

Lancaster Farming

SECOND SECTION

Nutrition In The Field

While farmers nourish their crops with over 3,000 grades of chemical fertilizers, mounting sales of plant nutrients invite a look at the industry's supplies.

America's farmers are reaping ever-bigger harvests with steadily increasing yields. At the same time, they're using more and more fertilizer.

Farmers spent nearly \$1.8 billion in 1966 for about 34 million tons of chemical fertilizers offered in close to 3,300 different grades.

These sales represented a 57-percent increase from only a decade earlier in the volume of

gross fertilizer tonnage consumed.

The most striking change in the 1956-66 period, however, was a rise of 120 percent in use of fertilizer's primary plant nutrients—nitrogen, phosphorus, and potassium (tagged N, P, and K, respectively).

Total use of these nutrient elements rose to 9.6 million tons in the year ending June 30, 1966. And about 5 million tons went into mixtures alone. These mixtures accounted for 57 percent, or 19.4 million tons, of total tonnage.

By 1980, consumption of plant nutrients is expected to be more than double that in 1966.

What and where are the sources of plant nutrient supplies—not only for U.S. farmers but also for farmers abroad? Will stocks be sufficient to meet the heavier needs and demands? What developments can be expected in the chemical fertilizer industry?

Nitrogen, for which Nature's primary store is the atmosphere, is available to all countries that have a facility for converting it into chemical compounds—notably synthetic ammonia.

North American plants have the capacity to produce an estimated 27 percent of the world's nitrogen supply, and Western Europe 36 percent. U.S. productive capacity for anhydrous ammonia was an estimated 17 million tons in 1966. (Continued on Page 22)

Spring Sends Out A Call Even To Stored Corn

When spring creeps north, nature puts out an undeniable call to all living organisms.

Even corn in storage "hears" and tries to answer the call to reproduce.

Everyone knows that corn begins to sprout when it is planted in the warm, moist soil, but did you know that even in the crib, far above the ground, corn "knows" when spring arrives?

At this time of year, corn goes through a physiological change. Even though it is not planted in the ground, corn seed will try to carry out its reproductive function. It may not ac-

tually sprout, but the increased activity within the kernels will produce enough heat to spoil the crop. This can happen even when the corn has been dried to 14 or 14½ percent moisture.

Says John Crothers, Extension marketing specialist at the University of Maryland, "if you have shelled corn stored on the farm or in commercial bins, check it carefully for heating. One of the first obvious signs of heating is the odor of sour corn—but by that time it is too late."

"You have to be on the defensive if you want to beat nature at her tricks he adds. "If you don't have heat sensors already in the bin, you'd better find some way to take temperature readings at several areas. Heat sensors on the market can be installed in most bins."

Crothers says the heating problem is likely to be worse if the corn contains large amounts of foreign material (weed seed, pieces of cob, broken kernels) which forms pockets and may hold a little more moisture than the rest of the bin.

"What can you do if the heat sensors do show hot spots? The best thing is to turn the corn by transferring it to another bin. This will be certain to move and aerate all sections of the bin. It also breaks up any pockets of foreign material." Crothers adds. "This job should be done on a sunny day if possible."

But even after the corn is moved to another bin, don't be complacent, Crothers warns. All your efforts may be wasted if the rebinned corn begins to heat again. Usually you can keep the corn in good condition if you aerate it with forced air. Grain can be kept safely through the summer if it does not heat or is not allowed to get damp. But you have to know Mother Nature and her tricks if you want to stay on the defensive.

Jay Irwin Speaks At E-Town FFA

Guest speaker for the Elizabethtown FFA Chapter Parent-Son Banquet held recently in the school cafeteria, was Jay Irwin, assistant county agent. Irwin showed slides taken on his recent trip to the Soviet Union.

In the awards program, Daniel S. Baum, Kenneth Johnson Jr. and John Risser were made Honorary Chapter Farmers, and a certificate of appreciation was given to Baum's Bologna, Inc. The Chapter Star Farmer was John Kurtz and the Star Green Hand was James Kreider.

These foundation awards were given Kurtz, Dairy; Steve Alleman, Livestock, Mike Baum, Poultry; Gary Dupler, Farm Mechanics, and Kurtz, Crops.

The Swine Trophy was presented to Mike Baum from the Elizabethtown Kiwanis Club and the Record Keeping Award went to Kurtz from the Elizabethtown office of the Harrisburg National Bank and Trust Co.

The Lancaster County Bankers Award went to Kurtz and was presented by Dr. Phillip Metzler, president of the Elizabethtown Trust Co.

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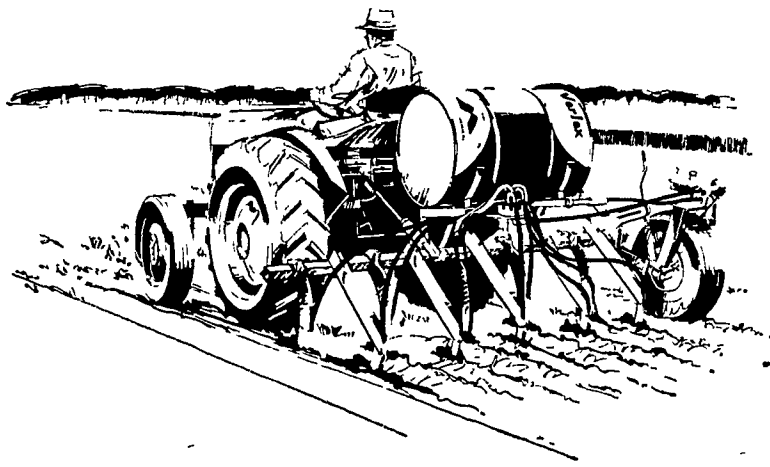
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