

## They “Brew” Compost Tea In Big Batches

Scott Grimes brews tea in 1,000-gal. batches using “giant tea” bags he mixes up filled with worm castings, cow manure, kelp and molasses. Called compost tea, he uses the home brew to feed soil and vegetable crops at Watt Brothers Farms, Paterson, Washington. As the manager of fertilizer operations, Grimes is responsible for brewing and application, and he says the benefits have been impressive.

“We use it as a soil conditioner,” he explains. “We had a lot of water penetration problems and had been using different microbial products, but they didn’t seem to be activated. The tea seems to inoculate the products and wake them up. We have seen definite improvements in water penetration, more organic matter, better root development and better nitrogen release.”

At Watt Brothers, the tea is applied by center pivot irrigation systems. Grimes puts it on at the rate of 3 gal. per acre, although he admits other compost tea users go as high as

8 to 10 gal. per acre. Production costs for the soil elixir is about 25¢ per gallon.

Grimes started out trying his own mixes and sending samples to the Soil Food Web, Inc., Corvallis, Washington (ph 541 752-5066). Grimes also works with Bruce Elliot, EMP, Inc. (ph 767-2747). Elliot builds compost tea machines and sells various ingredients.

You can’t make good tea without good water, whether it’s compost tea or English Breakfast. Grimes prefers river water and warns against well water or even worse, city water. “You can’t use city water because of the chlorine. Well water often has high levels of calcium and sulfurs. River water is already biologically active,” he notes.

The key to good compost tea is to keep the mix active and that requires lots of air. Grimes has designed his system to inject the air bubbles. His venturi tube system releases small, very fine bubbles into the solution through the sandstone base at the bottom of



Compost tea is brewed in 1,000-gal. batches using giant “tea bags” filled with worm castings, cow manure, kelp and molasses. The tea is used as a soil conditioner.

the tanks.

It is the oxygen component that Grimes feels ‘wakes’ up the microbes and puts them to work. It takes him one to two days to percolate his tea, relying on the air to keep the water churning. The warmer it is, the faster the tea is finished. He applies it at the rate of about 3 gal. per acre through the more than

200 center pivots at Watson Farms.

A 1,000-gal. compost tea system sell for about \$4,000.

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Fingers on modified reel follow contour of auger as they convey crop into header.

## New Reel Changes How Crops Feed Into Combine

If you’ve ever plugged up a combine trying to harvest down, short or damp crops, Wayne Guyer, Wabash, Indiana, has an idea that might interest you.

His new Phoenix Reel features a new type of drive system that completely changes the way a grain head feeds crops into the combine. “It turns a common tine reel into what we call a conveyor reel,” Guyer says.

The movement of the reel acts as a cradle to lift short or lodged crops across the cutter bar, pushing all of the crop material into the auger. This prevents wads from building up behind the cutter bar and then feeding into the machine as a slug.

Thanks to Guyer’s new drive system, the reel fingers follow the contour of the auger to ensure that all of the crop is fed in and the reel is free from stems and any material that might wrap around it. This reduces cutter bar losses and enables headers to top wheat and save short or downed crops.

Guyer says producers who have tried prototype Phoenix Reels report longer operating hours with less operator fatigue. “You can start harvest earlier in the morning and continue later into the evening,” he says.

Another advantage of smoother feeding is smooth machine operation. Guyer says his customers say their combines run more smoothly with engines at a constant speed once the Phoenix Reel has been installed. And since there are fewer wads and slugs to deal with, the combine does a better job of separating grain, resulting in cleaner grain in the tank.

The only way to get a Phoenix Reel is to



New reel drive system changes angle of pickup fingers and how they handle crop.

take your platform header to Guyer’s shop in Indiana. “There are two requirements for installing it,” he says. First, the reel must have a pipe-style bat. Secondly, your reel must have “Gentle Fingers” installed with welded brackets.

The only modification necessary if you have both of these is the addition of Guyer’s Phoenix drive unit and the relocation of the crop dividers due to the lower running clearances of the reel. “If your grain head does not have a pipe style bat, we can add it for an additional charge,” he says. Current prices for the conversion to a Phoenix Reel are \$7,200 for a 20-ft. reel, \$7,500 for a 25-ft. reel and \$8,000 for a 30-ft. reel. Addition of a pipe bat reel ranges from \$1,340 to \$1,840.

Contact: FARM SHOW Followup, Wayne Guyer, Till-Harvest Unlimited, 3295 W. State Rd 124, Wabash, Ind. 46992 (ph 260 563-5052; fax 260 563-3070; E-mail: info@till-harvest.com; Website: www.till-harvest.com).



Back-mounted boom takes weight off your arms. It’s designed for use with any tools you carry in front of you and is basically an overhead lift boom that’s anchored to your back. Boom extends ahead of you and a rope runs down from the end of it to the piece of equipment you’re holding.

## Back-Saving Lift Harness Works With Many Tools

“Everyone who tries it can’t believe how well it works and how much easier it is to get things done,” says Ed Helinski, inventor and manufacturer the new “Easy-Lift” back-mounted boom that takes weight off your arms.

Designed for use with any tools you carry in front of you – like weed whackers, hedge trimmers, and Christmas tree shearers – it’s basically an overhead lift boom that’s anchored to a harness that mounts on your back and straps around your waist. The boom extends ahead of you and a rope runs down from the end of it to the piece of equipment you’re holding. The boom is held up by a gas strut. Lift force can be adjusted but is usually set

to carry 90 to 95 percent of the weight of the equipment being carried. In most cases, your arms are only carrying about one pound.

“It makes you a lot more productive. You, or hired workers, can do more work with less fatigue. The entire rig weighs less than 6 lbs.,” notes Helinski. The lift is designed to carry equipment weighing up to 16 lbs. “You can now work all day doing jobs that you used to be able to do for only 2 to 3 hours with much less chance for back injury.”

Sells for \$249.

Contact: FARM SHOW Followup, Ed Helinski, Easy-Lift Products LLC, 1502 Oakdale Rd., Johnson City, N.Y. 13790 (ph 607 729-3252).