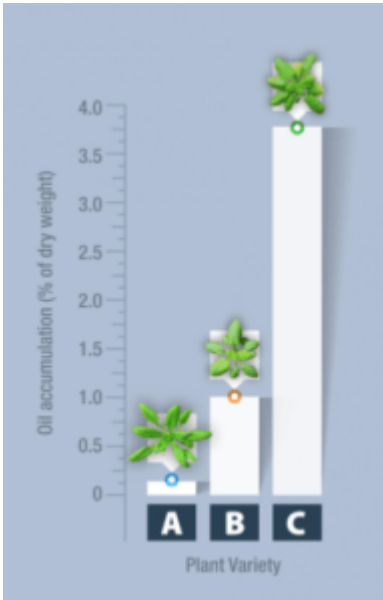


## Genetic engineering could increase biofuel production by fattening plant leaves

While there are legions of plant researchers dedicated to the idea of using GMOs to maximize food production, there's a lesser-known syndicate of scientists trying to cultivate a different outcome: increasing plant output of biofuels.



leaves through gene manipulation, researchers at the Brookhaven National Laboratory found that by making leaves fatter, oil production can be increased.

“Combining genetic mutations that decrease the transport of sugar out of

leaves and the conversion of sugars to starch increases sugar levels in leaves,” explains biochemist John Shanklin, who’s leading the research, in a statement from Brookhaven Lab. “That excess sugar drives increased oil production by stabilizing the oil on-switch, and also by supplying the carbon building blocks needed to make more oil in leaves.”

...

[In] his process of converting solar energy to chemical energy, researchers at the Long Island, N.Y.-based lab determined that biofuel benefits could emerge if they could block or slow the mechanism of sugar leaving the leaves. So, they “selectively bred plants to combine a series of traits,” the study reported, “that blocked some of the sugar transport and conversion pathways, which resulted in increased oil production and accumulation.”

[Read the full study [here](#).]

**The GLP aggregated and excerpted this article to reflect the diversity of news, opinion and analysis. Read full, original post: [Growing A Different GMO: Genetically Modified Oil](#)**