"High Tunnel Farming" Extends His Growing Season

Certified organic farmer Larry Patrick, Evans City, Penn., knew that plastic tunnels in fields could extend his growing season for fresh market vegetable crops, but he figured they would really pay off if he could use his tractor and field implements inside them.

Patrick's high tunnels are different from greenhouses in that they're not heated. But they are intended to be permanent structures in the field. The wood frames are covered by plastic that can be rolled up on the sides as the weather gets warmer.

He built two tunnels. One is 14 ft. wide. The other is 22 ft. wide. Both are 98 ft. long.

There are five purlins holding the ribs apart. The bottom ones on each side are 44 in. off the ground, which is 2 in. higher than the 42-in. tires on Patrick's Ford 3600 tractor.

He actually plows, disks, harrows or anything else needed right inside the tunnels. "With the tractor, I can have the soil worked and be ready to plant in just a few minutes, and most of the time is taken up in changing from one implement to another," he says. "It would take hours to work the area inside both tunnels with a tiller."

The tunnels allow him to put out lettuce and other salad greens earlier in the spring. And he can plant tomatoes around the end of June or early July and have fresh tomatoes to sell well into November.

To make the ribs, Patrick screws together 2 by 5/8-in. wood strips. That makes the ribs 1 1/4 in. thick when they're finished.

"I learned that if you put the screw heads on the inside, you can take them apart and repair them in place if you need to without having to remove the plastic."

Patrick says he'd be happy to discuss his ideas with anyone interested in high tunnel crop production.

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Larry Patrick says the plastic tunnels he uses in his fields greatly extend the growing season for high-value crops. He plows, disks, and harrows right inside the tunnels.

Self-Propelled Weed Wiper Covers Up To 50 Ft. At A Time

"Our new self-propelled weed wiper covers up to 50 ft. at a time. There's nothing like it on the market and it's affordably priced," says Ron Kloefkorn, Manchester Mfg., Manchester, Okla.

The 2-WD, hydrostatic-drive weed wiper is powered by a 21 hp Briggs & Stratton gas engine and has three front-mount booms that can be hydraulically raised or lowered. The booms are fitted with Speidel canvas-wrapped applicator tubes that hold a total of about 8 gal. of mixed chemical. There's no chemical tank.

The rig is equipped with four narrow motorcycle wheels. The front wheels are spaced 90 in. apart while the rear wheels are standard on 30-in. centers. The machine can be ordered to adjust to different row crops. Row dividers separate the crop ahead of the wheels. Standard equipment includes an air or suspension seat, buggy top, stereo radio, and adjustable foam marker.

"It's an economical way to control weeds without knocking down much of the crop," says Kloefkorn. "It works great for controlling wild rye in wheat, as well as weeds in grain sorghum, soybeans, or cotton. A fully equipped model sells for about $11,000. By doing custom work you could pay for the rig in just one season.

"I came up with the idea because so many farmers are having problems with wild rye in wheat. It can result in big dockage at the elevator. A lot of farmers in our area save money by using wick wipers they build out of old swathers. However, the machines are equipped with big automobile tires that knock down a lot of the crop. The motorcycle wheels on our machine knock down very little of the crop, and the row dividers in front of the wheels separate the standing crop and peel it out of way. A few days later you can hardly tell you were ever in the field."

Each boom on Kloefkorn's machine can be independently raised or lowered, allowing you to use the machine on terraces and contoured ground. "The flow rate of each tube can be controlled on-the-go by opening or closing a valve on the operator platform. We use the Speidel applicator because the tube has a non-pressurized, canvas wrap design that's very efficient. It works even when the tube is tilted at an angle, allowing it to be used on terraces and contoured ground," says Kloefkorn.

The 2-WD, hydrostatic-drive weed wiper has three front-mount booms that can be hydraulically raised or lowered.

Booms are fitted with Speidel canvas-wrapped applicator tubes that hold a total of about 8 gal. of mixed chemical (Roundup and water). There's no chemical tank.

The flow rate of each tube is controlled by a valve on the operator's platform. The farther you open the valve, the more chemical drips out. "Last year I used the rig to wick wipe 160 acres of wheat heavily-infested with rye. I used only 2 1/2 gallons of Roundup, at a total cost of less than $100," says Kloefkorn.

"Every oil component on this machine has its own separate oil cooler including the engine, hydrostatic drive transmission, and hydraulic system. Most of the components are available at industrial supply stores," he notes.

Contact: FARM SHOW Followup, Manchester Mfg., Hwy. 132 & Main, Manchester, Okla. 73758 (ph 580 694-2292; Website: www.manchestermfg.com).

Self-propelled weed wiper is equipped with four narrow motorcycle wheels.

Combine Grain Tank Makes Cheap Bulk Feed Bin

Grain tanks off old combines can be converted into low-cost bulk feed bins, says Kenneth Wilde, Fortuna, Mo., who used a 200-bu. Massey Harris grain tank to make a bin that holds up to one ton of feed.

"I use it to fill 5-gal. buckets which I dump into bunks for my cattle. I already had the tank so it cost very little to set up," says Wilde.

The tank is supported by four 7-ft. long, 2-in. angle iron legs bolted to a 4 by 5-ft. concrete pad. Lengths of 1-in. angle iron serve as cross braces. Feed gravity flows out through a 10-in. sq. opening fitted with a chute. A truck-type endgate controls the flow of grain. The tank is filled by a grinder-mixer auger through a 10 by 14-in. opening at the top of the tank that's covered by a hinged metal lid.

"The tank sits next to the panel fence where I keep my cattle, with a 45-ft. long feed trough on the opposite side of the fence. I fastened lengths of tin onto the fence which slope down to the trough along its entire length. That way I can dump 5-gal. buckets of feed through the fence without having to reach over," says Wilde.

Wilde converted a 200-bu. Massey Harris grain tank into a bin that holds up to one ton of feed.

He made his own feed troughs by cutting 50-gal. barrels in half and welding them together. He used 2-in. angle iron for the legs and frame.

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