



## Boise biodiesel conference in fall aims to improve air for children

Sit in traffic behind a diesel-fueled school bus and chances are you'll understand health concerns for children who ride buses to and from school each day. At Boise workshops on September 15 and 16, UI researchers and educators hope to influence a number of school bus fleets around the United States—including in Idaho—to use the cleaner biodiesel fuel.

School fleet managers will meet at the Centre on the Grove for the Biodiesel Utilization Workshop to share up-to-date information about biodiesel production, availability, and use.

"School buses are one of the largest mass transit programs in the United States," says Jon Van Gerpen, head of UI's Department of Biological and Agricultural Engineering and workshop chair. "They can help jump-start the use of renewable and healthier biofuels in this country."

### Northwest's bus fleets lag behind

In 1997, the Medford, New Jersey, School District was the only one in the nation to run its fleet with the cleaner burning fuel. While the use of biodiesel in school bus fleets is gaining momentum nationally—including in Phoenix and Denver—school transportation districts in the Northwest, including Idaho, Oregon, Utah, Nevada, and Wyoming, lag behind in adopting the cleaner, healthier fuel.

According to EPA sources, it is estimated that, in a single year, the average school bus emits as much soot as 114 cars. Every school day, some 440,000 school buses transport more than 24 million children to and from schools and school-related activities. Bussed children average 90 minutes each weekday on a school bus.

In Littleton, Colorado, Jeffrey Kimes, EPA environmental engineer, reports that biodiesel performs just like diesel, but tests show biodiesel—derived from a variety of vegetable oils—is better for human health.

The Boise workshop, funded with a multi-year USDA grant to study market barriers to biodiesel and to educate the public on biodiesel potential, is the second Idaho autumn conference for public vehicle fleets. Van Gerpen's team plans additional workshops annually through 2008.

Find more on the conference at [www.biodieseleducation.org](http://www.biodieseleducation.org).

—by Barbara J. Smith

## New green manures reduce nematodes by up to 99%

New oilseed radishes not yet available in the marketplace should entice more Idaho potato and sugarbeet growers into giving nematode-reducing green-manure crops a try. Saad Hafez, UI nematologist at Parma, says the varieties Defender and Comet slashed the populations of both sugarbeet cyst nematodes and potato-damaging Columbia root-knot nematodes by 95 and 99 percent, respectively, in the greenhouse.

"Their main advantage is that they reduce both of these nematodes," says Hafez. Previously, green-manure crops that discouraged one nematode encouraged the other. In addition, Defender and Comet reach nematode-inhibiting growth stages in six to eight weeks—two weeks earlier than other varieties. That will give growers more opportunities to squeeze them into their rotations after a fall-harvested crop or before a spring-planted crop.

Green-manure crops decrease nematode populations by serving as nonhosts or poor hosts while the crops are growing and by releasing biofumigating chemicals, activating natural enemies, or improving soil condition after the crops are turned under.

The best older varieties of oilseed radish green manures curbed populations of Columbia root-knot nematodes by 50 percent and sugarbeet cyst nematodes by 80 to 90 percent.

This year, Hafez will test Defender and Comet in the field. He hopes they will be available to Idaho growers by 2006.

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—by Marlene Fritz

## Ranch buyers ante up for blue skies

In a study of 100 ranch sales from 1996 to 2002 in the Great Basin of Idaho, eastern Oregon, and northern Nevada, UI Extension Range Economist Neil Rimbey and New Mexico State University colleagues L. Allen Torell and Octavio Ramirez found that ranch income explained only 8 percent of the variation in ranch value and added roughly \$6 an acre for most of the 100 ranches sold.

"If you are going to buy a ranch, you would think that the income associated with cows would be pretty important, but it wasn't," says Rimbey. What boosted values for the Idaho ranches were elevation and scenery. Any ranch above 3,000-foot elevation had a premium value at \$1,121 per acre, and "trophy ranch" or recreational and scenic values added \$864 an acre.

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—by Marlene Fritz