

## AFDC 11 (795) DTZS/ ISO TS 20224-6:2020

## **DRAFT TANZANIA STANDARD**

Molecular biomarker analysis - Detection of animal-derived materials in foodstuffs and feedstuffs by real-time PCR - Part 6: Horse DNA detection method

**TANZANIA BUREAU OF STANDARDS** 

## NATIONAL FOREWORD

The Tanzania Bureau of Standards is a statutory national standards body for Tanzania established under the Act.No.3 of 1975, amended by Act.No.2 of 2009.

This Tanzania Standard is being prepared by the Biotechnology Technical Committee, under supervision of Agriculture and Food Standards Divisional Committee (AFDC)

This Tanzania standard specifies a real-time polymerase chain reaction (real-time PCR) method for the qualitative detection of horse-specific DNA derived from food and feed. It requires the extraction of an adequate amount of PCR amplifiable DNA from the relevant matrix and can be applied to the detection of horse material derived from domestic horse (*Equus caballus*), mule (*Equus caballus*  $\mathcal{L} \times Equus \ asinus \mathcal{L}$ ), hinny (*Equus caballus*  $\mathcal{L} \times Equus \ asinus \mathcal{L}$ ) and zebroid (*Equus caballus*  $\times Equus \ simplicidens$ ). The assay also detects the species Przewalski's horse (*Equus przewalskii*) and zebra (*Equus burchellii*).

This Tanzania standard was developed to provide guidance for PCR amplification and interpretation of results, specific to horse DNA detection against the fraudulent adulteration of meat in food and feed which threatens both public safety and commerce. Adulteration can affect those adhering to ethnological dietary rules, economic development and social stability.

This Tanzania standard is identical to the ISO TS 20224-6:2020 Molecular biomarker analysis - Detection of animal-derived materials in foodstuffs and feedstuffs by real-time PCR - Part 6: Horse DNA detection method, published by International Organization for Standardization.

## TERMINOLOGY AND CONVENTIONS

This text of the international standards if found suitable, may be approved for application as a Tanzania Standard without deviations.

Some terminology and certain conventions are not identical with those used in Tanzania standards; attention is drawn especially to the following.

- 1) The comma has been used as a decimal marker for metric dimensions. In Tanzania standards, it is current practice to use a full point on the base line as the decimal marker.
- 2) Wherever the words "International Standard" appear, referring to this Standard they should read as "Tanzania Standard".