

Impact of Medicinal Herbs on Aging and Its Implications Towards Treating Age Related Illnesses

Alicea, Aracely (School: Taunton High School)

Aging is a major contributor towards many diseases. Two examples of these diseases would be Cancer and Alzheimer's disease, two leading causes of death within America. Aging is a synergy and the sooner Americans identify the factors that contribute towards rapid aging, steps can be taken to help reduce its effects, as well as apply this knowledge towards research into age related diseases. This experiment served to test the impact of herbs, common plants with medicinal and culinary uses, on the life expectancy of *Drosophila Melanogaster*. *Drosophila* were placed, as larvae, into one of the following independent variables; a control, *rhodiola rosea*, ginseng, ginger, and cannabidiol habitat, where they continued to live until their eventual death. Their deaths were recorded and the time between their hatch date and death were calculated. It was hypothesized that the average life expectancy order would be, from least to greatest, ginger, control, ginseng, *rhodiola rosea*, and cannabidiol. The results of the experiment contradicted the hypothesis, with cannabidiol having the lowest life expectancy, and proved to be statistically insignificant. This experiment urges research into aging and the factors that contribute towards it, so that this knowledge can be applied to researching age related illnesses.