

Animal feeding stuffs — Isolation and enumeration of presumptive *Bacillus* spp.

ICS 65.120

National foreword

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Aliments des animaux - Isolement et dénombrement des
souches probiotiques de *Bacillus* spp.

Futtermittel - Keimzählung von *Bacillus* spp.

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Foreword

This document (EN 15784:2009) has been prepared by Technical Committee CEN/TC 327 “Animal feeding stuffs”, the secretariat of which is held by NEN.

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Introduction

This methodology has been developed to enumerate and differentiate probiotic bacilli spores capable of germinating, to enable the European Commission to control proper labelling of animal feeding products (EU project SMT4-CT98-2235 - "Methods for the official control of probiotics (microorganisms) used in animals feeds") [1]. Vegetative cells are not taken into account in this method, as all approved *Bacillus* species products at present are spores.

Spores of *Bacillus* species survive a heat-treatment at 80 °C for 10 minutes and the *Bacillus* species characteristic colony morphology of the individually authorised strains is examined using the proposed method [2].

This method is not selective for probiotic bacilli but can be applied to enumerate bacilli in additives, premixtures and feeding stuffs assuming that the probiotic bacilli are present in far higher numbers than any other bacilli.

If the feeding stuffs are "contaminated" with a high level of non-probiotic *Bacillus* species it can be recommended to use a procedure based on antibiotics for more specific selective counting, taking the antibiotic resistance profile of the different *Bacillus* strains into account.