Potato Research Programs

Potato Research and Extension in Idaho

Potatoes are Idaho’s most noted crop, generating cash receipts in excess of $700 million annually. Idaho produces more potatoes than any other state. The University of Idaho (UI) team of nearly three dozen potato researchers and Extension specialists work closely with the state’s potato industry to provide high quality, nutritious potatoes for the nation. Variety development, potato storage, agronomy and other research initiatives in Idaho and collaborations through the Tri-State Potato Program with Washington and Oregon make the region among the most influential in the nation and the world in potato production and processing methods.

Background

The College of Agricultural and Life Sciences began helping Idaho residents and farmers develop expertise as potato growers in the 1890s. Its efforts have evolved to make UI a regional and national leader in potato growing, storage and processing research. The Tri-State Potato program develops new varieties that offer better fertilizer-use efficiency, reduced water requirements, higher nutritional qualities and other characteristics needed by farmers to meet environmental and market needs. UI’s team of potato researchers and Extension professionals help potato farmers respond to pests and market forces.

Recent Accomplishments

- Idaho’s potato researchers and Extension experts delivered information to nearly 70,000 direct and indirect contacts through the annual potato conference, workshops and field days.
- Through close cooperation with the Idaho Potato Commission, UI researchers helped farmers understand the risk posed by potato psyllids and zebra chip disease. Intensive monitoring efforts led by UI Extension helped growers develop effective pest management programs.
- UI scientists lead a global research network focused on reducing the impact of potato cyst nematodes through the development of innovative control methods, among them the use of litchi tomatoes as a trap crop. The common tomato relatives induce the nematodes to hatch, but then have defenses that prevent the pests from reproducing.
- Two new potato varieties produced by the UI potato team as part of the broader Tri-State Potato Program were recently approved by McDonald’s as suitable for its french fries. The new varieties, Clearwater russet and Blazer russet, both possess superior qualities for growers and the public. The Clearwater russet, for example, requires less water and nitrogen fertilizer to produce large yields and contains a third more protein than the russet Burbank, the potato industry’s gold standard variety.

Upcoming Goals

- The potato team plans to continue educational and research activities that help Idaho’s potato growers and processors maintain and expand the state’s reputation for high quality, nutritious potatoes.
• Research efforts will continue to support development of new potato varieties that feature enhanced production and sustainability qualities by reducing water and fertilizer requirements while enhancing nutritional values.
• Research and Extension activities to support farmers, packers and processors will expand the knowledge of potato industry workers to maintain and enhance Idaho’s reputation as the nation’s top potato producer.

Projected Impact of Continued and Increased Funding

Potatoes are important to Idaho agriculture, to the state’s economy and to consumers nationally and internationally as a source of safe, nutritious food. The activities of the UI potato research team will continue to support and expand the state’s positive reputation.

Accounts: Agriculture Appropriations, NIFA, Potato Research, and Potato Cyst Nematode