Animal Diseases Diagnosis

The Agency offers laboratory diagnostics services throughout the country through its eight diagnostic centres namely Central Veterinary Laboratory at Temeke Dar es Salaam, Centre for Infectious Diseases and Biotechnology at Temeke Dares salaam, TVLA center in Arusha, TVLA Centre in Mwanza, TVLA Centre in Tabora, TVLA Centre in Dodoma, TVLA Centre in Iringa and TVLA Centre in Mtwara. The diagnostic services provided are from simple to high molecular techniques in areas of Vector and Parasites, Pathology, Bacteriology and Virology.

Pathology

Dr Yesse Elly Noah

Dr. Zakayo Magoke

Dr Jumanne Jumbe (acting, Head)

Post mortem examination (PM) of Avian, Small ruminants, Bovine, Porcine, Canine, Feline, Rabbit, and Wild animal);

Histopathology; and Immunohistochemistry.

- Post mortem examination (PM) of Avian, Small ruminants, Bovine, Porcine, Canine, Feline, Rabbit, and Wild animal);
- Histopathology; and
- Immunohistochemistry.
Microbiology

Dr. Makondo Z.E (Head)

Ms Grace Banda

Dr Mayenga Ngassa

Mr Godwin Minga

- Staining for Bacteria and fungi;
- Direct slide examination for fungus;
- Bacterial / Mycoplasma / fungal culture;
- Bacterial / fungal drug sensitivity test;
- ELISA test for CBPP, CCPP and Brucellosis;
- Rose Bengal Plate test;
- Pullorum and typhoid test;
- Tuberculin testing;
- Diagnosis of infectious agents (viral and Bacterial disease)
- Antibody detection for Foot and mouth disease using Liquid Phase Blocking ELISA with titration;
- Antibody detection using nonstructural protein ELISA for Foot and mouth disease, Antigen detection and serotyping for FMD using ELISA;
- Antibody detection any of the following disease: African swine disease, Peste des petits ruminants and Rinderpest;
- Antibody/antigen separate detection for each of the following disease: Avian Influenza, Newcastle disease;
- Antigen detection using FAT for rabies
- Nucleic acid detection for one partial gene for each of the following disease at one time: Foot and mouth disease, African swine disease, Peste des petits ruminants, rinderpest, blue tongue, malignant cattarhal fever, african horse sickness, classical swine fever, rabies, fowl pox, avian influenza, Newcastle disease;
- Virus Isolation for any of the following viruses at one given time African swine disease, Peste des petits ruminants, rinderpest, blue tongue, malignant cattarhal fever, african horse sickness, classical swine fever, rabies, Newcastle disease, fowl pox and Avian Influenza using cell culture; and
- Virus Isolation for any of the following viruses at one given time rabies, Newcastle disease, fowl pox and Avian Influenza using laboratory animals (mice/embryonated chicken eggs).
The Agency offers service for analysis of animal feed to check for quality and quantity. The feed are analyzed to determine the composition and amount of ingredient in the raw material and mixed feeds. The ingredient analyzed includes crude protein, energy, fat, crude fibre, ash, ether extract dry matter and vitamins. In addition the Agency provides animal feed formulation formulas of various animal feeds to the clients.

The Agency also analyses animal feeds, validates newly introduced acaricides and checks for strength of the dip wash, drug residues and toxins. Test done are listed below:

1. Wet chemistry for raw materials and mixed feeds

For determination of: Dry matter, Ash, CP, CF, EE, NDF, Acid Detergent Fiber (ADF), Acid Detergent Lignin (ADL), Minerals (Calcium and Phosphorus).

2. Near Infrared Reflectance Spectrophotometry (NIRS analysis)

For determination of; dry Matter, Crude Protein, and CrudeFiber. EE, Starch, Sugars, Metabolizable Energy, Lysine, Tryptophan, Methionine+ Cysteine.

3. Emulsion stability of Acaricides

4. HPLC for measuring acaricides strength, Drug residues and Toxin.
Animal Science

Dr. Proches C. Malamsha (Head)
Dr Pendo Dotto
Ms Wende Maulaga

Wet chemistry for raw materials and mixed feeds

For determination of: Dry matter, Ash, CP, CF, EE, NDF, Acid Detergent Fiber (ADF), Acid Detergent Lignin (ADL), Minerals (Calcium and Phosphorus).

Near Infrared Reflectance Spectrophotometry (NIRS analysis)

For determination of; dry Matter, Crude Protein, and CrudeFiber. EE, Starch, Sugars, Metabolizable Energy, Lysine, Tryptophan, Methionine+ Cysteine.

Parasitology

Kamilius A. Mamilo (Head)
Dr Jelly Chang’a
Dr Elpidius Rukambile

Vector and Parasites

- Giemsa and EPG;
- Buffy Coat and PCV;
- Faecal culture for larvae isolation;
- Identification of helminthes, tsetse fly, ticks and insects;
- Resistance of trypanosomes to trypanocides/ticks to acaricides;
- Testing efficacy and safety of introduced/imported acaricides;
- Examination of skin scraping for external parasites; and
- PCR for trypanosomes characterization.