



Canola Meal

New values for mustard, canola meals may transform Idaho's oilseed industry

University of Idaho soil biochemist Matt Morra knows he has a winning product. It's already in use elsewhere in the world, and he's seen the benefits first hand. The problem is that hundreds of thousands of dollars will be needed for the product to reach its full potential.

The product in Morra's case is mustard and canola meals. His chemical analysis helps to reveal how they can fight pests from nematodes to weeds. Field trials by university researchers and producers have begun to show when and where it works best.

The next step, Morra told members of the Idaho Canola and Rapeseed Commission in December, is to conduct the rigorous testing needed to gain U.S. Environmental Protection Agency registration as a biopesticide. The registration could open valuable agricultural markets for row crop and nursery markets.

Another University of Idaho researcher, microbiologist Don Crawford, discovered a specific bacterium that acted as a biopesticide. Texas-based Natural Industries believed in Crawford's product enough to invest nearly a decade and more than \$500,000 in winning EPA registration. The move succeeded in opening agricultural markets to the company's formulation of Crawford's discovery.

Similarly, adding value to mustard and canola meal could dramatically transform Idaho's oilseed industry, Morra and other researchers believe.

With a ban looming on the synthetic soil fumigant methyl bromide, mustard meal could fill the gap and become the most valuable commodity from the crop. With that shift, the seed oil would become an inexpensive byproduct, but a valuable asset in producing competitively-priced biodiesel.

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Idaho's dairy-canola connection includes soil fertility, pest control, crop rotations

Idaho dairies now routinely include canola meal in the lactating cows' rations.

University of Idaho dairy scientist Alex Hristov is studying how the meal left after the heart-healthy oil is pressed can benefit cattle and milk production.

The university is a leader in the development and testing of new canola varieties. Agricultural scientists study canola benefits including its use to improve soil fertility,

control pests, serve as a crop-rotation tool and as a cash crop.

Ironically, canola that southern Idaho dairies feed to their milk cows is almost entirely a Canadian export, flowing past Idaho's canola growing regions.

Preliminary research shows canola meal could make up as much as 20 percent of dairy cows' diets if consistent supplies could be secured.

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DID YOU KNOW?

180 GALLONS of oil or biodiesel can be produced from one acre of winter canola or rapeseed.

*Source: University of Idaho, Jack Brown, 2006

Economic implications for canola meal

Mustard and canola offer grain growers a rotation crop that can break the pest and disease cycle and provide other agronomic benefits. And mustard and canola can offer some other exciting possibilities including homegrown fuel.

Less appealing to growers is the risk of uncertain markets compared to other rotational crops like peas, lentils, and garbanzo beans. The pulse crops offer more certain markets, even if they're not always lucrative, said Larry Makus, a University of Idaho agricultural economist at Moscow.

Preliminary studies show mustard and canola can improve soil fertility in the long run, Makus said. But no detailed studies yet put those benefits in profitability terms for growers. Once that happens, he expects growers to take a closer look at producing mustard and canola.

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