



Florida's Alternative Fuels

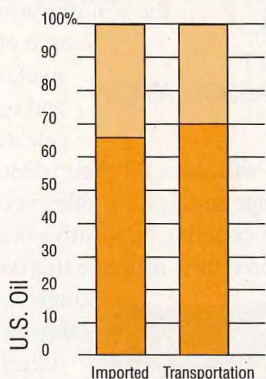
The Florida Department of Agriculture and Consumer Services and others recently sponsored Farm to Fuel Summit Orlando. Nearly 500 people attended this third annual summit. Charles Conson, Commissioner of Agriculture, has been promoting Florida as a state that has great potential for biomass and bio-ethanol production.

Wigs

The importance of this conference was highlighted by the presence of Florida Governor Charlie Crist and USDA Secretary of Agriculture Ed Schafer. Emphasizing the importance of energy and fuel, Governor Crist said that Florida could be a green-energy leader. Secretary Schafer pointed out that the nation's farmers are being seriously impacted by the price of fuel, feed, and fertilizer, even though they recently produced record crop exports. He brought up the contention that people who blame the production of ethanol for the increase in the price of food do so unjustly. This point was debated by other speakers later on. He mentioned that the Department of Energy estimated that blending ethanol reduced the price of gasoline by 10¢ to 35¢ per gallon.

Figures From IFAS

Besides speakers from renewable fuel industries, a number of speakers here from the University of Florida/Institute of Food and Agricultural Sciences. Dr. John Erickson from the



We rely on foreign oil for about 65% of domestic supplies and 70% of total U.S. usage is dedicated to transportation.

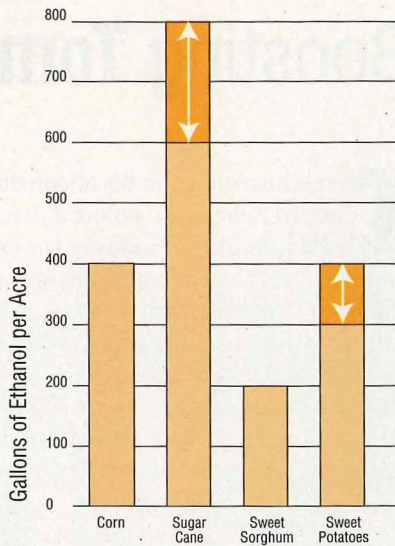
Agronomy Department discussed feedstocks for bioenergy in Florida. He pointed out that the Department of Energy reported that about two-thirds of U.S. oil is imported, and 70% of all U.S. oil is used for transportation. In 2007, the U.S. consumed about 142 billion gallons of gasoline and produced about 6.5 billion gallons of ethanol. Estimates for U.S. ethanol production in 2008 are close to 10 billion gallons. Most ethanol

in the U.S. is currently obtained by fermenting corn, and most ethanol biorefineries are in the upper Midwest. With corn, one can produce about 400 gallons of ethanol per acre. About 20% of the corn harvested recently went to ethanol production.

Potential For Florida

Sugarcane and sweet sorghum are warm-season grasses that are native to tropical and sub-tropical areas and are well adapted to parts of Florida. They could be used as feedstocks for ethanol production, and both of these crops fix carbon. In Florida, sugarcane is grown commercially on about 400,000 acres. Most of it is grown just south of Lake Okeechobee, and cold winter temperatures would limit how far north current cultivars could be successfully grown in Florida. Roughly 600 to 800 gallons of ethanol could be produced per acre from sugarcane in Florida.

In Florida, about 5,000 acres of forage and grain sorghums are grown, but



sweet sorghum is not commercially grown here. Sweet sorghum has been historically grown in the southeastern U.S. for syrup. There is the potential for two crops per year in Florida. About 200 gallons of ethanol per acre would be possible here based on sugar yields from preliminary growth trials in South Florida, but 400 gallons per acre has been reported for some cultivars grown in Texas. University of Florida researchers are continuing to evaluate cultivars and production practices for improved sugar yields here. Florida growers who have lost citrus trees to canker or greening might be interested in growing crops for biofuels, but more refining capacity will be needed.

Other speakers discussed starch, oil crop, and cellulosic feedstocks for bioenergy production. Dr. George Hochmuth pointed out that sweet potato is grown in much of the southeast and could be a potential bioenergy crop. Calculations have shown that 300 to 400 gallons of ethanol per acre could be produced from this crop, making it competitive with sweet sorghum.

There are certainly alternatives to corn for ethanol production that can be grown in Florida. Florida will be a major player in the future of alternative fuels.

