



Research to Application

CALS-ARS collaboration strengthens agricultural science for Idahoans

Across southern Idaho, scientists with the USDA Agricultural Research Service (ARS) work shoulder-to-shoulder with University of Idaho scientists, sharing everything from research acreage to high-tech equipment as they address current and emerging challenges in agriculture.

- **At Aberdeen**, ARS scientists develop disease resistance and other qualities for the Tri-State Potato Variety Development Program, design grain-based trout feeds, and work with university cereals specialists to improve small-grain end-use strengths, production practices, and crop health.
- **At Kimberly**, collaborative studies include dairy-related environmental issues, low-input bean varieties, organic cropping systems, sugarbeet diseases, and below-optimum irrigation in alfalfa.
- **At Hagerman**, ARS and university experts in fish nutrition, genetics, and physiology increase the usability of plant-based fish diets and improve the growth and product quality of rainbow trout.
- **At Parma**, research focuses on wine grapes, including production practices, water stress, varietal adaptability, and wine quality.

"There are a lot of reasons why the collaboration works well," says Steve Love, superintendent of the university's Aberdeen Research and Extension Center. "You have a stronger pool of people and ideas, and when they're all doing good work and attracting international attention, you get international collaboration in places that might otherwise get scientifically isolated." *Contact Director Greg Bohach, Idaho Agricultural Experiment Station, at gbohach@uidaho.edu.*

Study shows Idaho dairies can save money by curtailing phosphorus supplements

Southern Idaho dairies routinely feed mineral supplements to their cattle. In the case of phosphorus, supplements amount to money down the drain, or rather down the ditch or into groundwater.

A detailed study of six Idaho dairies to understand their whole-farm nutrient balances showed that nearly one third of the phosphorus that goes in as feed and supplements simply passes on as surplus.

That surplus phosphorus saturates Idaho soil. The excess is carried off as a pollu-

tant to feed algae growth in lakes and streams, or it sinks into groundwater.

Dairies can save thousands of dollars each year and help the environment if they stop feeding phosphorus supplements, said Alex Hristov, UI associate professor of dairy nutrition.

Hristov and UI Extension colleagues conducted the study funded by the United Dairymen of Idaho and the Western Region Sustainable Agriculture Research and Education program. *Contact Hristov at ahristov@uidaho.edu.*

DID YOU KNOW?

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ACRES: The size of farm one worker could handle in 1990, compared with 27.5 acres a century before.

*Source: U.S. Environmental Protection Agency

New publications help white pine, spruce growers limit damage

Two UI Extension publications offer ways to manage and lessen damage from two conifer pests—a weevil that attacks spruce in landscaping and nurseries, and blister rust, which decimates native western white pine forests.

Idaho Extension Forester Chris Schnepf and U.S. Forest Service pathologist John Schwandt produced *Pruning Western White Pine: A Vital Tool for Species Restoration*, a shirt-pocket-sized, practical guide in color for pruning to reduce by half losses caused by white pine blister rust, an invasive fungus that decimates native forests.

Management of White Pine Weevil in Spruce targets a major concern to commercial nurseries and landscape businesses. Robert C. Wilson, Bonner County UI Extension educator, and Ed Bechinski, coordinator of UI Extension Integrated Pest Management, co-wrote the guide with basic information about the pest and methods to control it.

Find both at info.ag.uidaho.edu/catalog/.