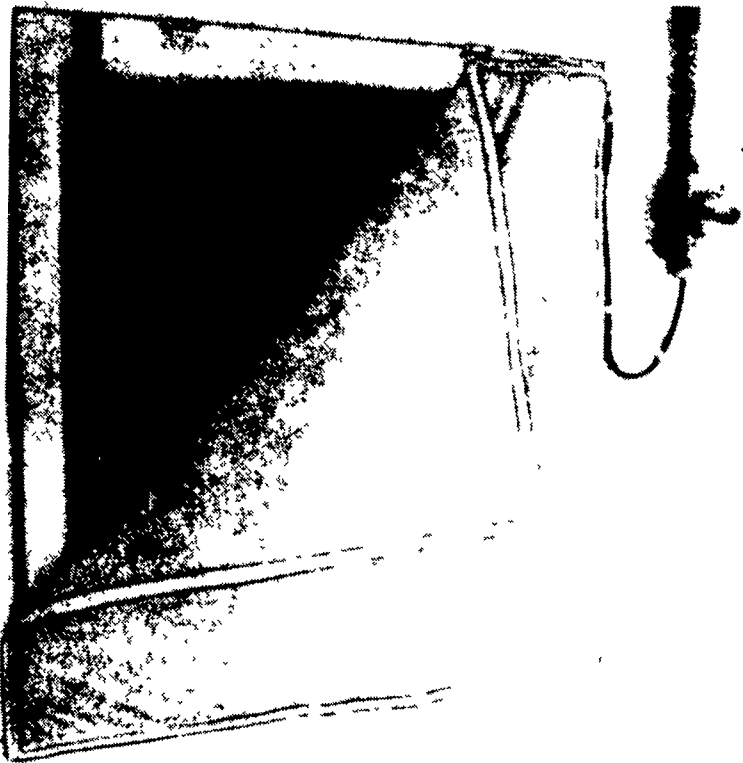




BUSINESS NEWS...



New insulated fan covers for hog confinement buildings hold in heat and keep out cold.

Insulated fan covers cited

DELPHIA, IND. — Two amazing space age materials have been joined together to produce new insulated fan covers with an R factor of 8 for use in hog confinement buildings. They have just been introduced by National Building Systems, Inc., P.O. Box 256, Delphi, Ind., a division of Underhill Industries, Inc. They are available in two sizes: for 24-inch and for 18-inch fans.

The new insulated fan covers are considerably less thick and bulky than those previously on the market, but they hold in heat and keep out winter cold much better.

A recent independent engineering study found that these new fan covers are so efficient in

retaining building heat that they pay for themselves in energy savings in about a year and a half, according to Robert Landis of National Building Systems.

The exterior of the fan covers is a completely new aluminum material that is not affected by the ultra-violet rays of the sun and is water, mildew and fire-resistant.

Although less than 1/2 inch thick, the revolutionary insulation material, called Astro-Blanket provides the same amount of insulation as other insulation materials several inches thick.

The new insulated covers are contour-shaped and finished with convenient attachment tabs that make them easy to install without tools.

Tillage system makes no difference in picking corn

BLOOMINGTON, IL. — Quality corn hybrids that yield well in conventional tillage are the ones growers using conservation methods will want to plant.

Corn breeders back that claim with five years of research at Iowa State University. Meanwhile, testing continues at an Iowa commercial corn breeding station comparing tillage practices and developing all-round, cold tolerant and disease and insect resistant hybrids.

Arnold Hallauer, research geneticist with USDA in Ames, Iowa, concluded there was no interaction of hybrids with tillage systems after reviewing 14 popular Corn Belt maturity hybrids from 1979-83 at ISU. Each hybrid was planted into four continuous corn plots. Seedbeds were prepared with fall plowing and spring disking, just spring disking, and they were no-tilled and strip-tilled. All locations received 100 lbs of potassium and phosphorus per acre based on soil test recommendations for the fine, loamy mix, and 180 lbs of nitrogen. Plots were seeded for populations of 24,000 plants/acre and the same herbicide and insecticide treatments were applied.

"We saw significant differences

in tillage systems with hybrids planted in fall plowing and spring disking systems producing higher yields, better stands and lower grain moisture," Hallauer says. But those same hybrids that did the best in fall plowed and spring tilled ground also were better performers in no-till and strip-tilled plots.

For example, the five-year average of the highest yielding hybrid was 113 bu/acre on spring disking, while on no-till, yields were only 96 bu/acre. Stands were 21,000 plants/acre on spring disk, 19,700 plants/acre on no-till. And harvest moisture was 29.2 percent on spring disk and 31.8 percent on no-till.

The five-year average for a low-yielding hybrid on spring disked ground was 105 bu/acre and 88 bu/acre on no-till, with correspondingly lower plant populations and higher grain moisture.

"We're not sure why the differences were significant," says Hallauer. "Yield variation among tillage systems tells me that something may be affecting nitrogen uptake and root growth. There may be soil compaction in no-till and strip-till and not much soil aeration. There might be toxic

crop residue left on the soil surface. Or maybe cole tolerance of some hybrids was a factor. However, there was no interaction of hybrids with tillage systems."

