



Technical Specification

ISO/TS 20224-10

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**Molecular biomarker analysis —
Detection of animal-derived
materials in foodstuffs and
feedstuffs by real-time PCR —**

**Part 10:
Duck DNA detection method**

*Analyse de biomarqueurs moléculaires — Détection de matériaux
d'origine animale dans les denrées alimentaires et les aliments
pour animaux par PCR en temps réel —*

Partie 10: Méthode de détection de l'ADN de canard



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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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This document was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 16, *Horizontal methods for molecular biomarker analysis*.

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Introduction

Fraudulent adulteration of meat in food and feed threatens both public safety and commerce. Adulteration can affect those adhering to ethnological dietary rules, economic development and social stability. This document provides a real-time polymerase chain reaction (real-time PCR) analytical method for the identification of meat animal species from nucleic acid present in the ingredients of food and feed.

Animal-derived biological materials in food and feed are detected and identified in the laboratory with the following successive (or simultaneous) steps: preparation of the test portion/sample, nucleic acid extraction and purification, PCR amplification and interpretation of results. This document provides guidance for PCR amplification and interpretation of results, specific to mallard duck (*Anas platyrhynchos*) and spot-billed duck (*Anas zonorhyncha*) DNA detection. Cross detection of white-winged duck (*Asarcornis scutulata*), tufted duck (*Aythya fuligula*), muscovy duck (*Cairina moschata*) and Mandarin duck (*Aix galericulata*) is observed.

The ISO 20224 series consists of technical specifications that describe specific applications. New species DNA detection methods established in the future will be added as independent parts.

