



AFLATOXIN ANALYST QUALIFICATION TRAINING REPORT

Date: 31 October – 1 November 2025
Venue: Harare Institute of Technology (HIT), Harare, Zimbabwe
Organized by: COMESA & Texas A&M AgriLife Research

1. Introduction

The Aflatoxin Analyst Qualification Workshop was held from 31 October to 1 November 2025 at the Harare Institute of Technology. The training aimed to enhance participant competence in aflatoxin testing methods using two lateral flow and ELISA-based systems — the Neogen Veratox and Reveal Q+, and Prognosis Quantum Green & Bioshield ELISA kits.

A total of 12 participants from food companies, the Ministry of Health and Child Care (MoHCC), and the Harare Institute of Technology (HIT) successfully completed the two-day training.

Participating organizations included:

- National Foods
- Blue Ribbon Foods
- Champion Foods
- Muungwe Foods
- Harare Institute of Technology (HIT)
- Ministry of Health and Child Care (MoHCC)

The workshop was facilitated by technical trainers from Texas A&M AgriLife Research, ADP South Africa (Neogen Supplier) and AES South Africa (Prognosis Biotech Supplier) with coordination support from the host laboratory.



2. Training Objectives

The training was designed to:

- i. Initiate APTECA Quality systems implementation – first step is Analyst qualification to create awareness and enable companies to choose kits that are fit for purpose.
- ii. Build technical capacity for analysts in the use of Neogen and Prognosis kits.
- iii. Qualify participants to independently conduct aflatoxin analysis with high accuracy and consistency.

3. Training Methodology

The workshop combined theoretical sessions, hands-on demonstrations, and supervised practical exercises.

Day 1:	<ul style="list-style-type: none">• Overview of ELISA methods.• Demonstration, practical, and qualification sessions on Neogen Veratox and Prognosis Bioshield ELISA systems: sample preparation, extraction, analysis, and use of ELISA readers.
Day 2	<ul style="list-style-type: none">• Overview of Lateral Flow methods.• Demonstration, practical, and qualification sessions of Prognosis Quantum Green Lateral Flow and Neogen Reveal Q+: sample preparation, extraction, analysis, and use of Raptor and 3PR Mini readers.• Basic result interpretation and troubleshooting.• Awarding certificates.

Protocols followed the manufacturer's validated methods and used APTECA's Reference Material. The class was split into two groups, each focusing on either the Neogen or Prognosis testing platforms.



4. Outcomes and Achievements

- All 12 participants completed the qualification process and were certified.
- Participants demonstrated competence in performing aflatoxin tests using either brand system.
- Results were acceptable based on reference material assigned values and detection ranges.
- Training materials and standard operating procedures (SOPs) were shared for continued use.



Qualified Participants

No	Name	Organization	Email/Contact	Qualified Platform(s)
1	Nyasha Mudita	National Foods	nyashamu@natfood.co.zw	Prognosis Bioshield ELISA & Quantum Green Total
2	Belinda Shamiso Manyanye	National Foods	josiah.musekiwa@natfood.co.zw	Neogen Veratox and Reveal Q+
3	Edward R. Kanjanda	Blue Ribbon Foods	-	Neogen Veratox and Reveal Q+
4	Shayline Mlambo	Blue Ribbon Foods	mlamboshayline@gmail.com	Prognosis Bioshield ELISA & Quantum Green Total
5	Camilla K. Mutero	Champion Foods	muterocamillakundai@gmail.com	Prognosis Bioshield ELISA & Quantum Green Total
6	Delight Shoko	Champion Foods	dshoko001@gmail.com	Neogen Veratox and Reveal Q+
7	Allen Mutape	Muungwe Foods	allenmutape@gmail.com	Neogen Veratox and Reveal Q+,
8	Farayi Leonard Mungofa	Ministry of Health (MoHCC)	flmungofa@gmail.com	Neogen Veratox and Reveal Q+,
9	Priscilla Nyakuseka	Ministry of Health (MoHCC)	ptyakuseka@gmail.com	Prognosis Bioshield ELISA & Quantum Green Total
10	Tafadzwa Matyora	HIT	tmatyora@hit.ac.zw	Neogen Veratox and Reveal Q+,
11	Tafadzwa Esnath Rukwishuro	HIT	trukwishuro@hit.ac.zw	Neogen Veratox and Reveal Q+,
12	Moreblessings Murindi	HIT	mmurindi@hit.ac.zw	Prognosis Bioshield ELISA & Quantum Total Green
13	Kurai Gareth Mawoneke	HIT	kmawoneke@hit.ac.zw	Prognosis Biotech Quantum Green Total



6. Next Steps and Recommendations

- Follow up on the interest in implementing APTECA quality systems by supporting food processors in developing APTECA Food Safety Plans.
- Encourage processors to engage Neogen and Prognosis suppliers for equipment procurement and create a communication platform for technical follow-up.
- Integrate qualified analysts into ongoing APTECA Proficiency Testing (PT) and Reference Material use.
- Continue collaboration between Texas A&M AgriLife Research, COMESA, and industry partners to sustain engagement with adopters.

7. Conclusion

The two-day workshop successfully achieved its objectives of strengthening analytical capability and ensuring consistent aflatoxin testing practices across Zimbabwe's food and feed industry. The 100% qualification rate underscores participants' technical readiness and the effectiveness of the training approach.

Prepared by:

Ann Muiruri

Program Coordinator, APTECA

Texas A&M AgriLife Research

Date: 3 November 2025