

11.5 Speciation Through Isolation

KEY CONCEPT

New species can arise when populations are isolated.

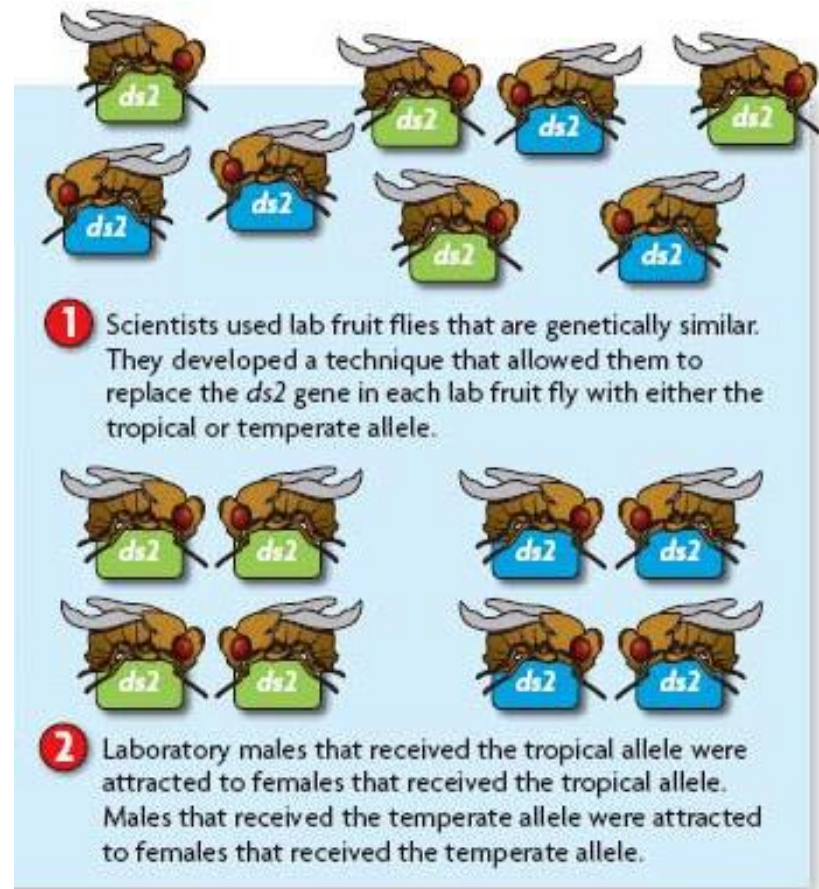


11.5 Speciation Through Isolation

- ▶ **The isolation of populations can lead to speciation.**
 - Populations become isolated when there is no gene flow.
 - Isolated populations adapt to their own environments.
 - Genetic differences can add up over generations.

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- Reproductive isolation can occur between isolated populations.
 - members of different populations cannot mate successfully
 - final step to becoming separate species



- Speciation is the rise of two or more species from one existing species.

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- ▶ **Populations can become isolated in several ways.**
 - Behavioral barriers can cause isolation.
 - called behavioral isolation
 - includes differences in courtship or mating behaviors

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- Geographic barriers can cause isolation.
 - called geographic isolation
 - physical barriers divide population



- Temporal barriers can cause isolation.
 - called temporal isolation
 - timing of reproductive periods prevents mating