

The Problem with Plant-Based Fuels

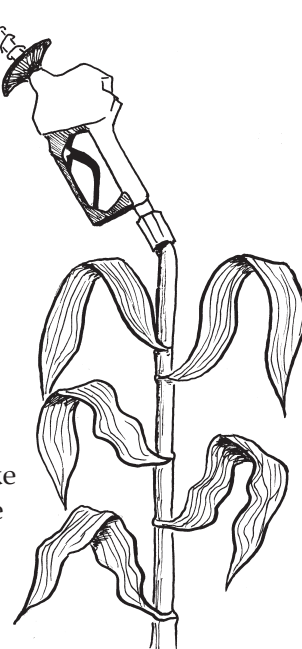
Jeff Conant and Pam Fadem

When the automobile engine was invented, it could run on fuels made from plants, such as vegetable oil or alcohol. But soon after, when petroleum became cheap to produce, gasoline and diesel fuel (both made from petroleum) became the main fuels used to power automobile engines, as well as motorcycles, trucks, and airplanes. The petroleum industry worked very hard to prevent plant-based fuels from being used.

Now that oil has again become expensive, many countries are turning to plant-based fuels to replace petroleum. Fuel made from palm, soybeans, canola, maize, or other plant oils is called “*biofuel*” or “*agrofuel*.” This seems like a good solution because plants are renewable. But there are many reasons why agro-fuels will cause more problems than they solve.

- 1 Producing oil from plants that could be used for food leads to competition between growing fuel for cars and growing food for people. With so many people suffering from lack of food, we cannot afford to turn food into fuel.

- 2 One reason to reduce dependence on fossil fuels is to decrease global warming. But to produce the amounts of crops needed to make biofuel requires the use of petroleum fertilizer, farm machinery, and transportation of the fuel crop from where it is grown to where it is processed and distributed, and finally to where it is used. In the end, producing biofuels uses more energy than it produces, and causes more global warming than petroleum!
- 3 When forested land is cleared to grow biofuel crops, the trees that absorb global warming gases are destroyed. For example, biofuel made from palm oil causes 10 times as much global warming as diesel oil.



Excerpted from *A Community Guide to Environmental Health* by Jeff Conant and Pam Fadem, Hesperian Foundation, <www.hesperian.org>, 2008. Reprinted with permission.

What do You Think?

What does this article say is the problem with plant-based fuels?

Why do you think plant-based fuels are called “biofuels” or “agrofuels”?

Who should make decisions about what kind of fuel we use?

Explore the idea of making biofuels from other natural substances, such as wood, grasses, or even algae. According to the Worldwatch Institute, an acre of algae can produce 5,000 gallons of biodiesel each year. By comparison, an acre of corn produces 420 gallons of ethanol and an acre of soybeans yields just 70 gallons of biodiesel in a year.

Read more about biofuels at: <<http://ngm.nationalgeographic.com/2007/10/biofuels/biofuels-interactive>>.