The research results lead Hallauer to conclude it's not necessary to develop and test hybrids for certain tillage systems. "Research suggests that we should leave some residue on the soil surface to reduce erosion and planting costs," he says. "A good spring disking would be enough, and provide good soil moisture and aeration. This wouldn't be as expensive as fall plowing."

The geneticist points to another study conducted in 1980 by former graduate student, Bill Funnemark, who is continuing corn breeding research for Funk Seeds International in Algona, Iowa.

Funnemark's master's thesis focused on evaluating yield differences between cold tolerant and non-cold tolerant hybrids in conventional and reduced tillage systems.

"We assumed cold tolerant hybrids would do better in no-till since soils are cooler and wetter. However, we didn't find a lot of difference in hybrid performance," Funnemark says.

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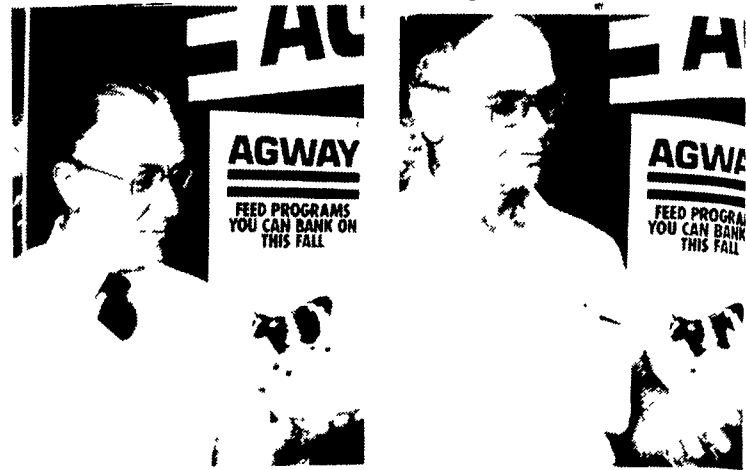
Agway introduces dairy feed

SYRACUSE, NY — A unique new concept in dairy cattle nutrition has been developed by Agway through Cooperative Research Farms (CRF), a joint research effort of 16 agricultural cooperatives in the United States and Canada. The new Pro: Right regulated carbohydrate (RC) feeds are aimed at helping dairymen maximize returns from more efficient utilization of homegrown forages.

The RC concept calls for regulating the amount of non-structural and structural carbohydrate in dairy feeds to provide an optimum "balance" of nutrients for both the rumen micro-organisms and the dairy cow. A new, more accurate measurement of carbohydrates in ingredients used to formulate dairy feeds has been developed and researched.

Eight years ago, Agway introduced Pro: Right dairy feeds with the regulated protein solubility concept, which is patented in both the United States and Canada.

Regulated protein solubility dairy feeds are sold throughout the United States and Canada by Agway and other members of CRF. Over 300,000 cows in the



Les Kreider, Lancaster, left, and Dave Shank, Quarryville, of Agway examine new dairy feed.

Northeast are being fed Pro: Right Feeds, resulting in an estimated annual increased milk income of over \$23 million for Agway members.

Lactating dairy cows need large amounts of energy in the form of carbohydrates. The new Pro: Right RC provides the right balance of the different forms of protein and carbohydrates to maximize total feed efficiency. This provides a more profitable ratio of pounds of grain fed to pounds of milk produced.

Results of testing at the Agway Farm Research Center in Tully, N.Y., showed a 13% increase in milk production and a 10% increase in feed efficiency compared with cows fed a different amount of readily available carbohydrate, when hay crop silage was the only forage fed.

Agway is continuing to test new regulated carbohydrate feeds and will be introducing feeds for use with other forage feeding programs soon.

A.O. Smith & Germania linking systems

MADISON, Wisc. — Linking of a computer farm management system with an automated dairy feeder has begun between A.O. Smith Farm Management Products Division and Germania Dairy Automation, Inc.

Roger H. Zorn, Farm Management Products Division general manager, and Rolf W. Reisgies, Germania Dairy Automation president confirmed that their companies will begin to link A.O. Smith's Agri-Key Dairy Herd Management Systems with Germania's Scoop II automated feeding systems this month. The experimental program is designed to confirm the feasibility of linking these two products for the benefit of farm managers, the principals

said.

The announcement was made at the World Dairy Exposition here, where an Agri-Key Dairy Herd Management System is on display with a Germania Scoop II automated feeding system.

Zorn said that the anticipated conclusion of the program will result in the first commercially available "link" between A.O. Smith's Agri-Key systems and Germania's Scoop II automated dairy feeders.

"Agri-Key systems already help farmers take advantage of technology to make informed management decisions in dairy farm operations," Zorn said. "Adding the ability to monitor feeding for greater profits is a

natural next step for us to assume."

Rolf Reisgies, president of Germania, said that automated feeders may be used advantageously by small or large dairy farmers. "Cows have individual characteristics in that they each look, eat, and produce differently," he said. "Why then should they be fed the same when they are inherently different from each other. Computerized feeding is a management tool with which you can fine-tune the feeding of individual cows. Computer feeding is ideal for the manager of a herd who wants to coax the highest possible production out of his cows."

