









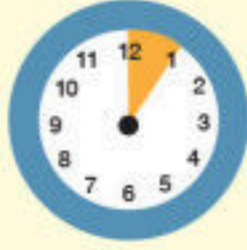


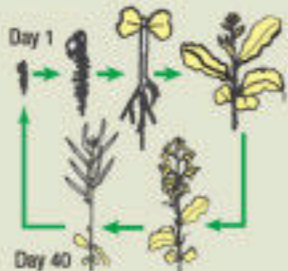







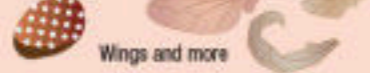




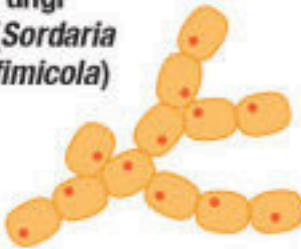






# Bring Your Genetics Lessons to Life with Model Organisms

Looking to breathe new life into your genetics activities but wondering where to start?

Carolina offers unique opportunities to work with model organisms—such as genetic corn (*Zea mays*), Wisconsin Fast Plants® (*Brassica rapa*), and fruit flies (*Drosophila melanogaster*)—in your genetics labs. These organisms allow students to analyze and understand genetic crosses, study alleles, recognize different phenotypes, and compare predicted versus actual results.

Model Organisms	Benefits	Best Used for	Generation Time	Number of Available Phenotypes	Setup Time	Total Required Cost
<b>Corn Ears</b> <i>(Zea mays)</i> 	<b>Reusable and durable</b> 	<ul style="list-style-type: none"> <li>• Monohybrid traits</li> <li>• Dihybrid traits</li> <li>• Chi-Square</li> </ul>	 ~55–90 days (Already grown, ready to use)	<b>8</b> 	 none	
<b>Corn Seeds</b> <i>(Zea mays)</i> 	<b>Results in 14 days</b> 	<ul style="list-style-type: none"> <li>• Monohybrid traits</li> <li>• Dihybrid traits</li> <li>• Albinism</li> <li>• Chi-Square</li> </ul>	 ~55–90 days	<b>4</b> 	 1 hour	
<b>Wisconsin Fast Plants®</b> <i>(Brassica rapa)</i> 	<b>Fast seed-to-seed time</b> 	<ul style="list-style-type: none"> <li>• Monohybrid traits</li> <li>• Dihybrid traits</li> <li>• Cytoplasmic (maternal) inheritance</li> </ul>	 ~35–40 days	<b>10</b> 	 1 hour	
<b>Fruit Flies</b> <i>(Drosophila melanogaster)</i> 	<b>Diverse phenotypes</b> Eye color  Body color  Wings and more 	<ul style="list-style-type: none"> <li>• Monohybrid traits</li> <li>• Dihybrid traits</li> <li>• Sex-linked traits</li> <li>• Gene linkage</li> </ul>	 ~13–15 days	<b>40</b> 	 1 hour	
<b>Fungi</b> <i>(Sordaria fimicola)</i> 	<b>Easy to grow and visualize</b> 	<ul style="list-style-type: none"> <li>• Meiosis</li> <li>• Crossing over</li> <li>• Gene mapping</li> </ul>	 ~7–12 days	<b>3</b> 	 1 hour	