



Reyne-designed weed "wiper" attachments wipe weeds with virtually no chemical waste.

## ELIMINATES NEED FOR BEAN 'WALKING' OR BEAN BUGGIES

# Slick Way To Weed Corn And Soybeans

"We've tested it on our own farms for three years. We know it works," says Minnesota farmer Darwin Reyne, of Rushmore, who with his son James has developed a "Weed Attack" system for wiping out weeds in corn and soybeans — including volunteer corn — as you cultivate.

"The beauty of this system is that it eliminates the need for having to go through fields on foot, or with spray buggies, to clean up weeds the cultivator missed. When you're done cultivating, you're done with the field as far as weed control is concerned," says Darwin.

The Reynes, prompted by excellent results on their own and neighboring farms, have "tooled up" to make their "Weed Attack" system commercially available to corn and soybean farmers.

It consists of a Reyne-designed weed "wiper" attachment that mounts on rear or front-mounted row crop cultivators, one over each row. The "wipers" (16 in. wide and 24 in. long) adjust up, down and sideways to ride precisely over the row, and just high enough above the crop to "wipe" tall weeds without touching the crop itself.

The Reyne "wiper" uses a small (5/8 in. dia.) single strand rope to wipe weeds "without the overkill and chemical waste you get with larger conventional wipers," notes Darwin.

The "secret" to the "wipers" efficiency is the special device the Reynes use to inject spray into each end of the rope. To recharge the wipers with herbicide, the tractor operator pushes a switch to activate a small, 12 volt pump. It moves herbicide from a 5 gal. plastic pail, through plastic (1/4 in. dia.) pipe, and to each "wiper" rope. All wipers get recharged with the same amount of material when the switch is pushed.

"Normally, the operator has to push this switch about once every two or three rounds," explains Darwin. "He controls the amount by holding the switch for as long as it takes to saturate the ropes without dripping."

The Reynes use a mixture of 1 gal. of Roundup and 2 gals. of water to "wipe" tall-growing weeds in both corn and soybeans. "Under average conditions, this 3 gal. mixture will cover approximately 300 acres.



Kit includes wipers, mounting bracket, 12-volt pump, plastic container and plastic pipe.

That's about 3 to 4 times more coverage than you get with a gallon of Roundup with conventional wipers which slop on more material than is needed to do the job," Darwin points out.

The Reynes are selling their new cultivator-mounted "wiper" for \$27.50 per row, including mounting bracket, metering device, fittings and plastic tubing with mounting harnesses. Not included are other required items which can be purchased locally — electric components, battery-powered pump and small (3 to 5 gal.) tank. Or, the Reynes will supply complete systems — including wipers, brackets, pump and other required items — for \$210 for a 4-row cultivator, \$320 for an 8 row and \$430 for 12 rows. "All we need to know is the make and model of your front or rear mounted cultivator," says Darwin.

In addition to the special "wipers," the Reyne's "Weed attack" system also includes row-directed spraying and timely cultivation. They band at planting with Lasso to control grassy weeds in both corn and soybeans. To nail in-the-row broadleaves, they equip their cultivator with indi-



Air rifle shoots "biobullets" into animals from range of 5 to 50 ft.

## QUICKER AND CAUSES LESS STRESS THAN CONVENTIONAL VACCINATION

# Ranchers Shoot Cattle With "Biobullet" Rifle

"You can vaccinate cattle in one-third the time with one-third the labor you would normally need," says J.P. Pollreizs, a veterinarian from Canyon, Texas who works with ranchers testing "Ballistivet", an air rifle that shoots "biobullets" into cattle from a range of 5 to 50 ft., eliminating the need to work cattle through chutes for "hands on" vaccination.

The Ballistivet system uses a 25 caliber air rifle that shoots the special 600 to 640 milligram bullets at 850 ft. per second. The shooter aims for major muscle groups — usually in the neck or in the rear. The bullet makes a slight puncture wound that generally seals itself.

"It's rare that an animal will even bleed. In 10 min. after entering the muscle the medication has dissolved out of the biobullet. After 10 hrs. the biobullet has completely dissolved and in 10 days you can't find a trace of the bullet," says Pollreizs, noting that the system requires no mixing of medication so animals always get accurate

doses, and it also eliminates the danger of cross-contamination.

The gun operates off an 18-cu. ft. compressed air tank pressurized to 2,200 psi. Cattle can be vaccinated in a walkway or in the feedlot. Pollreizs says the gun makes it possible to easily vaccinate 500 to 700 head of cattle in an hour compared to the three or four hours it would take several men to do the job with a chute.

So far the Ballistivet system has been used only on beef cattle. Other medications are currently being capsulized in biobullet form for use on dairy cattle and hogs.

The gun and air tank sells for around \$850. Biobullet doses sell for 20 to 50% more than conventional medicine. System is sold only through veterinarians to ensure proper training by applicators.

For more information, contact: FARM SHOW Followup, Ballistivet Inc., P.O. Box 10812, 4756 Banning Row, White Bear Lake, Minn. 55110 (ph 612 426-8996).

vidual row nozzles—one between each row using 150° tips.

"We're selling ready-made equipment to rig cultivators with our 'wiper' but we're not selling equipment for spraying. It's a relatively simple do-it-yourself hookup, using readily available nozzles, mounting brackets, plastic pipe and a battery operated pump — the kind used on bean buggies," says Darwin.

"We cultivate corn and beans twice and use the wiping and spraying attachments for both trips with our 8 row cultivator. The operator hits the 'spray' switch only when he spots a low-growing broadleaf weed in the row. This activates all nozzles so there's some waste, but not as much as there would be if we continuous sprayed with all nozzles. We figure it would take 1 qt. per acre to continuous band spray. By spot spraying, we cover 20 acres with just one

quart and end up with very few escapes," Darwin explains. "Even when traveling fast at normal speed on the second cultivation, it's not hard to spot weeds from the tractor seat. Most of them usually run in patches."

For corn, the Reynes generally band spray during cultivation with Banvel ("it's not as hard on corn roots as 2,4-D") and "wipe" with Roundup. For soybeans, they band with Basagran and "wipe" with Roundup.

Darwin notes that dust doesn't affect killing action of the "wipers". Each row unit is adjustable (to a height of 24 in.) and removable with just one bolt.

For more information, contact: FARM SHOW Followup, "Weed Attack" System; Darwin and James Reyne Manufacturers; Rt. 1, Rushmore, Minn. 56168 (ph 507 478-4213, or 478-4437).