

Reviewer Comments and Author Responses

1. **Comment:** *In the abstract section, other toxic metabolites of *Aspergillus* should also be mentioned briefly.*

Response: Thank you for the valuable suggestion. We have revised the abstract to briefly mention other toxic metabolites of *Aspergillus*, including ochratoxin A, sterigmatocystin, and cyclopiazonic acid, to reflect the broader scope of the review.

2. **Comment:** *It is not appropriate to divide the introduction into subsections. The introduction should present data regarding the economic losses caused by aflatoxin contamination in the food and feed industry.*

Response: We appreciate the reviewer's feedback. The introduction has been reformatted into a continuous narrative to improve flow and coherence. Additionally, quantitative data on economic losses caused by aflatoxin contamination, including trade impacts and agricultural losses, have been incorporated into the revised introduction.

3. **Comment:** *Lines 34–37 and lines 155–157 onwards show repetition.*

Response: Thank you for pointing this out. We have reviewed these sections and removed redundant content. The revised manuscript ensures unique and non-repetitive presentation of information.

4. **Comment:** *What is the basic difference between Figure 5, Figure 6, Figure 8 and Figure 3 when most of the causes and effects are almost the same? Most of the information is mere repetition.*

Response: We acknowledge the redundancy among Figures 3, 5, 6, and 8. These figures have been reassessed, and overlapping content has been consolidated. Figures have been revised for clarity and uniqueness, and redundant ones have been removed or merged where appropriate. In this regard, the difference between the figures are:

Figure 3: Factors Influencing Aflatoxin Toxicity

- Focus: Shows the environmental and host-related factors that influence how toxic aflatoxins become.
- Content Type: Includes variables like genetic susceptibility, metabolism, and co-exposure with other toxins.
- Purpose: Explains why aflatoxins are more harmful in some individuals or environments than others.

Figure 5: Acute Aflatoxin Exposure and Aflatoxicosis

- Focus: Highlights the effects of short-term (acute) exposure to high doses of aflatoxins.

- Content Type: Symptoms such as vomiting, abdominal pain, liver failure, and death.
- Purpose: Illustrates the clinical presentation and outcomes of acute aflatoxin poisoning.

Figure 6: Health Risks Associated with Aflatoxin Exposure

- Focus: Summarizes the broad health risks related to chronic exposure to aflatoxins.
- Content Type: Covers liver cancer, immune suppression, stunted growth, and impact on HIV/AIDS progression.
- Purpose: Provides an overview of health conditions caused by long-term aflatoxin intake.

Figure 8: Mechanisms of Aflatoxin-Induced Hepatotoxicity

- Focus: Describes the biological mechanisms by which aflatoxins damage the liver.
- Content Type: Pathways like DNA adduct formation, oxidative stress, and p53 mutation.
- Purpose: Delivers molecular-level insight into how aflatoxins lead to liver cancer.

5. **Comment:** *There should be a dedicated section for other metabolites, and each should be discussed in different subsections.*

Response: Thank you for this constructive suggestion. We have created a dedicated section titled “Toxicity of Other Aspergillus Metabolites,” with individual subsections for ochratoxin A, sterigmatocystin, and cyclopiazonic acid to facilitate focused discussion on each metabolite.

6. **Comment:** *In the mitigation section, the pre- and post-harvest interventions should be supplemented with classical and recent examples.*

Response: We agree with the reviewer’s recommendation. Classical and recent examples of pre- and post-harvest interventions, including case studies from Africa and Asia, have been incorporated into the mitigation section to enhance practical relevance and support the strategies discussed.

7. **Comment:** *In detection methods, specific examples and case studies should be discussed where these methods have been successfully utilised.*

Response: Thank you for this insightful comment. The section on detection methods now includes specific case studies and real-world examples where chromatographic, immunoassay, and biosensor techniques have been effectively applied in various countries and food systems.