
McCLUNE INDUSTRIES
presents
SOR-CANE HARVESTER
and
SORGANOL®
What is it?
The answer to LOWER FUEL COST for the CONSUMER and more PROFIT for the FARMER!

SORGANOL®

IS

ETHANOL FROM SWEET SORGHUM

The crop shown here was being grown in West Central, Oklahoma.

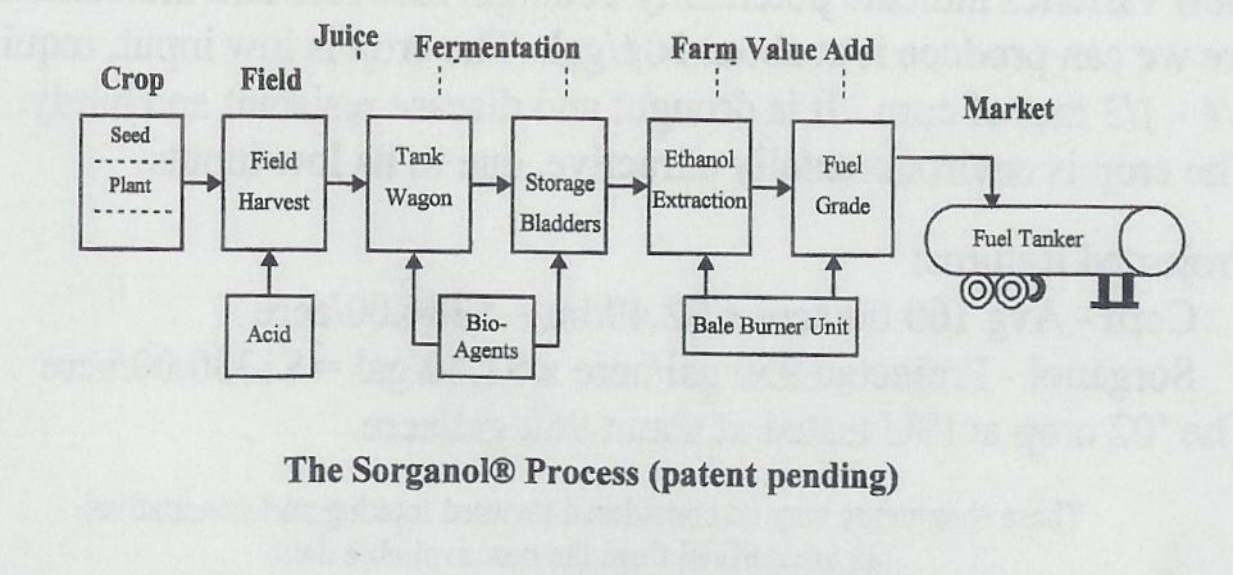
SORGANOL® is not just a new renewable energy crop. ***It is a totally new cutting edge process for the future!***

- The farmer has complete control of the crop & process from the seed to the final market!

- Results — Ultimate **PROFIT** for the farmer!

- **No** middle man!

SORGANOL® PROCESS FLOWCHART



The Sorganol® Process (patent pending)

BACKGROUND ON SWEET SORGHUM

Nearly all of the present Sweet Sorghum growers harvest their crop by hand and utilize the juice in making sorghum syrup. This is labor intensive and a very slow process.

Dr. Anderson of Iowa State University recognized in the 80's that sweet sorghum had high potential for much improved yields as a renewable energy crop. His first trials in '88 tested at 895 gallons of ethanol per acre. However, his process of ensilage/fermentation was cumbersome, troublesome, and cost/yield prohibitive. This resulted in its' lack of acceptance as a viable crop.

THE NEW PROCESS

Physicist, Lee McClune of Knoxville, Iowa, became aware of Dr. Anderson's work and realized there was a better way. He developed the new ***SORGANOL***® **Process** (PatPend) that would alleviate the problems associated with other methods of production. The sweet sorghum crop is harvested right in the field with the new **Sor-Cane Harvester.** It directly **harvests** the juice from the stalks, and also filters the juice. The juice is acidified as it is harvested. The appropriate yeast agents are added or metered in as the juice is pumped from the transporter into the storage containers. A few hours later the sugar conversion to ethanol is complete. Later, an ethanol bio-refiner unit extracts the Neat or fuel ethanol, which is then directly marketed. Thus, the Farmer receives the full Farm Value-Added income **benefit**.

Why $ORGANOL®?

New varieties of sweet sorghum indicate potentially 1000 gallons of ethanol per acre. Indications are that we can produce it at about 50¢ per gallon. The crop is a very low input, costing only 1/4 to 1/3 that of corn. It is drought resistant, (requiring less than half the amount of water as corn), disease resistant, insect resistant, and hardy. The crop is fast growing, only taking 100-120 days for the first harvest Also, in the Southern regions of the U.S. you get a second crop to harvest in about 60 days. It is very environmentally attractive because of its low inputs. Not to mention the fact that we have shown that Sorganol (fuel ethanol) can be produced at very near ZERO Fossil Energy Inputs, allowing for 6-10 times the NET fuel ethanol per acre.

Sor-Cane Harvester

(Patented)

The Sorganol Process should not adversely affect food or feed prices, thus making it a better renewable fuel source to produce energy. The use of sweet sorghum to make ethanol is the solution to lower fuel cost and bigger profit margins for the farmers without causing rising costs elsewhere. With rising oil prices and economic recession someone needed to figure out a way to produce ethanol more economically without impacting the food and feed markets. Lee McClune has done just that with the Sorganol Process!

The creation of Sor-Cane Harvester comes from a commitment to bettering America and its rural areas. Rural towns depend mostly on farming as their main source of income, and the farmers are currently dependent on imported fuels to produce most of the commodities grown. The *SORGANOL®* process will tremendously help to alleviate America's dependency on foreign oil by eliminating the food/fuel conflict. We are very excited to introduce this new harvester and Process to America!

CORN Based Ethanol vs. *SORGANOL*® Economics

Projected Returns:

CORN: Avg 160 bu/Acre x $4.80 / bu = $768.oo/Acre
~ $568.oo/Acre Prod Costs = ~$200.oo/Acre Profit

SORGANOL®: Projected at 800gal/Acre x $2.40/gal =$1,920.oo/Acre
~ $320.oo/Acre Prod Costs = $1,600.oo/Acre Profit

Carbon Emission Analysis

CORN Based Ethanol: (0.75 gal fossil/gal ethanol)

- Avg 160 bu/Acre x 2.8 gal/bu = 448 gal eth/Acre
- 448 gal x 0.75 Fossil Energy/gal = 336 gal Fossil Energy /Acre
- 336 gal x 18.5$^{\#}CO_2$/gal = 6,216$^{\#}CO_2$/Acre Emissions

SORGANOL®: (Est 0.05 gal FE/gal Sorganol)

- Est 800 gal Sorganol (fuel ethanol)/Acre
- 800 gal/Acre x .05 gal Fossil Energy/gal = 40 gal Fossil Energy/Acre
- 40 gal Fossil Energy/Acre x 18.5$^{\#}CO_2$/gal = 740 $^{\#}CO_2$/Acre

CBE @ 6,216$^{\#}CO_2$/Acre **vs.** ***SORGANOL***® at 740$^{\#}CO_2$/Acre

For more information, dial toll free:

1-800-375-2135

and ask for a representative to tell
you more about *$ORGANOL*®
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These statements may be considered speculative and forward looking, but are derived from the best available data.