Impact of Increasing Temperatures on Dionaea Muscipula: an Analysis of Possible Climate Change Risk
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This study explored the impact of increasing temperatures on Dionaea muscipula by exposing 5 groups of venus flytraps to 5 different temperature assays. Each of the 5 groups, consisting of 3 individuals, were tested during their exposure to either 20°C, 30°C, 35°C, 40°C, or 45°C. Trap reaction speed after stimulation was measured using slow motion video capture. Each individual was tested twice during a week-long exposure to a temperature assay. After analyzing these measurements, we created statistical graphs comparing the different temperature assay speeds as well as comparing each individual’s change in stimulation/closure delay from Test 1 to Test 2. Overall, we found that there was a relative increase in stimulation delay (time from first stimulation to first reaction) and closure delay (time from first reaction to completely closed) for most individuals from Test 1 to Test 2. We also identified a relative increase in stimulation delay time and closure delay time as experimental temperature increased.