The Effect of a Diet on the Life Span of the Danaus plexippus portoricensis Butterfly

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The problem established in this research was: Is it possible to extend the lifespan of the Danaus plexippus portoricensis butterfly by changing its diet? If the diet of the Danaus plexippus portoricensis butterfly is modified, then it will extend its lifetime, also extending its work time as a pollinator. To carry out this experiment, three mesh baskets were identified as cage #1, cage #2 and cage #3 and were lined up over a table. The nectar plant, pentas lanceolata flower, was placed in cage #1. In cage #2 it was placed on a plastic plate a green apple cut into pieces. In cage #3 a plastic plate with hair net was moistened with electrolyte solution to ensure that the butterfly did not fall into the liquid and wet its wings. Then, five recently hatched butterflies were placed in each basket. Once this was done, data was collected such as: the number of butterflies that remained each day, their behavior in the baskets and if they fed on the given food. Scientifically, the main diet of the Danaus plexippus portoricensis butterflies is mainly nectarine plants, however, once the experiment conducted it was observed that the butterflies that feed on green apples (cage #2) had lasted longer than the others. It was proved that it is possible to extend the life of a monarch butterfly by changing its diet.

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