

UF officials dedicate ethanol plant

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An ethanol plant at the University of Florida could help the nation kick its oil habit, as well as help the U.S. move away from using corn to make the alternative fuel.

UF officials this week dedicated the pilot plant, which will research using genetically modified E. coli bacteria to convert plant waste into ethanol.

UF microbiologist Lonnie Ingram, who developed the method, said Florida's climate makes it well-suited to grow plants for fuel production.

"We have the potential to lead the country in the production of biofuels," said Ingram, director of the Florida Center for Renewable Chemicals and Fuels.

Funded as part of a \$4.5 million state grant, the plant is nestled in a new addition to an agricultural and biological engineering building on the main campus. The plant will be used for research and to train graduate students.

"This plant is not a silver bullet ... but it's quite likely to make a significant contribution to the transition away from oil," said UF President Bernie Machen.

Florida currently imports all the oil that it uses.

Machen said recent gas shortages in Atlanta and beyond showed the need to develop local sources of fuel.

"Just like hurricanes, Florida dodged this shortage this year, but we are bound to have it hit us sometime in the future," he said.

The research could be applied in an ethanol plant that UF is building near Lake Okeechobee. The university is working with sugar producer Florida Crystals on the \$20 million project, which will initially produce ethanol from the crushed sugar cane stalks left after juice is extracted.

Currently, the U.S. uses corn to produce nearly all the ethanol used as an additive to gasoline. But the practice requires a large amount of energy and can mean increases in food costs.

Ingram said producing fuel from wood has advantages in those areas, but is more difficult to do. The plant will help refine the method and reduce its cost, he said.

Machen said the plant will make Ingram's process better-suited for industrial-scale production.

"Although it's come a long way, it's still not quite ready for prime time," Machen said. "And that's what this plant is all about."

The pilot project is expected to eventually expand to research other fuels such as hydrogen, biogas and biodiesel.

The U.S. is entering into an "energy age" when the development of alternative fuels will drive the economy, said Jimmy Cheek, a senior vice president who heads the university's Institute of Food and Agricultural Sciences.

"Like the information age, we will see an explosion of creativity, innovation and technological advances," Cheek said.

Machen said the move to biofuels will also ease the U.S. dependence on foreign oil.

"Every drop that we produce is a drop that we're not going to be importing," Machen said.

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