Humans have been using **selective breeding** for 10,000 years to improve plants and animals. Farmers choose seeds from plants with the best traits, selecting for traits such as taste, color, disease resistance, and productivity.

Farmers and scientists have been **cross-breeding** closely related species for hundreds of years to create new hybrids. Cross-breeding can occur only between closely related living organisms. Hybrids inherit a mix of genes from both parent plants, including both positive and negative traits.

**Examples:**
Most modern fruits and vegetables are hybrids of ancient wild plants. Cross-breeding has created many new varieties.

- **Rutabaga** Cross between turnips and cabbages
- **Grapefruit** Cross between pomelos and oranges
- **Apples** Many different flavors, colors, and textures
- **Corn** Increased size and productivity