

Aflatoxin Encyclopedia Article

Aflatoxin

The following sections of this BookRags Literature Study Guide is offprint from Gale's For Students Series: Presenting Analysis, Context, and Criticism on Commonly Studied Works: Introduction, Author Biography, Plot Summary, Characters, Themes, Style, Historical Context, Critical Overview, Criticism and Critical Essays, Media Adaptations, Topics for Further Study, Compare & Contrast, What Do I Read Next?, For Further Study, and Sources.

(c)1998-2002; (c)2002 by Gale. Gale is an imprint of The Gale Group, Inc., a division of Thomson Learning, Inc. Gale and Design and Thomson Learning are trademarks used herein under license.

The following sections, if they exist, are offprint from Beacham's Encyclopedia of Popular Fiction: "Social Concerns", "Thematic Overview", "Techniques", "Literary Precedents", "Key Questions", "Related Titles", "Adaptations", "Related Web Sites". (c)1994-2005, by Walton Beacham.

The following sections, if they exist, are offprint from Beacham's Guide to Literature for Young Adults: "About the Author", "Overview", "Setting", "Literary Qualities", "Social Sensitivity", "Topics for Discussion", "Ideas for Reports and Papers". (c)1994-2005, by Walton Beacham.

All other sections in this Literature Study Guide are owned and copyrighted by BookRags, Inc.

Contents

Aflatoxin Encyclopedia Article.....	1
Contents.....	2
Aflatoxin.....	3

Aflatoxin

Toxic compounds produced by some **fungi** and among the most potent naturally occurring carcinogens for humans and animals. Aflatoxin intake is positively related to high incidence of liver **cancer** in humans in many developing countries. In many farm animals aflatoxin can cause acute or chronic diseases. Aflatoxin is a metabolic by-product produced by the fungi *Aspergillus flavus* and the closely related **species** *Aspergillus parasiticus* growing on grains and decaying organic compounds. There are four naturally occurring aflatoxins: B₁, B₂, G₁, and G₂. All of these compounds will fluoresce under a UV (black) light around 425–450 nm providing a qualitative test for the presence of aflatoxins. In general, starch grains, such as corn, are infected in storage when the moisture content of the grain reaches 17–18% and the temperature is 79–99°F (26–37°C). However, the fungus may also infect grain in the field under hot, dry conditions.