

A Sweet Deal for Ethanol

Sweet sorghum is poised to provide both ethanol and electricity to help ease our dependence on foreign energy. When sweet sorghum is processed, its sugar is extracted to produce ethanol while the remaining fiber can be burned to create electricity. This produces enough heat to power the ethanol process. It also produces excess electricity to send into the utility distribution system, which can be utilized by consumers. Sweet sorghum allows for rotation with other important field crops in Florida and other southeast states including sugarcane.

Constructing new sweet sorghum ethanol facilities will bring construction jobs and will provide stable rural employment for continued agricultural production and operation of the plants.

Sweet sorghum can provide cost effective sugars for the manufacturing of a new generation of bio-based chemicals. These chemicals, which are made from renewable products, can produce plastics, rubber, textiles, and much more. The Sorghum Checkoff is currently funding research to learn more about sweet sorghum's value to the ethanol and bio-chemical industry.

Sweet sorghum will have to be approved under the Renewable Fuels Standard, version 2 (RFS2), by EPA through a petition process because it was not listed in the final rule published Feb. 3, 2010. The petition process will present processing pathways that can result in sweet sorghum ethanol being declared as an advanced biofuel under RFS2. An advanced biofuel must demonstrate a 50 percent reduction in greenhouse gas (GHG) emissions compared to 2005 gasoline.

Facts about Sweet Sorghum

- Sweet sorghum yields in previous studies have ranged from 3.8 wet tons/acre to 72.2 wet tons/acre.
- With an average of 28 tons/ acre with extractable sugar at 11.3 percent, an acre of sweet sorghum can produce 446 gallons of ethanol per acre per harvest.
- Sweet sorghum matures in 120 days, allowing for two harvests in Florida, that can be made into 892 gallons of ethanol per acre per year.
- Sweet sorghum also produces electricity that can be sold into the utility distribution system.
- Construction will bring jobs, and plants will provide stable rural economic employment.

