Growth Rates: Annuals in Varied Humidity

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Does an ideal humidity accelerate maturation in Geraniums and Petunias compared to native, relative humidity in their natural environments? My project compares and contrasts the intrinsic relationship between the different relative humidities and their overall effects on the flowers growth. Initially, I began by researching genomes and genetic inheritance. Subsequently, I planted the Petunias and the Geraniums autonomously: 12 Native Geraniums, 12 Native Petunias, 6 Idealized Geraniums, and 6 Idealized Petunias. From then on, I carefully sprayed them with two millimeters of tap water every other day, and I consistently monitored the humidities to replicate the flowers native climates. Additionally, I assessed their growth, the dependent variable, each morning at ten o'clock, and I programmed the 20-watt lights to mimic the sunlight for nine hours every day. After twenty-five consecutive days, I observed that the natively humidified Geraniums matured the fastest and had the most prominent germination rate at 92%. Secondarily, the natively humidified Petunias paled compared to the other humidity groups. A noteworthy stunted growth started on Day 19 and ended on Day 23, revealing that the flowers grew an average of 0.1 centimeters in five days. Regarding my three hypotheses, the observed relationships between the native humidity and the Geraniums partially disproved my null hypothesis; therefore, the exponential growth of the natively humidified Geraniums partially validated my alternate hypothesis. To conclude, a limited relationship exists between increased maturation and the humidities of the flowers native environments.

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