“Spray Brooms” Sweep Away Chemical Drift

Kurt Kamin has found a way to target coverage of spray booms with “spray brooms” designed to contain chemical drift.

“We use water sensitive paper to demonstrate in front of customers, and they can’t believe how well our Pattern Master brushes work,” says Kamin, K-B Agritech. “The first words out of a university researcher specializing in spray patterns was, ‘Why didn’t I think of that?’”

The brushes are 6 1/2 in. wide with a thin layer of bristles that hang in front of the spray tips. Wind striking the bristles is deflected, allowing the drops to form and fall intact.

Independent research has shown a near doubling of coverage with the brushes in place over neighboring tips without them. Coverage went from 25 percent, applying 20 gal. per acre at 12 1/2 mph, to 48 percent coverage. Kamin points out that every sprayer creates its own headwind simply moving through the field. As air moves around the boom, it speeds up.

“Add a 10 mph ground speed to a 10 mph wind, and we’ve had airspeeds of 20 to 25 mph hitting the spray pattern,” he says. “That scatters spray droplets. If you see a mist form around spray tips, the droplet pattern is being disrupted.”

“The brushes are made of polyethylene fibers with memory,” says Kamin. “The brushes bend if they hit the dirt, putting no pressure on the boom, but returning to shape. We are also working on a spring-loaded brush for breakaway booms.”

Pattern Master brushes are 6 1/2 in. wide with a thin layer of bristles that hang in front of boom’s spray tips. Wind striking the bristles is deflected, allowing the drops to form and fall intact.

Cost to equip a 120-ft. boom with brushes on 20-in. spacing runs around $4,400. They’re available direct from Kamin by phone or on his website.

You can see a video of the Pattern Master brushes at www.FARMSHOW.com.

Contact: FARM SHOW Followup, K-B Agritech, N6875 5th Ave., Plainfield, Wis. 54966 (ph 715 498-0005; kurt_kamin@yahoo.com; www.k-bagritechllc.com).

Battery-Operated Hydraulic Power Pack

“It lets you use one battery-operated hydraulic pack for any job on your farm,” says Ed Maas about his patent pending, portable TRUC-PACK.

The remote-controlled unit is designed to mount in your pickup bed or anywhere hydraulic power is needed. It consists of a 2.9-gal. hydraulic reservoir and pump with quick couplers enclosed inside a metal container. It operates off a 12-volt deep cycle battery (not supplied).

“There are gas-driven power supply systems on the market, but as far as I know no one else makes a self contained unit that’s designed for universal use. It gives you live hydraulic power anywhere you want it,” says Maas, who adds that Greg Spanier helped him develop the idea. “Using a portable hydraulic pack is a lot less expensive than paying hundreds of dollars for separate hydraulic pumps on each machine. The machine might be used only for a limited time and then parked for the season.

“The TRUC-PACK provides live power all the time. By mounting it in back of your pickup, you can hook up hoses without having to climb in. You have ‘power up, power down’ for full control of 2-way cylinders.”

He says the unit has a lot of different uses. “It works great to raise farm implements for transport, operate hydraulic ramps on trailers, ATV lifts, log splitters, snowplows, dump trailers, jack stabilizers, and as hydraulic power for antique tractors without hydraulics.”

A number of options are available for the unit, including a choice of Pioneer or flat-face couplers, a battery isolator kit, single or tandem hose assemblies, a truck box work light, battery jumper cables with a forklift type plug-in, vehicle and universal mounting kits, valve and coupling configurations to suit your needs, and a locking cover. A “power up/power down/gravity down” option for one-way cylinders and battery power savings is also available.

Remote-controlled TRUC-PACK is designed to mount in your pickup bed or anywhere hydraulic power is needed.

The TRUC-PACK sells for $1,095 plus S&H. Dealer inquiries are welcome. Due to weight and haz-mat restrictions, units are shipped without battery or hydraulic oil.

Contact: FARM SHOW Followup, Ed Maas, 56520 365th St., Eden Valley, Minn. 55329 (ph 952 486-8821; cell 320 493-2330; edw.maas@gmail.com; www.truc-pack.com).

Simple 3-Pt. “Hay Lifter” Runs Off Electric Winch

“I built this 3-pt. mounted ‘hay lifter’ for my friend Scott Stickdorn, who uses it to load and unload round bales in a small shed with limited headroom. It’s operated by a small electric winch so he can use his 1955 Ford 860 tractor, which has no hydraulics, to double stack bales,” says Steve Huffman, New Lexington, Ohio.

The 2,500-lb. electric winch runs off the tractor’s battery and is used to raise and lower a 6 by 12-in. metal plate made from 1-in. thick steel. A bale spear is welded into a hole bored into the center of the plate. The slide rides on small hard rubber wheels inside a 7-ft. high post made by cutting up an old truck frame. There’s a pulley on the slide and on top of the truck frame.

Huffman welded the 3-pt. mounting frame off an old potato digger on back of the truck frame. He also welded 1 1/2-in. angle iron on both sides of the truck frame to serve as a guide for the slide.

“It works really well and fits Scott’s needs perfectly,” says Huffman. “He uses 800-lb. bales, and it lifts them right up with no problem. He can back into a bale and raise it 32 in. with his 3-pt., and then use the winch to raise it another 4 ft. or so in order to double stack. We were worried the tractor might be too light on front and cause steering or tipping problems, but that hasn’t happened.”

Contact: FARM SHOW Followup, Steve Huffman, 3663 St. Rt. 13 N.E., New Lexington, Ohio 43764 (ph 740 342-2825).

Huffman’s 3-pt. mounted “hay lifter” is designed to load and unload round bales. A small electric winch is used to raise and lower a steel plate with a bale spear welded to it. Plate rides inside a 7-ft. high post with a pulley on top of it.