



Fiedler mounted "drop tube" spraying system on header of his Gleaner combine.

He Uses Combine To Spray Weeds As He Harvests

"It lets me spot spray Roundup on quackgrass with my combine while I harvest corn. Works great," says Jean Fiedler, Sauk Centre, Minn., who mounted a "drop tube" spraying system on the header of his Gleaner combine.

Fiedler fitted the 6-row header with two 55-gal. barrels and a framework that supports seven 6-ft. long, 3/8-in. dia. steel drop tubes fitted with flat fan nozzles suspended 30 in. above the ground. Herbicide is delivered through plastic tubes strapped to the framework. When Fiedler sees a patch of quackgrass, he simply flips a switch on the combine's header height control lever to spray weeds between rows.

Fiedler put the system together last year before beginning harvest of his 1,200 acres of corn. "I got excellent weed control. I sprayed a total of about 150 acres. The beauty of spraying while combining is that I have a great view from the cab and can easily see the quackgrass between rows," says Fiedler.

"I could wait to spray until after corn is harvested but then the quackgrass is buried under stalks, leaves, and chaff. Atrazine does a good job of controlling quackgrass,

but I don't like to use it because of carryover. Postemergence herbicides such as Accent and Beacon also do a good job. However, broadcast applications cost \$18 to \$20 per acre. By spot spraying Roundup, I can treat problem areas for about \$14 per acre. I keep spray pressure at a constant 5 lbs. so whenever I flip the switch off, the herbicide flow stops instantly."

The barrels are mounted on either side of the header, strapped to a 10-in. wide channel iron bar running across the top of the header. A pair of uprights bolted to the channel iron supports two 11 ft. long steel bars that angle upward in front of the header. The spray boom fastens across the ends of the steel bars. Drop tubes attach to the steel bar with harrow springs that allow the tubes to snap back into place whenever they catch on corn stalks. "Harrow springs give flexibility to the steel tubes and relieve stress on the entire framework," says Fiedler. The herbicide barrels are plumbed to a 2.8-gal. per min. diaphragm pump powered by an electric motor.

Contact: FARM SHOW Followup, Jean Fiedler, Sauk Centre, Minn. 56378 (ph 612 352-6928).

Chainsaw "Gopher Getter"

"It's easy to handle and will give gophers an Excedrin headache they won't forget," jokes Milo Buchholz, Fingal, N.Dak., about the "gopher getter" he made out of a gas-powered chainsaw.

He got the idea from other farmers who used exhaust from a tractor, truck or even a lawnmower to suffocate gophers in their tunnels. The chainsaw, he says, is much easier to handle and you can easily take it with you on the tractor or pickup whenever you go to the field.

Buchholz removed the bar and chain from the saw and modified the exhaust pipe so he could attach a flexible metal pipe.

"Just find the tunnel and put the exhaust pipe down the hole. Then pack dirt around the pipe to seal it and let the engine run for a few minutes. It'll kill them in the tunnel," says Buchholz, noting that the idea should work on other burrowing pest animals.

Contact: FARM SHOW Followup, Milo Buchholz, 12329 45th St. S.E., Fingal, N.Dak. 58031.



Buchholz removed saw's bar and chain and modified the exhaust pipe so he could attach flexible metal pipe.



Ricke removed two shanks per row from 12-row, 30-in. Danish tine cultivator and turned it into 16-row, 20-in. cultivator. Disc opener over each shank breaks up slabs.

"Dangling Discs" Stop Cultivator Slabbing

John Ricke, Williams, Iowa, improved performance of his 16-row cultivator by slipping 10-in. dia. disc openers over the shanks to break up slabs that come off the shovels, and to eliminate the need for row shields.

Ricke got the idea when he converted a 12-row, 30-in. Danish tine Westgo into a 16-row, 20-in. cultivator. He plants all his corn in 20-in. rows.

"This design also lets us run through heavy corn stalk residue without plugging because there's just one shank per row," he says.

The cultivator was originally equipped with three shanks per row, and each shank had a 7-in. wide sweep. Ricke removed two of the shanks from each row unit and then slid the single shank units closer together for 20-in. spacing. He widened the sweeps on the remaining shanks by welding pieces of old sweeps onto the wings. Then he slipped a disc onto each shank with a washer above and below each disc. He also fastened a hose clamp about half way up the shank and one just below the shovel so the disc can move up and down about 6 in.

"The discs flop up and down between the two hose clamps, riding along the top of the ground. They break up slabs and 'feather up' the soil at an even depth around the corn plants. Keeps the soil coming off the shovels from burying the plants," says Ricke.

"The same idea could be used on the rear sweeps of regular width cultivators to keep slabs off the plants. Some of the newer "no shield" 30-in. row cultivators already have 22-in. wide sweeps with plastic discs on top. They work like my system to eliminate the need for row shields.



The 10-in. dia. disc opener is slipped onto each shank with washer above and below the disc.

"We took the disc openers off an old International 500 planter. Originally we tried using plastic planter plates but found that they broke too easily. We widened the sweeps ourselves because at the time we rebuilt the cultivator, 10-in. wide sweeps weren't as easily available as they are now. We hard surfaced all the sweeps so they won't wear out as fast. We also made a circle weld around the bolt hole at the top of each sweep to keep the bolt head from wearing out too fast."

Ricke uses 12-in. wide rear tractor tires on 40 in. centers to fit between the 20-in. rows.

Contact: FARM SHOW Followup, John Ricke, Rt. 1, Box 145, Williams, Iowa 50271 (ph 515 854-2668).

Oversize Flighting Boosts Auger Capacity

"It gives my 8-in. dia. auger about one third more capacity," says David Morgan, Colfax, Wash., who removed the bottom 1 ft. of his 60-ft. long bin filling auger and replaced it with 10-in. dia. auger flighting that's tapered down to 8 in. dia. where the two augers meet.

Morgan welded a stub shaft between the two auger shafts, then used a cutting torch to cut the 10-in. dia. flighting down gradually to 8-in. He also attached a large 36-in. wide, 20-in. high hopper to the end of the auger to virtually eliminate grain spillage.

"The limiting factor on inclined augers is that they can't load themselves fast enough. Using oversize flighting force feeds grain into the auger," says Morgan. "I got the idea when we bought another combine and needed to unload our trucks faster. Some commercial augers have an extra length of

flighting on the end to increase capacity, but I think a single length of oversize flighting works better. The same idea could be used on any size auger."

Morgan's add-on hopper has a metal base with sides made out of rubber elevator belting which prevents damage by trucks. "The oversize hopper saves time when moving the auger from one bin to another because there's nothing to clean up," notes Morgan.

He mounted a sealed bearing in the hopper's end plate to support the auger. "Most commercial augers have a bronze bushing that gets buried in dirt and grit, and if the bushing isn't greased it wears out quickly. My sealed bearing should last several years."

Contact: FARM SHOW Followup, David Morgan, Rt. 2, Box 172, Colfax, Wash. 99111 (ph 509 397-3367).