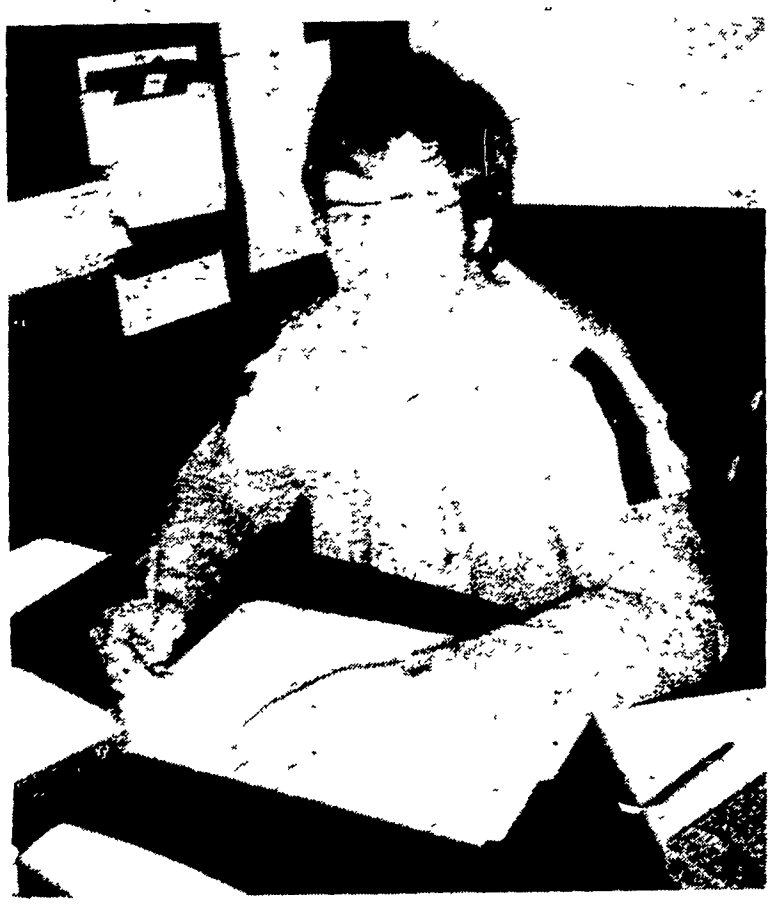
Farm Business News



Rick Thompson, of Shenk's Farm Service, 501 E. Woods Dr., Lititz, has assumed the responsibility of sales of Boumatic milking equipment and Dari-Kool bulk tanks, along with his duties as service technician.

Atlantic Breeders names Beat to marketing post

Larry Beat

LANCASTER — Atlantic Breeders Cooperative has appointed Larry Beat to the new position of Domestic Marketing Manager to work with the direct breeders sales program, domestic distributors and representatives, and domestic and international tours.

Beat is respnosible for developing a program of communications, information and educational and promotional meetings of special interest and value to direct-herd breeders. He will work closely with the organizations and sales representatives throughout the United States who handle Atlantic semen. Beat will also serve as a host for groups of visitors who come to see the Atlantic sires and their daughters in members' herds.

Larry Beat comes to Atlantic from Kansas, where he was mainly in charge of the dairy program for the KABSU stud since 1970. His responsibilities included the Holstein young sire program, dairy sement sales and marketing, AI traning schools, and public relations. He has also been active in National Association of Animal Breeders activities and the Kansas Holstein show.

Beat is a native Kansan and grew up on a dairy farm. He graduated from Kansas State University in 1966 with a bachelor of science degree in ag education, then taught vo-ag for four years. He also did some graduate study and worked as an AI technician. His wife and three children plan to relocate in the Lancaster area this summer.

Irrigation seminar held

WESTPORT, Ct. — Farmers in five mid-Atlantic states were shown how to save time and energy by applying Vapam soil fumigant through irrigation systems at a recent farmer seminar sponsored by Stauffer Chemical Company.

Though Vapam has been registered for many years to control pests in a variety of crops, the practice of applying the product through irrigation systems is gaining momentum in Delaware, Maryland, New Jersey, Pennsylvania and Virginia.

By injecting Vapam into their irrigation systems rather than applying it separately, farmers can save valuable time and make more efficient use of their equipment. The technique also gives better control of pests than other application methods because it allows a more uniform application and complete soil saturation.

