# Plant Health and Treasure Troves FROM THE PAST

# Plant health is your health.

#### WHERE DOES OUR FOOD COME FROM?



Around 70% of the food we eat crosses at least one national border before getting to our plates.

Most of the **food grown and consumed** in the United States originated in other countries. Blueberries, cranberries, and pawpaws are examples of foods that originated in the United States.





Your **Thanksgiving meal** is more international than you may think! Squashes came from Central America and the Andes Mountain region in South America. Corn was domesticated in Mexico; wheat originated in the eastern Mediterranean region; and potatoes came from southern Peru and northwestern Bolivia.

### **BUILD ON THE PAST FOR A BETTER FUTURE**

The **Irish potato famine** of the 1840s and the **Bengal famine** of 1943 are examples of disastrous famines caused by plant diseases.





Cassava mosaic disease and Panama disease (banana wilt) are examples of current epidemics that are devastating food crops around the world.

The Green Revolution increased grain production through plant breeding, fertilization, pesticide use, irrigation, and mechanization.





To provide sufficient food for a hungry world, scientists use **modern technologies** to improve crops and prevent the spread of diseases and pests.



For more information, visit planthealthisyourhealth.org



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### The Vaults for Our Future

- More than 1,700 seed banks worldwide safeguard agricultural biodiversity, ensuring farmers have the best seeds to grow our food.
- The Vavilov Institute of Plant Industry in Russia was established in 1894 and is one of the world's largest repositories of crop genetic diversity. During World War II, scientists at the institute died guarding seeds from the Nazi forces.
- The Svalbard Global Seed Vault in Norway, dubbed the "doomsday vault," stores the world's most diverse seed collection. An international seed bank was destroyed during recent conflicts in Syria, but thankfully, many of the seeds in that repository had duplicates in the Svalbard vault.
- The National Plant Germplasm System (NPGS), managed by the USDA-ARS, stores seeds for nearly 15,000 species of plants in banks around the United States. Scientists worldwide use these seed banks to improve crops.

Sources: Cohen, 2019 (https://geneticliteracyproject.org/2019/07/17/the-risefall-and-resurrection-of-russian-seed-pioneer-nikolai-vavilov/); Folger, 2020 (www. nationalgeographic.com/foodfeatures/ green-revolution/); Garcia-Bastidas et al., 2019 (https://doi.org/10.1094/PDIS-09-19-1922-PDN); International Center for Tropical Agriculture, 2016 (https://blog.ciat.cgiar.org/ origin-of-crops/); Nelson, 2019 (https://doi. org/10.1094/PHYTO-08-19-0300-IA); De Quattro, 1999 (www.ars.usda.gov/news-events/ news/research-news/1999/growers-group-towork-with-usda-seed-banks/); Rensberger, 1992 (www.sun-sentinel.com/news/fl-xpm-1992-05-13-9202080144-story.html); Ronca, 2008 (https://science.howstuffworks.com/environmental/green-science/seed-bank4.htm); Tran, 2019 (www.kitchenstories.com/en/stories/ where-has-your-food-been#:~:text=According%20to%20a%202016%20study,before%20 landing%20on%20a%20plate.); and Svalbard virtual tour, n.d. (https://tour.croptrust.org/).