

Demand Growing For Sorghum Products

Richard Wittgreve produces more than 1,300 gal. of sorghum syrup for sale each year. His Rolling Meadows Sorghum Mill is one of a handful of large, mechanized sorghum operations in the country. Thanks to a growing health food market, the Wisconsin farmer is also selling coarse ground sorghum for hot cereal, sorghum flour, and even sorghum-caramelized popcorn. He got started in the business because he missed an old favorite treat - sorghum syrup.

"I started raising sorghum in 1985 because I couldn't find any sorghum syrup," he recalls. "I raised a third of an acre and cooked up 6 gal. the first year. The next year we did 12 gal. and then 25 and then 50. I cooked it all down in two pans set over a fire between four cement blocks."

By 1990, Wittgreve had started selling his syrup and was planting three acres of the crop. When he lost two of the acres, he realized that he had been making more income on those 2 acres than he would have made on 100 acres of conventional crops. He decided to get serious about sorghum.

"I started building equipment and a processing facility," he says. "It took nearly 8 years to get fully mechanized."

Wittgreve explains that most sorghum syrup producers (as opposed to grain or forage sorghum producers) keep small plots and cut the harvest by hand. The pieces are then fed by hand through a roller to extract

the juice, which is then boiled down to syrup in batches in pans over a fire.

Wittgreve uses large equipment, including a modified Hagie Highboy Sprayer. A front tool bar carries 6 rotary blades for trimming seed heads off 6 rows at a time, about two weeks prior to harvest. Heads are trimmed so the seed won't end up in the syrup and so the stalks don't lodge. He makes a second trip through the field a week before harvest to get any partial seed heads that remain.

Wittgreve uses a two-row, modified stalk chopper to harvest stalks, which are cut into 6 to 9-in. chunks and blown into a forage wagon. Chunks are run through a three-roller press at a rate that extracts 300 gal. of juice per hour. At that point, the clock starts to tick.

"You have to process the juice within 24 hours, or it will start to ferment," he says. "The juice is preheated in large bulk tanks with high pressure steam coils. We pull off the scum that floats to the top which leaves a brown tea-like juice."

Sediment falls to the bottom to be removed, while the juice is cooked down in large pans with steam coils in them for heating. Each day Wittgreve cooks down 1,100 gal. of juice into 125 gal. of syrup, which is stored in 55-gal. drums and eventually bottled and sold.

Wittgreve also raises his own popcorn, caramelizing it with sorghum and shipping it all over the U.S. This year he added sorghum



Wisconsin farmer Richard Wittgreve has made a successful business out of growing sorghum and processing it into syrup. He also sells coarse ground sorghum for hot cereal, sorghum flour, and even sorghum-caramelized popcorn.

flour made from white sorghum, a special type of grain sorghum grown in western Kansas by contract growers.

"About three years ago we started getting requests for sorghum flour," he says. "We didn't realize how much demand there is for gluten-free flour."

Wittgreve expects the sorghum market to continue to expand as more people discover its health benefits. He points out that a third of a cup of sorghum syrup has 8,540 units of antioxidants and a quarter cup of sorghum flour has 9,378. This compares to 2,400 in 3 1/2 oz. of blueberries. As a result, even people who aren't allergic to gluten are buying the

flour and cereal. That's not to say this is a get rich quick business.

"There is no commodity market for sorghum syrup," he says. "We spent 25 years finding stores that would buy a few cases a year. Our market runs 300 miles in each direction, and we travel 50,000 miles a year to stores and shows to sell our products. Sorghum's been good to us, and we've learned a lot."

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Barbeque Business Built From Scrap Materials

"You don't have to spend a lot of money to build your own barbeque grill," says Major Dunlap, Ozark, Alabama, who started a thriving sideline business selling barbeque grills that he makes out of scrap materials.

Two years ago FARM SHOW published a story on the low-cost grills he makes from 55-gal. drums (Vol. 31, No. 6). Since then he's come up with several other types and sizes, all made from scrap materials.

Key to success of his design is that the fire in each grill is cradled by a high-carbon steel harrow disc that rests on a 3-legged steel tripod inside the open-top drums. The discs can be set at two different heights. Meat cooks on a chrome-plated grate above the disc and also has two different settings. There are vent holes at the bottom of the drum and a metal lid on top to control the draft.

Each drum has its own cart, and a metal bracket supports the lid in the vertical position whenever it's not being used. A shelf for utensils and food bolts to the side of the drum.

"Fire never comes into contact with the drum's walls so it won't burn out. The discs are made from high carbon steel so they'll last virtually forever. In fact if you burn one out, we'll replace it," says Dunlap. "I guarantee my grills won't flame-up and burn the meat because of the way they're drafted. All my grills are equipped with a thermometer so you always know what your cooking temperature is."

All models use the same "disc harrow and tripod" idea. He uses 10, 15, 30, 85 and 110-gal. barrels. One grill is made from two 38-in. tractor wheels. Some of the smaller grills are set up on wheels. "The 10-gal. model makes a great tailgating grill," says Dunlap.

To make a grill from tractor wheels he simply clamps two wheels together. The lid is cut from a sheet of metal. He paints



Major Dunlap has a thriving sideline business selling barbeque grills made out of scrap materials. The fire is cradled by a high carbon steel harrow disc, which rests on a 3-legged tripod inside each drum. He uses 10, 15, 30, 85 and 110-gal. drums.

them with 500-degree engine paint. "We find it works best to put down a layer of brick to set the bottom wheel on. The brick keeps the fire off the ground," says Dunlap. "This grill has a lot of capacity. The body has an inside diameter of 36 in. which is enough room for 15 Boston butts, six slab ribs, or 20 chickens. I haven't sold any of these units yet, but they've been used at our church cookouts."

He also recycles old dome-lidded Weber grills. "Most of these grills are made from material that doesn't last long so the bottom eventually burns out. Most of the time all the customer brings me is the lid and sometimes the grate," says Dunlap.

To use the dome lids he cuts a 55-gal. barrel in half horizontally, leaving a 22 1/2-in. dia., 17-in. high body. Then he uses an old gas grill frame to make a cart for it.

Dunlap buys used drums from a carrot juice company that ships juice from California to Florida where it's frozen. He gets other

drums from various sources, including parts stores that sell chain in barrels. He buys the discs from local farmers for \$1 apiece. "Most of the discs I buy started out as 24-in. dia. but eventually wore down to 16 to 18 in. diameter," he says.

Typically, a rebuilt Weber grill sells for \$125, plus an extra fee for the cart.

A 10-gal. drum grill sells for \$100. "I'm willing to custom build grills for anyone who's interested," notes Dunlap.

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