

**NOTE: Effect of Ear Bagging Systems on *Aspergillus flavus* Kernel Infection and Aflatoxin Contamination of Corn Hybrids Grown in the Field**

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Field studies were conducted for 4 years to determine the effect of various ear bagging systems on *Aspergillus flavus* kernel infection and aflatoxin production in developing ears of corn hybrids. Each year, corn hybrids were grown on a Myatt loam (low water-holding capacity) and a Leeper silty clay loam (high water-holding capacity). Corn ears were inoculated with *A. flavus* using the side-needle technique 7 days after mid-silk (50% of the plants in the plot had silks emerged). For the first 2 years, inoculated ears were covered with either white or black paper pollination bags at approximately 14 days after inoculation. During the last 2 years, inoculated ears were covered with either a brown paper pollination bag or a clear plastic zip-lock bag. Daily maximum temperatures were increased 2 to 4°C in all of the bagging systems over ambient temperatures. The bagging systems had a limited effect on aflatoxin production and *A. flavus* kernel infection in the Leeper silty clay loam. In the Myatt loam, ears covered with plastic bags had higher levels of aflatoxin contamination and *A. flavus* kernel infection compared with ears covered with paper bags.

**KEY WORDS:** Aflatoxin; *Aspergillus flavus*; corn; kernel infection; maize; micro-environment; temperature.

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