ON THE FARM - THE GOOD DIRT

Mustard on your soil Sir?

Ian Dickson with mustard residue once the oil has been extracted

Longwood cropping farmer Ian Dickson is enthusiastic about the potential of Straight Vegetable Oil (SVO), produced from mustard seed, and used to fuel vehicles.

"We need to wake up to change," he says. Ian has put his money where his mouth is by growing mustard seed, which not only provides fuel for his van and tractor, but can be used as fertilizer and animal feed and can add carbon to the soil.

Mustard is a great break crop; it is a natural fumigant of the soil, increases deep cycling of organic matter and helps build soil carbon. Mustard, in rotation with other legume and cereal crops improves the long term health of the soil and improves farm diversity.

In 2008 Ian decided to set up a pilot plant to produce oil from the mustard seed he grows on his property. He acquired a petroleum manufacturer's licence and made biodiesel. While the market in fossil fuels meant that manufacturing biodiesel was not economically attractive at that time, making SVO was because it does not have a fuel excise levy. The other advantages are that SVO is a renewable fuel that can be produced locally, and, says Ian, "it is about half the price of diesel."

Ian hopes now that others will take note of this new road to reducing our reliance on fossil fuel.

He says that while mustard seed SVO will not solve

all fuel/energy problems it may well be part of the answer by

enabling farmers to become a small energy producer rather than a total energy importer. And at the same time, it has the added benefits for soil health in a farm crop rotation.

Ian sourced an oil extractor from Germany that allows him to extract five litres or more of oil an hour. During the recent drought he extracted 30% oil from the seed; in a good season he can extract 40% oil.

Indian mustard contains nitrogen, phosphorus, potassium, and sulphur. Following oil extraction, the residue (cake) can be made into a stock feed, which is rich in protein and energy, or used as a fertiliser.

Mustard is also a hardy crop, is drought tolerant and able to survive frosts. Ian estimates it costs around \$120 per hectare to sow and harvest. A further advantage of mustard seed is that it is suited to direct heading, overcoming the need for windrowing. Following harvest, Ian puts cattle in "They just love mustard and graze it almost to the ground."

Ian has shown that innovation in farming is alive and well.

FURTHER INFO

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