

Animal feeding stuffs — Isolation and enumeration of yeast probiotic strains

ICS 65.120

National foreword

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English Version

**Animal feeding stuffs - Isolation and enumeration of yeast
probiotic strains**

Aliments des animaux - Isolation et dénombrement de
souches probiotiques de levures (*saccharomyces*
cerevisiae)

Futtermittel - Keimzählung von Hefestämmen

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Foreword

This document (EN 15789:2009) 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 method has been developed to enumerate probiotic yeasts in additives, premixtures and feeding stuffs. 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 as animal feeds”) [1]. It is based on ISO 7954, a pour plate method using extract dextrose chloramphenicol (CGYE) (alternatively oxytetracycline) agar, a selective agar for yeasts [1]. This method is not selective for probiotic yeast but can be applied to enumerate yeast in feed assuming that the probiotic yeast is present in far higher numbers than any other yeast.

In addition or alternatively a spread plate method and a chromogenic¹ agar can be used allowing an elective enumeration of the probiotic yeast species for example *Saccharomyces cerevisiae*, which forms distinct mauve/purple colonies. The presence of other yeasts will be identified on the elective agar by different colouration.

The application of both agars (CGYE and Chromagar® Candida) have been validated for four probiotic commercially used yeast strains, belonging to *Saccharomyces cerevisiae*, in premixtures and feeding stuffs [3].

¹ e.g. CHROMagar® Candida from CHROMagar

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