Toxin Reviews ›
Volume 27, 2008 - Issue 3-4

Research Article

COST-EFFECTIVENESS OF AFLATOXIN CONTROL METHODS: ECONOMIC INCENTIVES

Felicia Wu, Yan Liu & Deepak Bhatnagar

Pages 203-225 | Received 10 Apr 2008, Accepted 24 Jun 2008, Published online: 02 Dec 2008

Cite this article https://doi.org/10.1080/15569540802393690

Abstra

Multiple ell- ers, processo nation of commoc at both the pre- a seek to inves ways to improve nomic incentive ethods; and (3) educ within a commoc sectors bear the brun cottonseed growers tree nuts, shellers and handlers incur the costs of aflatoxin control. Thus, peanut and tree nut

growers may have no economic incentive to apply preharvest aflatoxin control. Postharvest control options are limited and in many cases are not yet approved by the EPA or FDA. The Kaldor-Hicks efficiency criterion may help to resolve this economic dilemma. If this criterion was to be applied to aflatoxin control in peanut and tree nuts, growers could be compensated by shellers/handlers to adopt preharvest aflatoxin control methods. However, the control methods must be cost-effective for this compensatory arrangement to work. We present three case studies of cost-effectiveness to reduce aflatoxin contamination in different crops: AF36 in cottonseed, Bt in corn, and Afla-Guard in peanuts.

Keywords:

aflatoxin control methods | biocontrol | Bt corn | economic incentives | cost-effectiveness

Acknowledgment

This work was funded in part by a cooperative agreement from the Aflatoxin Elimination Workgroup, a partnership of the USDA Agricultural Research Services (ARS) and U.S. crop industries. The authors wish to thank the following individuals for their insights and info med Abbas, Julie Ada Dorner, Bruce Ha eux, Jane Robens,

Aflatoxin Reduction in Corn Through Field Application of Competitive Fungi
Source: Journal of Food Protection
Competitive exclusion of aflatoxin producers: farmer-driven research and development.
Source: Unknown Repository
The Costs of Mycotoxin Management to the USA: Management of Aflatoxins in the United States
Source: Journal of Toxicology Toxin Reviews
Mycotoxins in Ethanol Co-products: Modeling Economic Impacts on the Livestock Industry and Management Strategies
Source: Journal of Agricultural and Food Chemistry
Saving two in a billion:
Source: Food Policy
Spatial Relationships of Soil Texture and Crop Rotation to Aspergillus flavus Community Structure in South Texas
Source: Phytopathology
Variability among atoxigenic Aspergillus flavus strains in ability to prevent aflatoxin contamination and production of aflatoxin biosynthetic pathway enzymes
Source: Applied and Environmental Microbiology
Cost of Aflatoxin to the Farmer, Buying Point, and Sheller Segments of the Southeast United States Peanut Industry
Source: Peanut Science
Mycot
Sourc
Effect
Sourc
Redu
Sourc
An Ar rting
1988
Sc
M
Stanc
Sourc
CULT
Sourc
A tale ee nut
indus
Sourc

An isolate of Aspergillus flavus used to reduce aflatoxin contamination in cottonseed has a defective polyketide synthase gene

Source: Applied Microbiology and Biotechnology

Workgroup Report: Public Health Strategies for Reducing Aflatoxin Exposure in Developing Countries

Source: Environmental Health Perspectives

United States Department of Agriculture—Agricultural Research Service research on pre-harvest prevention of mycotoxins and mycotoxigenic fungi in US crops

Source: Pest Management Science

Linking provided by Scholexplorer

Related research

People also read | Recommended articles | Cited by 54