Vapam controls weeds, soilborne fungi, nematodes and other soil insects. It can be used on all types of soil, regardless of crop. Farmers in mid-Atlantic states use the soil fumigant primarily for potatoes and vegetable crops, such as lettuce and tomatoes. It also is used on ground being prepared for tobacco, sweet potatoes and watermelons.

Herbicide-coated seed research moves ahead

MINNEAPOLIS, Mn. — The cost-cutting dream of planting the necessary crop-insuring chemicals attached right to the seed itself is taking a giant stride closer to reality in research laboratories in Washington State and Minnesota.

Researchers are saying that it is now possible to coat alfalfa seeds with herbicide, plant with conventional planting equipment, and create a zone of weed suppression in the intimate vicinity of the seed, helping insure a successful stand and greater yield.

Further, says Jean Dawson of the USDA's station at Prosser, Washington, who originally conceived the idea of coating alfalfa seed with herbicide, "There is a great potential in coating seeds in general with chemicals to suppress weeds close by. We've shown clearly that the idea works with alfalfa, and we're now experimenting with edible beans, as well as with sunflower, soybeans, flax, and other seeds in a preliminary way."

Doing some of the developmental research on coating alfalfa with herbicide is Northrup King Co., Minneapolis, Mn. Researcher-in-charge Fred Porter also is highly optimistic about the idea of herbicide-coated seed in general: "The sky may be the limit," he says. "Someday we may be able to successfully coat corn and soybean seed to better control yield-robbing weeds."

While developmental work is fairly well advanced on herbicide-coated alfalfa, NK marketers say they're still studying commercial application and market potential.

According to Dawson, herbicide-coating of seed is being studied closely by the chemical industry, which he feels verifies the potential of the idea in that substantial dollar investments in research are being made.

Porter, developer of several seed-coating patents held by his company, says, "If we use herbicides that are volatile and, therefore, permeate through the soil and kill weed seedlings, it seems to me we might be able eventually to eliminate all other applications of herbicide. We can do that now with alfalfa if it's coated with enough herbicide and seeds are placed in the soil within an inch or two of each other.

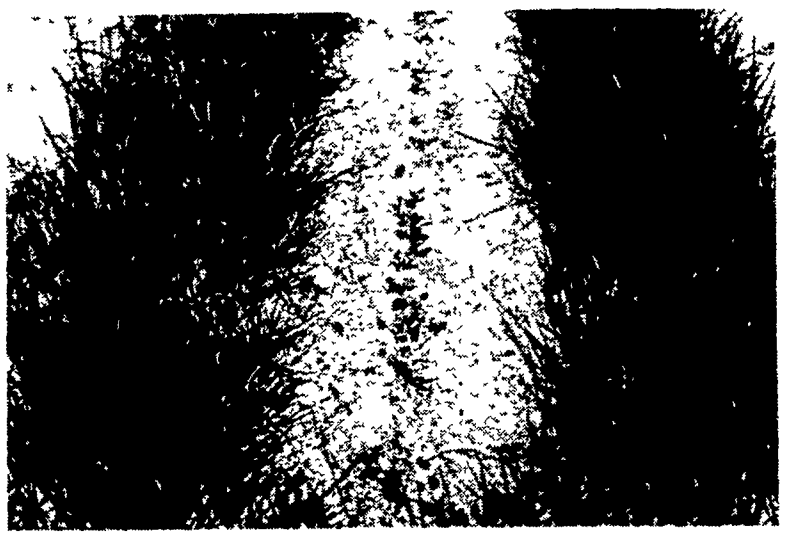
"With corn or soybeans, using the right kinds of herbicides, we might eliminate weed seedlings within two or four inches of the crop, then cultivate close and get the rest of the weeds."

"The beauty of the idea is that we could eliminate the expense of all that handling, applying, and incorporation of herbicides. The farmer wouldn't spend his time going to town to buy the chemical, haul it home, fill his spray tanks, spray, and incorporate. These costly steps may become unnecessary!"

