

ITS DEADLY ACCURACY HELPS CUT CHEMICAL COSTS

New Electric Eye Sprayer Spies Weed, Then Sprays

An "electric eye" sprayer specifically designed to apply Poast and Fusilade, the latest new grass herbicides, was unveiled at a recent southern farm show.

Poast and Fusilade are extremely expensive "over the top" chemicals, with Fusilade selling in the range of \$260 a gal. last year and Poast for over \$100. Roger Bowman, president of Bowman Manufacturing, says many farmers feel the chemicals are too expensive to broadcast.

"Our new Scan Ray electric eye-operated sprayer automatically detects and spot sprays above-the-crop weeds at a fraction of the cost of broadcast spraying. It allows farmers to use these new chemicals, which are extremely effective on Johnson-grass, volunteer corn and other above-the-row weeds," says Bowman, noting that Poast and Fusilade are contact grass herbicides that, unlike Roundup, will not harm broad-leaves.

Here's how the Scan Ray works: A constant electric beam travels constantly between arms extending in front of the tractor. The operator ad-

justs the height of the light rays to just above the crop by shifting the hydraulic lift frame. When a weed breaks the light beam, a solenoid valve is activated. This triggers the

spray system which sprays chemical for a pre-selected interval of time, then shuts off automatically. The light beam is about 3 ft. ahead of the nozzles and 20 in. below them, which

allows enough time for the spray pattern to develop.

The light beam needs just 1/1000 second to detect weeds, which can be as small as 1/32 of an in. in dia., says Bowman. "It reduces the cost of using over the top chemicals by 90% or more and eliminates the need for extra labor required for manual spot sprayers. You can travel at speeds of 5 mph and faster with the sprayer calibrated to your speed. It sprays for exactly the right amount of time, eliminating chemical waste due to spraying too soon or too long," Bowman told FARM SHOW.

"The Scan Ray is designed for spot spraying applications only. Farmers with heavy infestations should use a broadcast sprayer," he advises.

The Scan Ray is available in 4, 6, and 8 row units. The 60-row model, which uses three electric eyes, runs around \$3,600, including everything except the pump and tank.

For more information, contact: FARM SHOW Followup, Bowman Mfg. Co., Rt. 3, Box 705, Newport, Ark. 72112 (ph 501 523-2785).



Weeds break the electric beam between the extended arms, triggering the sprayer which sprays the weeds, then shuts off automatically.

DRIER, MORE ABSORBENT AND CHEAPER THAN STRAW

By Doug Sorenson

Old Newspapers Make Cheap Livestock Bedding

This past winter, Wisconsin dairy and hog farmers got a chance to watch old newspapers being shredded into bedding at a demonstration near Chippewa Falls.

A John Deere Model 35 forage chopper turned 3,000 lbs. of newspaper into bedding in about an hour. Only modification of the chopper was replacement of the pick-up tines with a steel chute of newspaper size. The knives and screens were set for a 1-in. cut.

Shredded newspaper bedding provides two-fold benefits. It replaces straw and shavings which are in short supply, and it makes use of a solid waste that's now being buried in landfills.

Calvin Kraemer, Chippewa County agricultural agent who is helping to promote newspaper bedding for livestock, says that it's drier and more absorbent than straw. It breaks down rapidly when spread in the fields, and the material is easy to handle with most manure handling systems.

"It takes a ton of newspaper bedding per cow per year," says Kraemer. "A farmer can chop it as needed, or bale and store it."

If newspaper bedding suddenly became popular, there wouldn't be a big enough supply in rural areas. An average family buys 7 lbs. of newspaper a week, so it would take six families to provide the ton of newspaper needed for one cow for a year.

Newspaper now sells for \$40 a ton, compared to about \$50 for straw.

In another part of Wisconsin, 500,000 tons of newsprint were separated out of residential solid waste and sold to farmers for bedding last year, with the potential for doubling this amount this year. An estimated 14% of all landfill material is newspaper.

Farmers attending the Chippewa Falls demonstration who have tried newspaper bedding are sold on it. One said it goes farther and lasts

longer than straw. Another said it handles easily and disappears when spread in the field.

Here are other comments from other hog and dairy farmers who use shredded newspaper to bed their animals:

"It works great for pigs. Not only keeps them dry but gives them something to tear into. I even bed day old pigs with it."

"Pigs don't eat it but young calves will chew on some of it, the same as with straw."



Kraemer uses a Deere chopper to turn old newspapers into bedding for livestock.

"For cows in stanchions or stalls, newspaper bedding has to be chopped into pieces or the cows will work it back too fast."

"I don't think there's any more of a fire danger with newspaper than with straw. Bales of custom-shredded paper are packed so tight that they're just like bricks."

"Disposing of manure laced with newspaper bedding poses no problems. We spread it on cornfields where it seems to break down easier than conventional straw bedding. It's easily handled with most any waste-handling system."

"Paper bedding lasts a couple of weeks, whereas we had to bed cows twice a week with straw."

"One disadvantage is that paper blowing around the farm can cause an unsightly litter problem. It may not look as nice as straw but, used in the barn, it's a lot more attractive than it would be going to waste in some landfill."

There has been some concern about lead in the printer's ink, but this is a minor amount and animals don't eat the bedding, notes Kraemer. He cautions farmers to use only newspaper without staples to avoid any hardware problems.

For more information, contact: FARM SHOW Followup, Calvin Kraemer, County Extension Office, 21 E. Spruce St., Chippewa Falls, Wis. 54729 (ph 715 723-9195).