

# The Peanut Biodiesel Project

*From the Field to the Fuel Tank!*



## Why use peanut oil as fuel?

- Highest potential in SE (see table below)
- High oleic varieties = high quality diesel
- *The first diesel engine was powered by peanut oil!*

Crop	Gallons fuel per acre
Peanut	100+
Canola	75
Soybean	65

## What are the benefits?

- Single farms or groups of farmers can be fuel independent
- Clean burning, renewable fuel
- *Costs less than buying petro-diesel*
- Capture tax credits and incentives from the government
- Peanut meal is valuable animal feed

*For more information contact:*



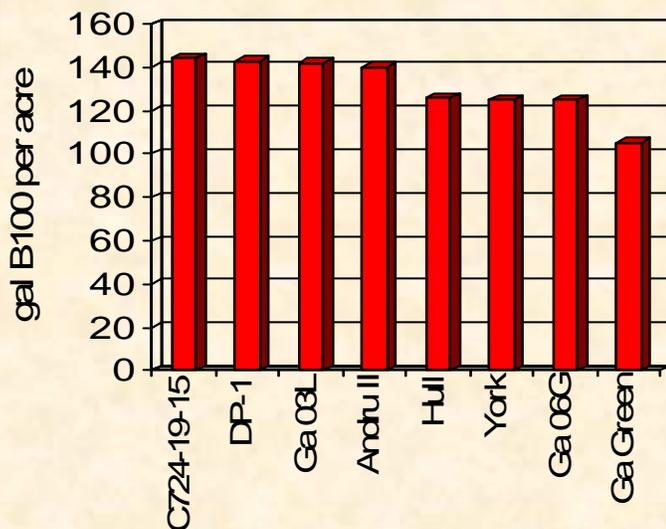
Wilson Faircloth, research agronomist

Chris Butts, agricultural engineer

229-995-7400

## How do I make biodiesel?

- 1 ton farmer stock peanuts yields about 100 gal crude peanut oil + 800 lb meal
- Crude peanut oil is mixed with methanol and a catalyst (lye)
- The result is *methyl ester* or biodiesel (B100)
- B100 will run in any diesel engine without modification; or can be blended to your specifications



This chart illustrates B100 yield per acre for 8 varieties grown in a very low-input, low cost production system. No fungicides, insecticides, and very little herbicide was used.