Simple Software to Demonstrate Changes in Allele Frequency

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A fast, simple program was written in DOS (author: John Moeur) to allow our Introductory Biology students to simulate the effect of changes in population size, initial value of q, selection against different genotypes, and breeding ratio on the frequency of alleles in a population. The program includes genetic drift in all simulations and maintains a constant population size during each simulation. The students collect and graph the data needed to answer a set of standard questions and one of their own devising. The program is used in conjunction with a set of problems which require the students to calculate values for allele and genotype frequencies in populations which follow the Hardy-Weinberg model.