

Beans Means Oil Crisis Relief

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

Gresshoff, who is the Director of the Australian Research Council Centre for Excellence for Integrative Legume Research at UQ, 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", Gresshoff said. 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 Federal government has set a 350 MJ target for renewable fuels by 2010."

Legumes have the edge over other biodiesel sources such as canola because legumes make their own nitrogen fertiliser. Canola, wheat and sugar cane require fertiliser — 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", 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 optimise oil output." ■