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Flower Power

A common mustard plant holds potential as a sustainable fuel and alternative crop

By Cindy Spence

Agronomist David Wright sees a future where jet fuel comes from a field of yellow flowers.

The flowers top the stalks of *Brassica carinata*, a variety of mustard whose seeds produce oil that can easily be converted into jet and diesel fuels that are nearly identical to their petroleum counterparts.

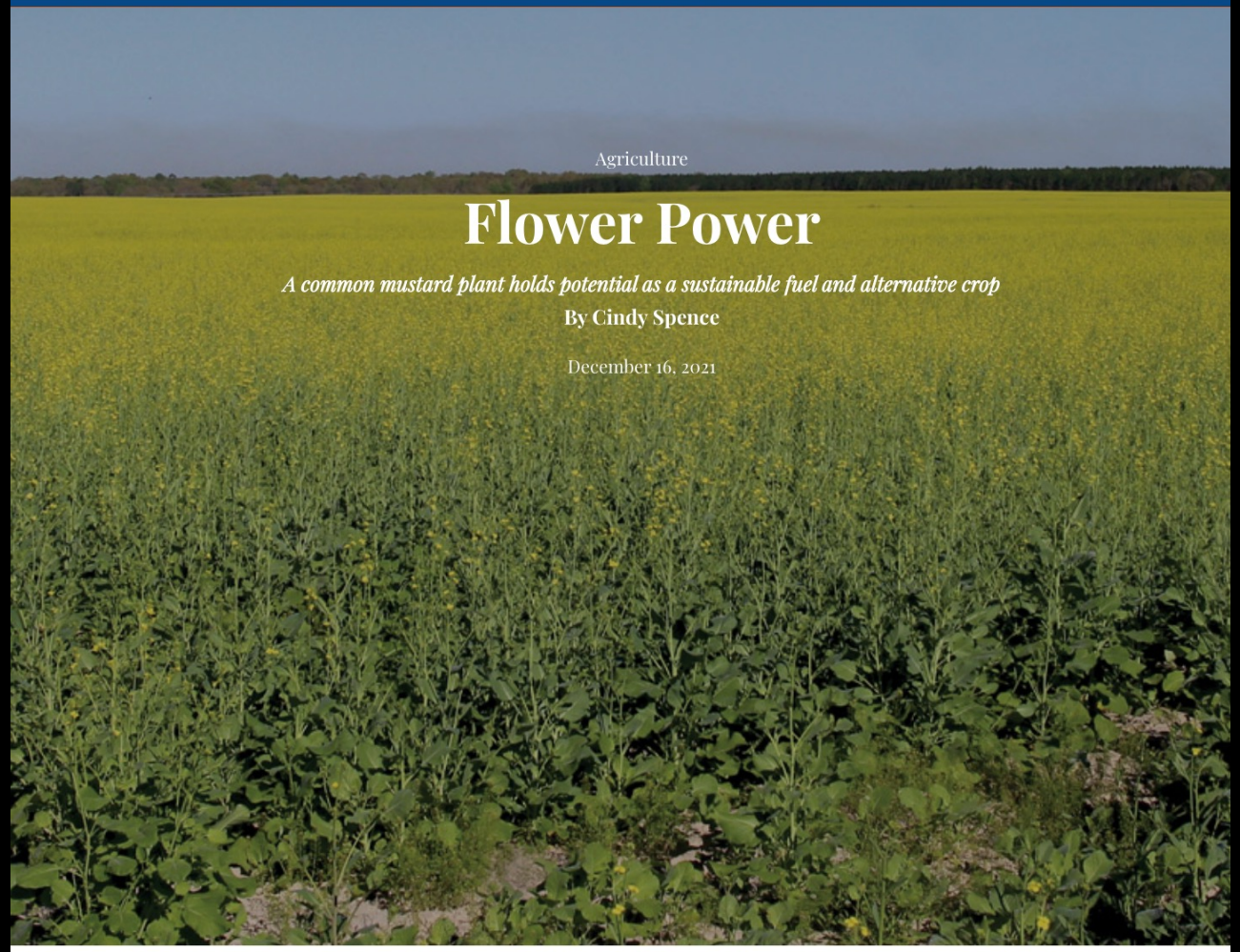
In 10 years of working with carinata at the University of Florida's North Florida Research and Education Center in Quincy, Wright and his colleagues say they've discovered that jet and diesel fuels are only one benefit of the humble mustard. At each stage in the growth cycle, carinata offers benefits to farmers, says Sheeja George, research project manager.

"Carinata fits for the Southeast in the winter when farmers grow nothing else, and it gives them an opportunity to build carbon in the soil and an opportunity to produce a high-protein meal that can be used to feed chickens and cows," George says, "all on top of harvesting the seeds for oil for biofuel."

In recognition of carinata's potential, the USDA's National Institute of Food and Agriculture awarded $15 million in 2017 to a public/private partnership led by UF called SPARC, the Southeast Partnership for Advanced Renewables from Carinata.

George says 2022 will be a key year for SPARC, as varieties with higher yields and improved genetic traits are being field tested with the ultimate goal of giving growers a chance to make money from their fields year-round.

An offhand comment in 2010 led to the eventual creation of the $15 million SPARC project. Wright and George and their colleagues were working on a project with camelina, another oilseed, and a



Agriculture

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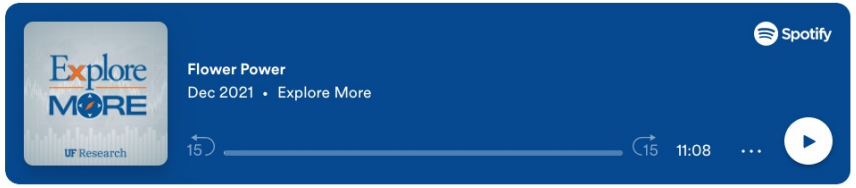

PODCAST EPISODE

Flower Power

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Dec 2021 · 11 min 8 sec

Episode Description

University of Florida agricultural researchers are working to establish carinata, a common mustard plant that has potential as a sustainable fuel and livestock feed, as a new crop in the Southeast. To read the article, visit https://explore.research.ufl.... **see more**

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