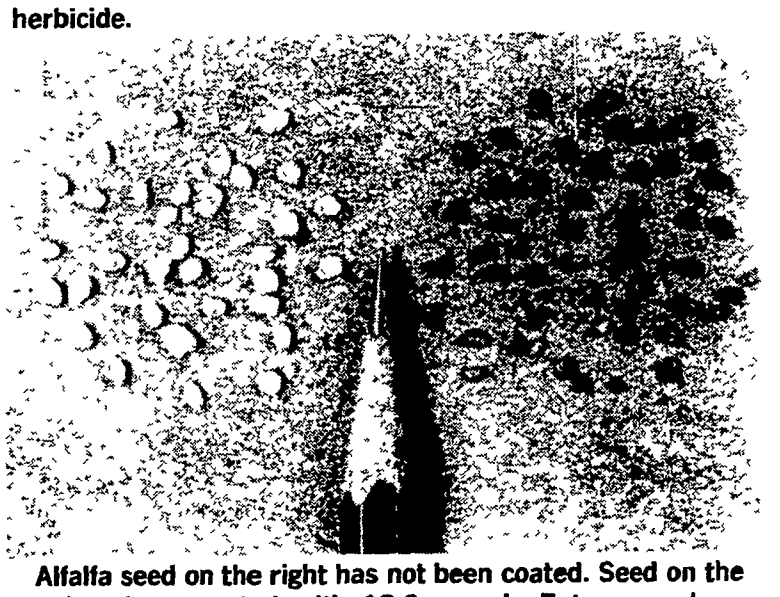
The researcher says there may be ways to develop systems to attach today's popular corn and soybean herbicides to those seeds, but in general a herbicide has to be volatile to work as a coating. The herbicide being used in alfalfa-coating research is Eptam. Once the seed is in the ground, the Eptam volatizes and permeates surrounding soil.

The idea also could have merit in controlling crop insects, continues Porter. Coating corn and other seeds with fungicides already is common.

Alfalfa has a surprising resistance to Eptam, while the chemical works particularly well in killing grassy weed seedlings. In laboratory trials conducted by NK in Minnesota, involving four replications, Eptam-coated alfalfa seeds, ryegrass seeds and broadleaf weed seeds were planted together in 10x10 inch pans. The alfalfa seeds sprouted and grew successfully while the ryegrass seeds germinated but were stunted, and by the end of the test many were dead. The broadleaf weeds were stunted but not killed.



Research conducted by Jean Dawson, of the USDA, at Prosser, Wash., shows how grass was eliminated near the row of alfalfa which was grown from seed coated with Eptam herbicide.



Alfalfa seed on the right has not been coated. Seed on the left has been coated with 18.2 pounds Eptam per hundredweight of seed in a calcium carbonate carrier, which causes the white color.

Further research indicated that Eptam-coated alfalfa seeds retain germinability over a period of at least one year.

A number of benefits become obvious for alfalfa growers from using herbicide-coated seed. Clear-stand seeding with no nurse crop is made more possible, providing good hay yields in the establishment year, followed by improved forage quality in subsequent years. Add to that the possibility of more years of harvest before tearing up the field.

Simplified herbicide handling, applying, and incorporation could alone save the farmer as much as $6 an acre, speculates Porter. "One or two trips over the field are eliminated, giving the savings," he says.

The researcher explains that in establishing alfalfa, the major weed problem is unwanted grasses. If a broadleaf weed infestation exists, the farmer should take care of it as he prepares the land.

With a May 27 planting date last year, a field trial using normal and herbicide-coated alfalfa seed was conducted by Northrup King. Although the late planting date, drought, high temperatures, and a leafhopper infestation sharply reduced yields, the pure stands of alfalfa, in the establishment year, yielded 1.82 tons/acre (two cuttings) where normal seed was used, compared to 1.90 tons/acre where Eptam-coated seed was used (two-pound/acre rate). Hay yield at the four-pound/acre rate was 1.65 tons.

According to Porter, the yields are not statistically different — no advantage or disadvantage is proven for the establishment year. The field trial does prove, however, that herbicide-coated seed is a viable concept. Also, "in subsequent years of harvesting, yield in the coated-seed stand should be better, due to the suppression of grassy weeds at the outset," says Porter. "And there may be a real difference in the quality of the forage you get by eliminating low-feed-value weeds. Total tonnage doesn't tell the whole story."

"About 110 seeds per square foot of ground is an ideal planting rate in view of seed and seedling mortality," says Porter. "An equidistant broadcast of that seed, almost one seed per square inch, when it is coated with Eptam, would result in total control of grassy weeds in the field," says Porter.

Dawson agrees. Volatization of the herbicide at this seed rate would be sufficient to control weeds between the seeds.

While production, distribution, and storage questions regarding herbicide-coated alfalfa seed yet need answers, Northrup King Co. will continue exploring feasibility of commercial use.