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**SYNOPSIS:**

Much of our food source is made up of thousands of plants that are grown from seeds and there are literally thousands of varieties of fruits and vegetables grown worldwide. The importance of maintaining a healthy seed supply is key to human survival. In this program, students will learn about the importance of seeds and what scientists can do to ensure their protection.

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**CURRICULUM UNITS:**

Agriculture  
Biology  
Chemistry  
Conservation  
Genetics  
Life Science

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**CAREER OPPORTUNITIES:**

Agriculturists  
Biologist  
Botanist  
Conservationist  
Farmer  
Plant Pathologist  
Seed Technologist  
Soil Scientist  
Taxonomist

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**PROGRAM OVERVIEW:**

Human life would not exist without plants. The oxygen they create is an obvious prerequisite to the existence of all air-breathing creatures on earth. As humans began to grow food plants, they discovered the importance of seed preservation. Today, the National Seed Storage Laboratory in Ft. Collins, Colorado protects hundreds of thousands of seed samples.

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**ISSUES & CRITICAL THINKING:**

After showing the program, ask your students the following questions:

- 1) Why is having a variety of crops important?
- 2) Where do seeds stored at the National Seed Storage Laboratory come from?
- 3) What kinds of storage methods are used at the National Seed Storage Laboratory?
- 4) How is plant cloning done?
- 5) Why is tissue culture important?

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**GLOSSARY:**

**CLONING-** Creating a genetic copy of an individual organism.

**GENETIC-** Of or relating to the origin or development of something.

**GERMPLASM-** Hereditary material; genes.

**MUTANT-** Something that has been altered or changed.

**NITROGEN-** A gas that has no color and no smell. It makes up almost four-fifths of the air on earth.

**SEED-** The part of a plant from which a new plant will grow.

**TISSUE CULTURE-** A cellular sample.

The Wonders of Technology,  
Genetic Engineering,  
Biotechnology



Show Me Science

AGRICULTURAL SCIENCE: SEEDS  
FOR TOMORROW'S FOOD



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