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Pre-harvest management is a critical practice for minimizing aflatoxin contamination of maize

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Abstract

Maize, the main dietary staple in Kenya, is one of the crops most susceptible to contamination by aflatoxin. To understand sources of aflatoxin contamination for home grown maize, we collected 789 maize samples from smallholder farmers' fields in Eastern and South Western, two regions in Kenya representing high and low aflatoxin risk areas, respectively, and determined aflatoxin B₁ (AFB₁) using ELISA with specific polyclonal antibodies. AFB₁ was detected in 274 of the 416 samples from Eastern Kenya at levels between 0.01 and 9091.8 $\mu\text{g kg}^{-1}$ (mean 67.8 $\mu\text{g kg}^{-1}$). In South Western, AFB₁ was detected in 233 of the 373 samples at levels between 0.98 and

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