"Catch a Whiff"

Smith, Autumn

Are synthetic fragrances (conventionally manufactured perfumes) more harmful than essential organic oils? Are the widely used body sprays and perfumes unknowingly putting the public at risk? To increase profit, synthetic aromas have been chemically created or have had their structures modified so they are no longer natural like organic essential oils. The purpose of my project was to determine if these conventional perfumes used by men and women are safe, or if they are slowly affecting us in a negative way. Randomly selected popular name brand synthetic sprays were tested and compared to the natural oils in a total of 7 groups to test my hypothesis of the oils being a healthier alternative to the possible toxic chemicals in perfumes on the market. Our skin absorbs anything we spray onto it and that can affect our respiratory health and other vital systems. Crickets were selected to be used in this experiment due to their soft shell sensitivities in quickly absorbing and sensing odors. The sprays used mimicked what a human would spray when applying their favorite fragrance. By day 7, 100% of the crickets in the synthetic groups died, where the organic oil group's survival rate was 87%. As a result of this project, it is conspicuous that healthier alternatives are needed. The toxicity evident in synthetic perfumes has been proven harmful according to the data.

Awards Won: