

Beans means oil crisis relief

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Forget ethanol fuel blends from sugar, tomorrow's cars could be full of beans, according to University of Queensland legume biotechnology expert Professor Peter Gresshoff.

Professor Gresshoff has shown that oils extracted from soybeans and peanuts are a cheap, environmentally sound source for biodiesel production.

“The focus to date has been on ethanol blends made from sugar and petrol, but our research shows that the biggest potential environmental rewards are diesel alternatives made from grain legumes such as peanuts and soybeans,” Professor Gresshoff said.

As the Director of the Australian Research Council Centre for Excellence for Integrative Legume Research at UQ, he said Australian growers had increasing opportunities and markets for alternative fuels.

“Given increasing pressure for environmentally friendly products and increasing fuel prices, the demand for renewable fuels is escalating rapidly,” he said.

“The Australian Federal Government has set a 350-megalitre-target for renewable fuels by 2010.”

Legumes have the edge over other biodiesel sources such as canola because legumes make their own nitrogen fertilizer.

Canola, wheat and sugar cane require fertilizer — costing valuable fossil fuel energy.

“The Australian agricultural industry now faces the challenge of supplying the growing biodiesel market with sufficient volumes of consistently high quality product,” Professor Gresshoff said.

“This is a valuable opportunity to decrease national dependence on foreign petroleum, increase efficient and sustainable production of domestically grown crops and significantly boost agricultural revenue.

“However many oilseed legumes suffer from only average yields under Australian conditions. Our research shows that increased effort is needed to adapt the growth habits and architecture of the legume plant to optimize oil output.”

Professor Gresshoff will present his findings at the Queensland University of Technology, Gardens Theatre, on Wednesday from 1pm.

His talk is part of the German/Queensland Science and Technology Week to showcase cutting edge technology from partnerships between universities and institutes in Queensland and Germany.

Bayer CropScience has sponsored the Week as part of its commitment to developing innovative agricultural technologies, enhancing crop productivity and reducing crop losses to pests, weeds and diseases.

“New market opportunities for the supply of biofuels already exist in both Australia and worldwide,” Bayer CropScience Managing Director Sam Howard said.

“Bayer CropScience is committed to a partnership with Australian farmers to deliver high yielding crops of consistent quality to meet the

needs of current and future food, feed and fibre markets.”

Source: University of Queensland

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