No Treatment)  **E2** = Estradiol Control |