

Research shows promise in converting camelina oil into jet fuel

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(PhysOrg.com) -- Researchers at Montana State University-Northern have developed a process to convert camelina oil to jet fuel and other high-value chemicals. MSU has applied for a U.S. patent and research is ongoing.

Using a continuous-flow process at low temperature and pressure, the technology yields butane, pentane, gasoline, diesel, [triglycerides](#) and oleochemicals among other products, although the research is primarily directed at jet [fuel production](#). Jet fuels produced in this manner meet the applicable American Society of Testing and Materials (ASTM) standard.

The U.S. consumes about 22 billion gallons of [jet fuel](#) from the 73 billion gallons produced worldwide. Recent studies have indicated that aircraft contribute to about 3.5 percent of the emissions linked to climate change. Fuel derived from [oil seed](#) such as camelina would dramatically lower those impacts.

To date, there are only a couple of methods for making advanced renewable jet fuels that have been certified by ASTM. One of those is done with the Fischer-Tropsch method commonly known as part of the coal gasification process. Both require a lot of energy to produce and both have potentially lower blending ratios than the process being developed by Nestor Soriano, Randy Maglinao and Akash Narani of the Bio Energy Center at Montana State University-Northern.

Provided by Montana State University

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