

## **SCIENCE & TECHNOLOGY**

## Scientists in Israel Make Gene Bank for Wild Crops

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Could the key to securing the world's food supply for the future be hidden in the **DNA** of wild crops?

Scientists in Israel are creating a gene bank from the seeds of local wild crops. Some of these crops have survived for thousands of years since the birth of agriculture. The seeds may help farmers deal with a severe climate in the coming years.

Alon Singer, a plant expert, recently collected seeds from several plants discovered near a new building project.

The seeds, including different kinds of water mint, will be frozen and stored at a gene bank of the Volcani Institute. It is the national agricultural research and development center in Israel.

Singer and several other people are now exploring the country in search of wheat, barley and other wild crops. The goal is to save and study their genetic makeup before the crops are lost to growing deserts and more buildings.

Singer said, "The plants here are very **unique**. They are the ancestors of many of the **cultivated** plants used today."

Information from the wild crops could be used to genetically modify farmed crops so they can better deal with disease or lack of water.

Tens of thousands of different kinds of seeds are stored in Israel's gene bank. It may be smaller than some collections elsewhere in the world but the gene pool here is one of a kind. The crops come from an area known as the birthplace of crop cultivation. 11/16/22, 8:33 PM

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"This is where agriculture started about 10,000 years ago," said Einav Mayzlish-Gati, director of the gene bank. "**Species** that were domesticated here are still in the wild **adapting** along the years to the changes in the environment."

The research has already brought good results. For example, scientists have engineered different kinds of wheat with a very short life. It may not be able to compete today, but it could be helpful in a hotter climate with reduced growing seasons.

The World Bank warns that climate change will likely harm worldwide agriculture. Harmful effects, it says, are already being felt with hotter temperatures, more frequent extreme weather events, and **invasive** crops and pests.

I'm John Russell.

*Rinat Harash and Ari Rabinovitch reported on this story for Reuters. John Russell adapted it for VOA Learning English.* 

## Words in This Story

**DNA** -- *n*. a substance that carries genetic information in the cells of plants and animals

**unique** – *adj.* used to say that something or someone is unlike anything or anyone else

cultivate – v. to grow or raise (something) under conditions that you can control

**species** – *n. biology:* a group of animals or plants that are similar and can produce young animals or plants:

**adapt** – *v.* to change your behavior so that it is easier to live in a particular place or situation

invasive -- adj. tending to spread