Biology! lab report on evolution assignment



The sum of both allele add up to one or one hundred percent for that population. To calculate the frequency we use There are five conditions in order satisfy the Hardy-Weinberg equilibrium. These are, mutation, gene flow, genetic drift, non-random mating and selecting. Evolution does not occur in individuals, it occurs in a population. Charles Driven theory of natural selection states that natural selection acts to preserve and accumulate minor advantage to any trait that helps them to Bette suited for survivals.

The purpose of this is to help us understand better about Evolution ND Mother Nature also the relationship between evolution and changes in allele frequency using a sample population. The null hypothesis for this experiment is that the flashier the male are more attractive they will become to the female and predators. This will lead to the decrease of population and changes in the population. The frequency for the color fishes will decrease as time passes. Methods For this particular experiment we had two different lab tests.

For the first part of the experiment it was necessary to use a computer and log on the http://www. PBS. Org/high.

Evolution/educators/lessons/lessons/ACTA. HTML and lunch the Sec and the Single Guppy web activity. Running the simulation on the web site and selecting "I'm ready to find out" will start the experiment. Choosing the causes guppy color variation will give detail information's on the guppy environments. For the second part of the experiment, we had hundred red and white beads. We placed the beads in a large container and mixed the beads. We than labeled (IF) (If) and (if) in three different containers. IF)

represents the dominant homozygous, (FDA is a heterozygous and (if) that having no fur. The experiment simulation took in the absence of heat.

Bunnies with the (if) will not make it through the winter. Results For the first part of the experiment, brighter the color of male guppy is more likely its predator will notice the male guppy. The number of the male drab guppies will increase over generation because their ability of camouflage will help them to survive from the predators. Since Reproduction is also part of this population, it also plays a big role.

Since the Female guppies are attractive to the Bright male guppies, few guppies will also be bright and keep the repetition even though population of bright guppies will be very low. A) This graph shows the starting point for the guppy experiment where we have equal number of male population and predators (30 rivulets, 30 Carr, and 30 child). (b) This graph shows the final generation for the guppy experiment where we have least amount of bright and the highest number of Drabbest number of male population and predators (30 rivulets, 30 Carr, and 30 child).

In this case the lab is on predation and from my results we can see how predators act as evolutionary agents. Since the guppies had a verity of colors such as brightest bright, drab and drabbest there was equal amount chance for its survival but since the female are attractive to the Bright color male, they will produce more. In this experiment of trial selection, brighter the male guppy is more likely he will be seen and eaten by the predators. Over the generations male guppies population became drabbest as shown in the graph above.

The Hardy-Weinberg Equilibrium, it is a principle that demonstrates how heredity cannot produce changes in the allele frequencies. Based on the results one can see that if no predator or no natural selection would have affected the population and it was allowed to reproduce, the allele frequencies would be the same. In this case the predator affects the equilibrium and cause the population to evolve because it changes the relative gene frequencies when he cold takes away the life of ferules bunnies.

These results are very important in helping us understand that living organisms have been are being evolved. Ingather, Katie (2010) shows this concept of natural selection to be effected even in humans. Ingather states, "A separate study by Open University's Daniel Nettle found that shorter women are more likely to be in long-term, offspring- producing relationships perhaps, he hypothesized, because men evolved to disavow tall women, who tend to reach puberty later. "Ingather is sharing with us one of the possible affects that natural selection is having humans as you read his.