

As part of multistate projects, researchers at land-grant universities are improving apple production, harvest, yield, and quality.



- New rootstocks helped growers transition from large trees spaced far apart to compact rows of high-yielding, small trees, making orchard maintenance and harvest easier, increasing apple yields by **20%** and apple size by **10%**, and providing estimated gains of **\$200 million**.
- A mechanized harvest-assist device can eliminate ladder falls and increase the number of apples harvested per second **50%**.
- Studies identified ways to prevent browning during storage.
- Growers are using recommended treatments and protocols to store apple crops worth **tens of millions of dollars**.

