

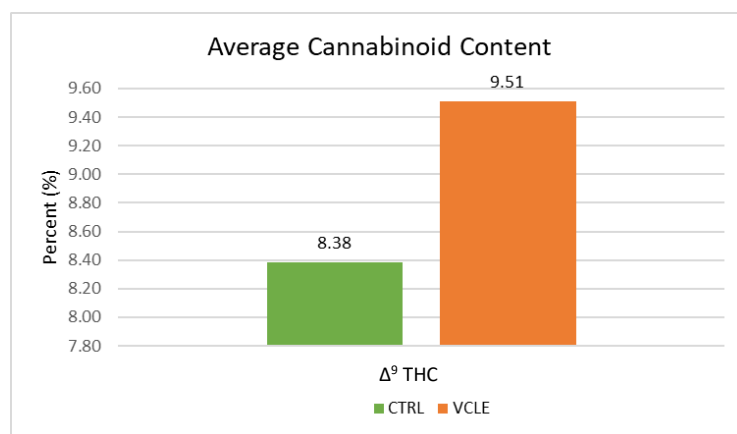
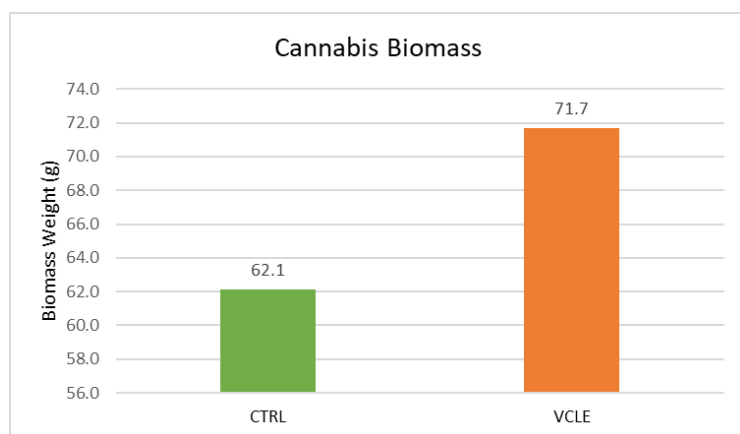
### Evaluation of Worm Power for Cannabis Production

**Background:** Of the 120 cannabinoids, the one of the major groups is  $\Delta^9$ -Tetrahydrocannabinol ( $\Delta^9$ -THC). Increased plant growth and production of THC could help growers have a more profitable product.

**Objective:** To determine the benefits of adding Worm Power Liquid Extract to a standard Cannabis growing program.

**Methods:** Cuttings taken from a *Cannabis sativa* mother plant were grown and upon reaching desired growth, photoperiod was changed to stimulate flowering. Two groups were created with one group being the control and one group treated with 3 oz of Worm Power vermicompost liquid extract (VCLE) per plant per week until maturity. All other variables were kept the same. Mature plants were harvested, dried, and processed individually. Flower and leaves were analyzed and compared for cannabinoids and terpenes content using established GC-FID (gas chromatography) methods.

#### Results:



Cannabis plants treated with VCLE had 15% increase in biomass from untreated plants. The average increase in  $\Delta^9$ -THC content in VCLE treated plants was 13.49 % higher than the untreated control.

**Summary:** There was a 30% higher yield of THC per plant vs the control with regular fertilizer. No significant difference in terpene content was noticed. The 30% higher yield of  $\Delta^9$ -THC can be attributed to the increased biomass and increased content per plant. The addition of Worm Power's VCLE can be beneficial for the yield and plant growth of *Cannabis sativa*.