Agriculture by Robert Baker

Aflatoxins in the corn crop

The already low corn crop is suffering a further side effect of the summer's drought: one of the deadliest toxins known to man.

Besides the low yields in the U.S. cornbelt, there is other damage from the drought. One of the most obvious now—as the corn comes into the elevators and is inspected—is the high rate of aflatoxin, a toxic substance produced by microbes, especially in drought-stricken corn.

Aflatoxin, in high concentrations, is one of the most deadly substances known to man. Aflatoxin is capable of wiping out livestock herds and causing liver cancer in humans. It has been extensively evaluated in biological warfare research. In the past, its appearance has been restricted mostly to the southern crop-growing areas of the United States.

But this year, most elevators are checking new crop corn for aflatoxins, and it has shown up in all the cornbelt states, from Iowa to Indiana. Officials in Illinois, South Dakota, and Maryland were the latest to report the toxic substance's discovery.

In Illinois, a preliminary survey by inspectors showed that 34% of 58 samples randomly collected from grain elevators in the state contained dangerous levels of aflatoxin. Another 269 samples are now being tested. Previously, aflatoxin had rarely been found in the Midwest, and authorities are attributing it to the drought. The microbes producing aflatoxin spread under dry conditions.

In Iowa, the leading corn-producing state in the nation, farmers are finding that the price they are receiving for corn at the elevator is being reduced by as much as 20% if aflatoxin is detected.

The elevator usually tests for aflatoxins by using what is called the "black light" test. This test is only applicable to corn and consists of shining a longwave fluorescent light on whole or, preferably, cracked corn.

As this test gives many false positives, it becomes a great income-generating tool for the grain cartel, as almost all drought corn will test positive. The grain companies store this grain in separate bins from good corn. They can then legally mix a large proportion of corn infected with aflatoxin together with a small proportion of noninfected corn and sell it at full price—an old trick the grain companies know very well.

According to Tom Romer, president of Romer Labs, Inc. of Washington, Missouri, which specializes in mycotoxins, livestock producers face a two-edged mycotoxin sword this year. Not only is drought corn infected with aflatoxin, but, because of a corn shortage, corn that has been in government storage for two to three years will also be fed. Corn in storage this long tends to develop a mold called fusarium toxins, which is almost as bad as aflatoxin.

This could prove disastrous to livestock producers, as these mycotoxins cause many health and fertility problems when fed to livestock. Slow growth rates develop in livestock fed corn infected with mycotoxin molds. When mycotoxins invade the grain,

its density is reduced, and the number of broken kernels increases because the mold consumes carbohydrates.

Thus, even after this year's drought is over, financial losses will continue to ripple throughout the farm production system into 1989, as producers feed livestock the infected corn.

In Texas, where the fungus is more common because of the climate, state officials suspect that about one-fifth of the crop is contaminated with aflatoxin, some at 20 times the level considered safe for human consumption. Any contamination of 5 parts per 1,000 is automatically docked at least 50¢ per bushel, or about \$25 per acre on land yielding 50 bushels per acre.

The banning of EDB (ethylene dibromide) by fanatic action by the Environmental Protection Agency (EPA) a few years ago has led to the current spread of aflatoxin. This disastrous effect of the environmentalists' campaign was predicted by *EIR* in 1985.

In addition to mycotoxins, there are other problems developing with this year's harvest. As farmers put grain in storage, many must wear a breathing device to filter out mold spores which cause "farmer's lung."

Allen Hamilton, a farmer from Albia, Iowa who has had two episodes of "farmer's lung," warned in the Sept. 17 Iowa Farm Bureau Spokesman: "There's probably been farmers who've died from farmer's lung and no one knew it because they attributed it to pneumonia or the flu." The symptoms of "farmer's lung—fever, chills, etc.—are much like flu.

Hamilton reported, "I told the doctor it couldn't possibly be the same thing, pneumonia." He conferred with a doctor in Des Moines, Iowa, and they concluded that he had "farmer's lung." "My doctor told me I only have so much [resistance] in my system, and it can kill me."

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