This microscopic image shows Aspergillus flavus, which is the mold associated with a group of mycotoxins called aflatoxins.

mycotoxins

mī-kə-'täk-səns

Jagger Harvey is the director of the Feed the Future Innovation Lab for the Reduction of Post-Harvest Loss, which is one of four Kansas State University laboratories that are funded by the U.S. Agency for International Development, or USAID. Harvey is also a research associate professor of plant pathology in the College of Agriculture and he explains in fewer than 100 words what mycotoxins are and why they are a big problem for crops.

Mycotoxins are naturally occurring fungal toxins that form on many crops, foods and feeds, including wheat, sorghum and corn. Mycotoxin-producing fungi pervade the soil and environment globally, with over a quarter of the world's food supply contaminated. Exposure can lead to cancer or death and has been associated with stunting children's development; livestock are also affected. Mycotoxins have serious economic impacts, such as potentially costing U.S. corn production billions of dollars in a bad season. Many pre- and post-harvest factors contribute to mycotoxin contamination, including temperature, rainfall and improper drying and storage; research is producing a range of effective interventions.

See pages 7 and 47 to learn more about K-State research related to mycotoxins.