Transcript of the peanut biodiesel video from the Georgia Farm Monitor, 2008

(Denny Moore - Host, Georgia Farm Monitor)
Taking crops and creating fuel is a hot topic all across the nation, as farmers and ranchers look for creative ways to save money. Researchers in the south are seeing what can be done by using peanuts, and they may have come up with something that will work.

(Wilson Faircloth - Research Agronomist, USDA National Peanut Lab)
Most people don't realize that a peanut is 50% oil which is much greater than either soybeans or canola. So why not use a crop that we know how to grow and can grow well to produce a fuel that we can use and save some money.

(Moore)
It could become the wave of the future because the need to create on-farm fuel sources is so extremely important. The USDA National Peanut lab has created a facility that turns peanuts into fuel, and they are doing it quite inexpensively. The process isn't as complicated as you may think.

(Faircloth)
Well, peanuts come in to an oil press where they are physically with heat pressed into a cake. When the cake forms the oil that's contained in the peanut is also released. So from a ton of peanuts you will have about 800 pounds of meal that is produced which is a great animal feed product, and then you have about 800 pounds of oil and 800 pounds of oil is roughly 100 gallons of usable crude oil.

(Moore)
That crude oil has to be filtered several times to get some gums and other particulate matter, and then the crude oil is placed into a reaction tank.

(Faircloth)
And in that reaction tank we add methanol and sodium hydroxide, a catalyst, and a reaction takes place in which the peanut oil is actually changed into a methyl ester which is the scientific name for a diesel fuel.

(Moore)
At the National Peanut Lab they can crush oil for about two days and have enough oil to make a batch of fuel. On a larger scale you could have this online and go from kernel to a gallon of oil in the same day. Is it cost prohibitive?

(Marshall Lamb - Research Food Technologist, Research Leader, National Peanut Lab)
We don't think so and our date says it is not. The reason being is that generating peanut bio-diesel is a scalable investment. If you have a need for so many gallons of diesel fuel for the upcoming year, you can build a bio-diesel plant to that scale and have your investment level relative to the amount of output that you want.

(Moore)
In this facility, they have between $35,000 to $45,000 invested and they say when you amortize that over 5 - 7 years and over several thousand gallons of fuel each year, the per unit or per gallon cost comes down fast. Lamb admits some farmers are already beginning to develop business plans for co-ops.

(Faircloth)
The benefits to doing this yourself, of having control of your own fuel price where no one else is dictating to you an arbitrarily raising or lowering the price of those fuels and when you create that fuel when you those peanuts. You know how much your fuel costs you, you can budget and you can plan so much better by doing it this way.

(Moore)
Officials at the lab say that in the future we could see farmers dedicating a certain amount of land to grow a specific variety of peanuts for bio-diesel. They don't however want the peanut bio-diesel acreage to compete with edible acreage of peanuts.

(Lamb)
Our laboratory is committed to helping farmers conserve natural resources but also to find ways to reduce the per unit cost of production and generating peanut bio-diesel is one of those ways.

(Zippy Duvall - Georgia Farm Bureau President)
I think it's absolutely a wonderful idea and the research they are doing here could help farmers all over this state and for them to be able to grow their own fuel and self-sufficient in their areas is just exciting to me.

(Lamb)
According to our estimates, we're cheaper than diesel right now.