



Spinach Survival Game

Ages: 9+

Instructions: Hand out a card to each student and ask everyone to stand. Review the terms on the cards (next slide). Go through the growing season and call out various natural events that can cause plants to die. If the student's card cannot survive the event they sit down. At the end, see if there are both pollen producing (male) and pollen accepting (female) plants. If so, you have enough genetic diversity and your spinach lives on.

Example: The spinach seeds were beginning to germinate when a massive rain hit, plants that are not able to grow in waterlogged soil sit down (**if there is no mention of waterlogged soil on your card stay standing**). Unfortunately, the wet conditions led to increased plant disease, sit down if you are not disease resistant. Finally, the cold season came early, sit down if you are not cold hardy. Now look and see who is still standing, are there both pollen producing and pollen accepting plants? If so, you had enough genetic diversity in your crops. If no, your plant variety did not make it through the season and those genetics are lost.