

TBS/AFDC 11 (2268) DTZS/ISO 20569-7:2022

DRAFT TANZANIA STANDARD

Horizontal methods for molecular biomarker analysis - Methods of analysis for the detection of genetically modified organisms and derived products ands and and an analysis of the second secon Part 7: Real-time PCR based methods for the detection of CaMV and Agrobacterium Ti-plasmid derived DNA sequences

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

This draft Tanzania standard specifies a procedure for the detection of a DNA sequence of the open reading frame five (ORF V) from cauliflower mosaic virus (CaMV) and a procedure for the detection of the DNA sequence of the nopaline synthase (nos) gene from tumour-inducing (Ti) plasmids of phytopathogenic *Rhizobium radiobacter* (formerly named Agrobacterium tumefaciens). The procedures can be used in the context of screening for genetically modified crop/plants and their derived products to further clarify a positive PCR result for a specific promter or terminator of CaMV(P-35S), or both, and the nos gene (P-nos, T-nos), respectively.

This draft Tanzania standard is applicable for the analysis of DNA extracted from foodstuffs and other products such as feedstuffs and seeds/grains. The application of the methods requires the extraction of an adequate amount of amplifiable DNA from the relevant matrix.

This draft Tanzania standard is identical to the ISO 20569-7:2022 Horizontal methods for molecular biomarker analysis - Methods of analysis for the detection of genetically modified organisms and derived products -Part 7: Real-time PCR based methods for the detection of CaMV and *Agrobacterium* Ti-plasmid derived DNA sequences, 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".