

# Aflatoxin Management in Groundnuts using Moringa Oleifera in Malawi

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## Introduction and problem statement

- Groundnut production in Malawi is done by 95% smallholder farmers.
- Aflatoxin contamination affects groundnut production.
- It reduces yield, restricts trade and causes diseases to human beings.
- It can occur at every stage; pre-harvest, harvest and storage
- Poor access to credit limits farmers' ability to procure inputs therefore the need to have affordable and easy mitigations for aflatoxin



Fig 1: shelled and unshelled groundnuts (a), groundnut field (b), aflatoxin contaminated groundnuts (c & d)

## Implementation steps

- Develop an experimental design
- Input acquisition
- Seed treatment
- Set up experimental plots
- Data collection
- Aflatoxin sampling
- Laboratory analysis
- Statistical analysis
- Data interpretation
- Report and conclusion
- Future Research recommendation
- Knowledge dissemination



Fig 2; Moringa oleifera tree

## Objective

To check the efficacy of moringa oleifera in the management of aflatoxins

## Expected Outcomes

- Contribute to the knowledge of harnessing natural plant-based solutions
- Significant decrease in aflatoxin levels
- Significant increase in crop yield

## Highlights

- Food safety improvement
- Natural and sustainable solution
- Potential health benefits
- Scientific Advancement
- Commercial opportunities
- Community Impact
- Global relevance
- Collaboration potential
- Public healthy
- Regulatory implications

## SWOT

### Strengths

- Potential Healthy benefits
- Natural and sustainable
- Research Interests

### Weaknesses

- Costs and Resources
- Limited research

### Opportunities

- Food safety improvement
- Market Potential

### Threats

- Regulatory Hurdles
- Competition