



## How is USDA Research Working for Pennsylvania?

In FY 2012, Pennsylvania received:

- **\$41 million** from the Agriculture Research Service (ARS)
- **\$15 million** from the Agriculture and Food Research Initiative (AFRI)

### Agriculture Research Investments in Pennsylvania

- Pennsylvania has **8 ARS research units** including:
  - Molecular Characterization of Foodborne Pathogens Research
  - Sustainable Biofuels and Co-Products Research
- **Pennsylvania State University** has 18 AFRI grants worth nearly **\$6.3 million**

Honey bees are a major pollinator of crops in the U.S. Researchers at **Penn State University** are working with local beekeepers to decrease the number of honey bee colonies that die in the winter. AFRI funding is being used to increase nitrogen uptake in plant roots as a way to reduce the amount of nitrogen fertilizer farmers use, thereby reducing costs, while maintaining crop yields.

### Small Business Benefits in Pennsylvania

- Pennsylvania small businesses received **\$450,000** through the Small Business Innovation Research and Small Business Technology Transfer programs within USDA

In Philadelphia, **Azavea, Inc.** is developing a computer program, OpenTreeMap, that allows users to calculate the benefits of each tree in an urban forest on the surrounding air and water quality.

### Agriculture Value in Pennsylvania

- Pennsylvania has **62,100 farms** that account for **\$6.9 billion in total commodities**, **\$1.7 billion in agricultural exports** and nearly **147,000 jobs**
- U.S. public investments in agriculture research and development **produce benefit-cost ratios of 20:1 and higher**