FOR JUST $7.95 YOU CAN CALIBRATE YOUR SPRAYER TO NEAR PERFECT ACCURACY

Plastic Tubes Simplify Sprayer Calibration

"Most farmers know they're wasting chemicals. They just don't have a good way to calibrate," says Jack Stufflebam, inventor of a just-introduced calibration system for farm sprayers that anyone can use with a minimum of waste, time and effort.

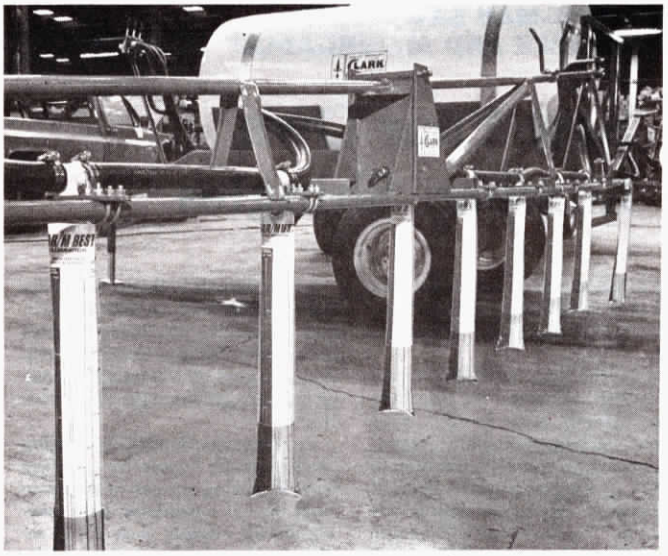
Stufflebam's calibrator kit consists of 15 soft plastic tubes and tape to fasten them over sprayer nozzles. In 30 min. or less, he says, you can feel confident your application rates are on target.

"Calibration methods now available are too complicated, too time consuming, or too expensive for most farmers to use as often as they should," says Stufflebam. "Recent tests by Ag Engineers at the University of Nebraska showed that two out of three farm sprayers cause application errors that cost $2 to $12 an acre in lost crop production, extra chemical expense or added mechanical weed control. Just one extra bushel of soybeans will pay for this new calibration kit."

Stufflebam points out that many farmers don't use the best chemicals — the ones with narrowest crop tolerances — because they know their sprayers aren't accurate. With this kit, he says you can "tune" your sprayer to within 5% accuracy, depending on the volume sprayed per acre.

Here's how it works:

Each tube tapes over an individual nozzle. Once all are covered, turn the sprayer on for a 15 to 30 sec. burst. Markings on the face of the tube measure the captured liquid and indicate the gallons per acre broadcast at field speeds of 3, 5, and 8 mph. Conversion factors on the tubes enable operators to compute broadcast application rates for field speeds of 3 and 6 mph. Others factors let you figure out the rates if nozzles are spaced 30 or 40 in. on-center instead of the standard 20-in. spacings.



One short blast into calibration tubes tells you whether all nozzles are delivering same output.

"You can tell at a glance down the line of hanging tubes whether the nozzles are delivering the same output. It quickly spots mismatched nozzles or plugged nozzles. Once nozzles have been cleaned or replaced so they all deliver the same output, the sprayer can be adjusted to the desired gallons per acre.

The tear-resistant tubes are expected to last a couple seasons. Kit sells for $7.95.

For more information, contact: FARM SHOW Followup, Jack Stufflebam, president, Far/M Book Co., 4446 Madison Ave., Kansas City, Mo. 64111 (ph 816 561-0700).

NO CHEMICALS NEEDED WITH "INSECTICIDER"

New Insect Killer Zaps Bugs With Fire

You've never seen anything like this pan-frying, bug-killing "Insecticider" built by farmer-inventor Robert Harrell, of Dyersburg, Tenn. Designed to replace chemical insecticides on growing crops, the new exterminator has been proven in preliminary one-pass tests to control about 75% of the insects. A second pass through the field ups the percentage.

"For less than half the cost of insecticides you can get nearly the same control. Another key benefit of the Insecticider is that we can stop filling our environment with chemicals no one really knows much about," Harrell told FARM SHOW.

Rather than poison, the new machine kills bugs with red-hot propane flames blasting out of boat-shaped metal pans that pass between rows. A canopy above the rows gently shakes the crop, knocking insects into the pan below.

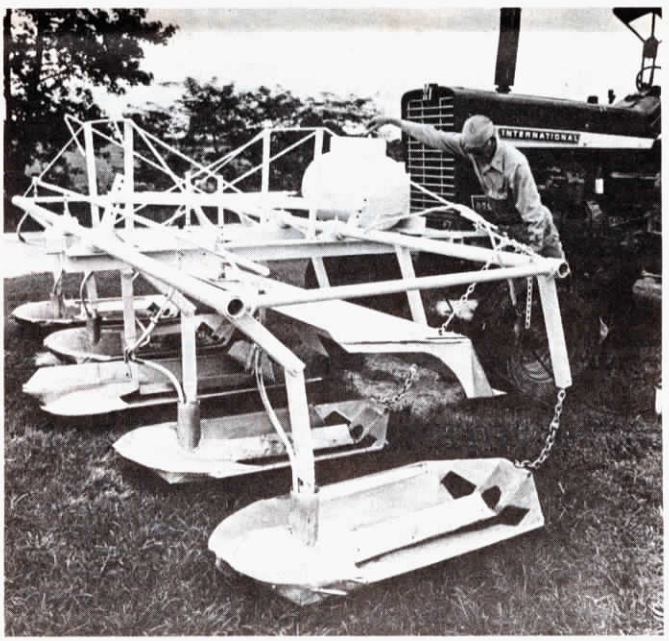
Pans fill the space between rows and are long enough to catch nearly all falling insects. Heat spacers and deflectors prevent the crops from being damaged.

As bugs fall off the crops, they drop into the pans. The flame, under a deflector in the pan, keeps the pan hot enough to kill or greatly injure any insect that comes in contact with it, if the flame doesn't burn them up directly. As the pan moves forward, burned bugs shake out a hole in the back, explains Harrell. He also is investigating having a trailing flame behind the pans to burn off weeds in the row.

"Most people, if they've ever tried to pick a bug or worm from a plant, don't believe this machine will work. But if they had tried shaking the plant rather than pulling on the insect they would have been surprised to see it fall off. Most agricultural stations, for example, take insect counts by placing a paper on the ground and shaking the plant," explains Harrell.

Harrell's prototype machine has five pans 28 by 36 in. riding below a tube steel frame. The plant-shaking canopy, made from sheet metal, is positioned directly above the pans. A propane tank mounts on the frame directly in front of the tractor. Although the machine was designed with cotton in mind, it is completely adjustable for other crops.

"It'll work well in soybeans, corn, potatoes and other row crops. On tall-growing crops, you could use a "high boy" tractor, if needed. It would be great for grasshopper infestations," says Harrell. He notes that mounting the machine in front allows simultaneous use of other rear-mounted equipment, such as cultivators.



As Harrell's machine passes down the row, bugs fall off the crop and into the pans where they're incinerated.

James Lloyd, county agent in Dyersburg, Tenn., says further tests need to be conducted but agrees that the Insecticider should work well in cotton and soybeans for killing not only live insects but "dead squares" that contain insect eggs. "Perhaps the real value of this machine," he says, "will be in the future as pesticides are restricted and maybe even banned."

Harrell says he plans extensive tests this summer and hopes to sell the idea to a manufacturer.

For more information, contact: FARM SHOW Followup, Robert Harrell, 616 N. St. John, Dyersburg, Tenn. 38024 (ph 901 285-1708).