

Genetic variation in populations:

Questions: How common is genetic variation in populations? How is it detected? Why is it there?

Mutation and recombination is the source of new genetic variation in natural populations:

Evidence for abundant genetic variation: artificial selection experiments

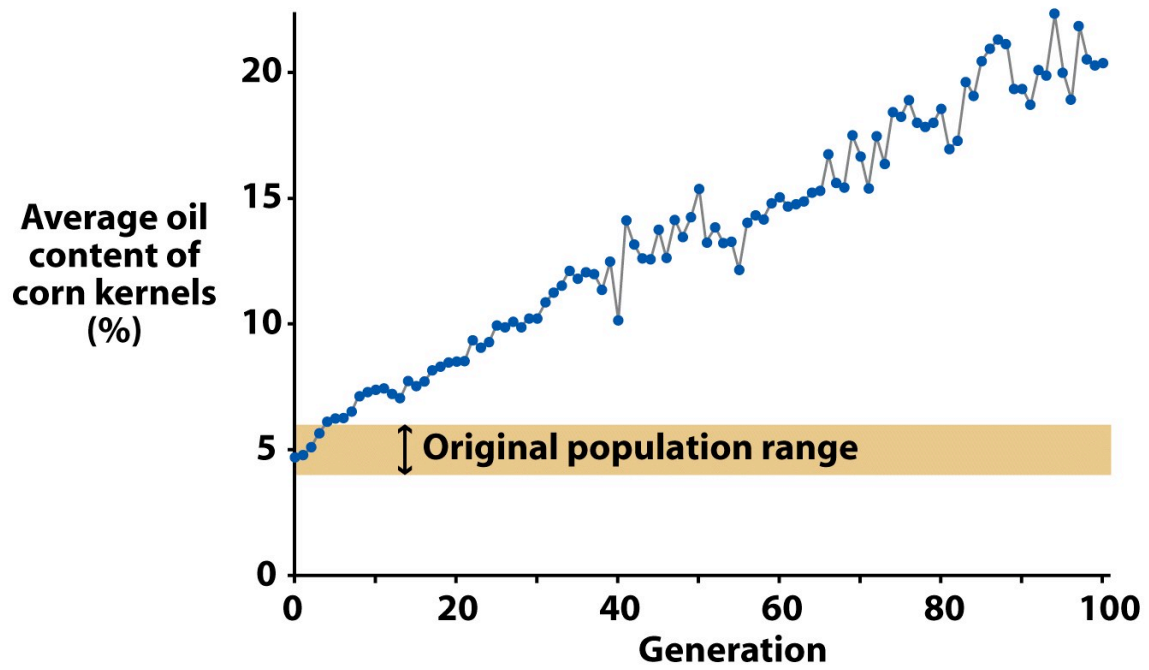


Figure 3-18 Evolutionary Analysis, 4/e
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Another advantage to sex (and recombination):

Measuring genetic variation in populations:

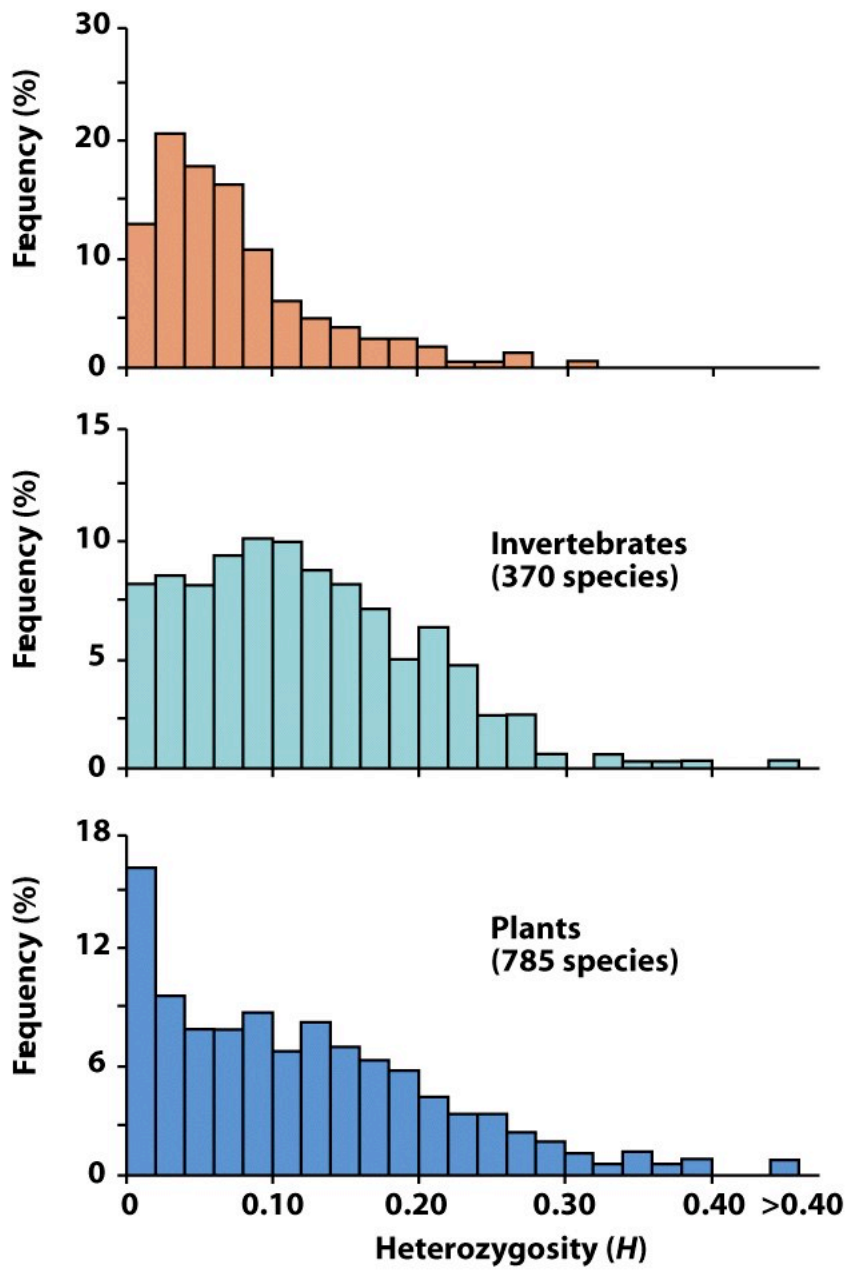


Figure 5-13 Evolutionary Analysis, 4/e
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What is the significance of genetic variation in populations?

To evaluate these alternatives, we need a theory of evolution which includes genetics: population genetics