

TABLE 22.1. Classification of causes of reproductive isolation

Prezygotic barriers

Potential mates live in the same place, but do not meet.

habitat isolation

temporal isolation (by time of day or time of year)

Potential mates meet, but choose not to mate (behavioral isolation).

Individuals copulate, but male gametes (sperm or pollen^a) are not transferred.

Male gametes are transferred, but the egg is not fertilized (gametic incompatibility).

Postzygotic barriers

Zygote dies early in embryogenesis.

F₁ hybrids are inviable.

F₁ hybrids survive, but are sterile.

Backcross or F₂ hybrids are inviable or sterile.

^aIn insect-pollinated plants, pollinators might visit a flower, but not pick up pollen successfully, or fail to deposit pollen on the recipient stigma.