

## Charcoal lighter fluid makes summer grilling more environmentally friendly

May 24 2018, by Mike Wooten







EcoGreen Charcoal Lighter is made entirely from plant-based products. Credit: University of Georgia

Whether they call it a "barbecue" or a "cookout," Americans love backyard cooking. Grilling steaks, hamburgers—even veggie burgers—on a warm summer evening has become such a part of our culture that nearly three out of four adults own at least one grill or smoker.

Now, thanks to scientists at the University of Georgia College of Engineering and a company in nearby Monroe, backyard chefs can reach for a more environmentally friendly and sustainable alternative to petroleum-based <u>charcoal</u> lighter fluids.

Typically made from crude oil, lighter fluid can emit compounds that leave an unpleasant taste and odor on grilled foods. The new product manufactured by ESCOGO, EcoGreen Charcoal Lighter, is made entirely from plant-based products. It is now available in Home Depot and Target stores nationwide.

While ESCOGO has produced a natural charcoal lighter fluid designed to work on lump charcoal since 2009, the company wanted to offer a formula that worked equally well on charcoal briquettes.

"They had a product that worked great on lump charcoal but briquettes are much denser and the fluid would burn off before getting the briquette hot enough to ignite," said Dan Geller, a research engineer in UGA's College of Engineering. "We needed a product that burned really well and one that met the strict air quality concerns for <u>volatile organic</u>



## compounds."

The product also had to be economically priced to compete with other options available on the market.

UGA and ESCOGO performed trials on more than 100 formulas and organic ingredients before finding a solution, an all-natural byproduct of the fermentation industry.

"We looked at a lot of different options that would burn, that we could buy in large volume, and that were natural byproducts of other industries," said Geller. "This really was a classic engineering design problem because we were trying to figure out a way to meet all these specific constraints."

The Center of Innovation for Agribusiness, a state agency that provides technical assistance and connections to academic, business and government resources, provided funding for the project.

"We didn't have the research and development expertise or the budget to come up with this new formula," said Rick Huszagh, a founding member of ESCOGO. "Working with the University of Georgia, with the grant money we received from the innovation center, allowed us to come up with a formula that works great and diversifies our product line."

May is National Barbecue Month and the beginning of peak grilling season, but many backyard chefs pay little attention to the calendar. According to the most recent consumer survey conducted by the Hearth, Patio & Barbecue Association, an industry trade group, nearly two-thirds of grill owners use their grill or smoker year-round.

Provided by University of Georgia



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