

# Aflatoxin is No Match for the Agrisure Viptera Trait

## The Aflatoxin Problem:

Aflatoxin refers to a group of toxins produced by specific molds, which are extremely harmful to humans and animals. The spores of fungi responsible for aflatoxin enter corn plants through exposed areas such as those caused by insect damage, and proliferate, spreading the harmful toxin throughout the corn plant. Conditions favorable for these molds and aflatoxin production are increased by heat and drought. According to researchers at Iowa State University, the prime conditions for the fungus to produce toxins are warm (>70°F) nights during the latter stages of grain fill (August/September) in a period of drought.<sup>1</sup> Because aflatoxin is a known carcinogen, the FDA mandates that aflatoxin levels cannot exceed certain limits, measured in parts per billion (ppb) depending on the intended use of the corn. The bottom line is aflatoxin robs growers of grain in the field and revenue at the elevator.



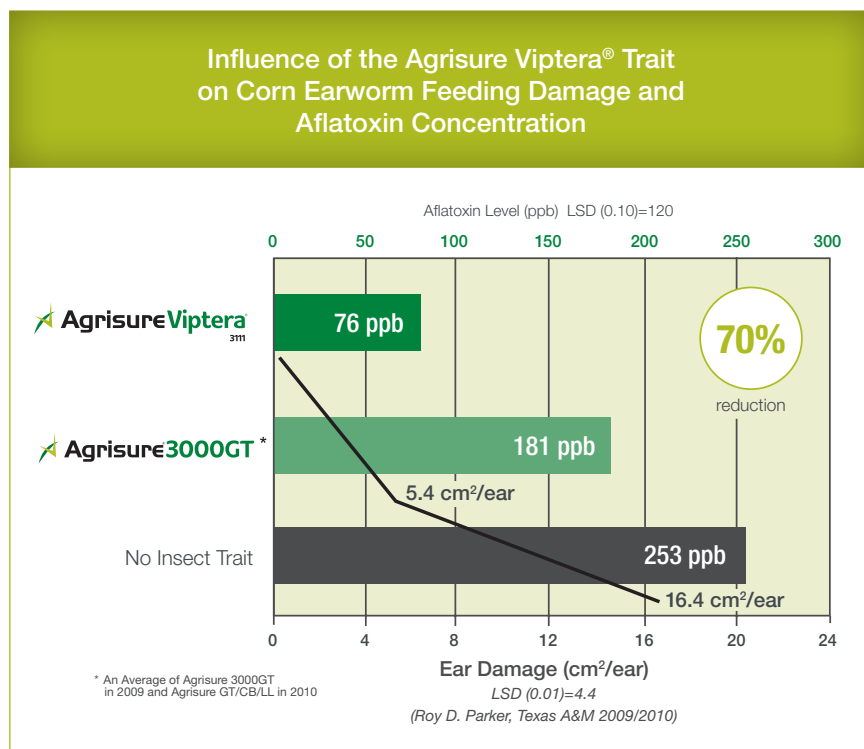
Aflatoxin-producing molds can be recognized by olive-green or gray-green growth on corn kernels.



Trial observations collected from Crawford County, Kan., in Aug. 2012 show greater aflatoxin-producing mold infestation in competitive corn hybrids (left and middle ear) compared to a hybrid containing the Agrisure Viptera® 3111 trait stack (right ear).

## How the Agrisure Viptera Trait can Help:

Hybrids containing the Agrisure Viptera® trait reduce aflatoxin levels by providing unsurpassed in-seed control of the broadest spectrum of above-ground lepidopteran pests. The excellent insect control provided by the Agrisure Viptera trait helps prevent insects from feeding, keeping the plant healthy and reducing areas of exposure, while also helping farmers grow more corn. The Agrisure Viptera trait has demonstrated an ability to significantly reduce aflatoxin contamination in research conducted by Texas A&M University and Syngenta.<sup>2</sup> The breakthrough Agrisure Viptera trait for best-in-class insect control is available in three trait stacks: Agrisure Viptera 3110, Agrisure Viptera 3111 and Agrisure Viptera 3220 E-Z Refuge™.



For more information on Agrisure Viptera visit [www.agrisuretraits.com](http://www.agrisuretraits.com).

<sup>1</sup>Aflatoxins in Corn by Iowa State University Extension 8-2012

<sup>2</sup>Dr. Roy Parker, Texas A&M University, 2009-2010. Influence of insect trait on grain aflatoxin levels.

## What are growers saying about Agrisure Viptera?

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The corn I harvested without the Agrisure Viptera trait contained aflatoxin levels so high that it was rejected by the elevator. The aflatoxin levels in the corn containing the Agrisure Viptera trait were very low. Elevators are scrambling for low aflatoxin level corn because of this widespread problem.”

Tom Pauly; Sumner, Kan.

“

I planted corn hybrids containing the Agrisure Viptera trait and competitive hybrids without Agrisure Viptera. The corn without Agrisure Viptera had aflatoxin levels around 300 ppb while the corn with Agrisure Viptera had less than 30 ppb, which is hardly anything. As far as I'm concerned, you can hardly afford to be without it.”

Robert Kaufman; Griffin, Kan.

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corn**

 **Agrisure Viptera®**

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