PD CEN/TS 17717:2022

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Plant biostimulants — Detection of *Salmonella* spp.

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The UK participation in its preparation was entrusted to Technical Committee EH/4/-/7, Plant Biostimulants.

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Plant biostimulants - Detection of *Salmonella* spp.

Biostimulants des végétaux - Détection de *Salmonella* spp.

Pflanzen-Biostimulanzien - Nachweis von *Salmonella* spp.

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European foreword

This document (CEN/TS 17717:2022) has been prepared by Technical Committee CEN/TC 455 “Plant Biostimulants”, the secretariat of which is held by AFNOR.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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Introduction

This document was prepared by the experts of CEN/TC 455 “Plant Biostimulants”. The European Committee for Standardization (CEN) was requested by the European Commission (EC) to draft European standards or European standardization deliverables to support the implementation of Regulation (EU) 2019/1009 of 5 June 2019 laying down rules on the making available on the market of EU fertilizing products (“FPR” or “Fertilising Products Regulation”).

This standardization request, presented as M/564, also contributes to the Communication on “Innovating for Sustainable Growth: A Bio economy for Europe”. The Working Group 5 “Labelling and denominations”, was created to develop a work program as part of this request. The technical committee CEN/TC 455 “Plant Biostimulants” was established to carry out the work program that will prepare a series of standards. The interest in biostimulants has increased significantly in Europe as a valuable tool to use in agriculture. Standardization was identified as having an important role in order to promote the use of biostimulants. The work of CEN/TC 455 seeks to improve the reliability of the supply chain, thereby improving the confidence of farmers, industry, and consumers in biostimulants, and will promote and support commercialisation of the European biostimulant industry.

Biostimulants used in agriculture can be applied in multiple ways: on soil, on plants, as seed treatment, etc. A microbial plant biostimulant consists of a microorganism or a consortium of microorganisms, as referred to in Component Material Category 7 of Annex II of the EU Fertilising Products Regulation (EU) 2019/1009 [1].

This document is applicable to all microbial biostimulants in agriculture. The method is based on the EN ISO 6579-1:2017 for the detection of *Salmonella* spp. in food.

WARNING — Persons using this document should be familiar with normal laboratory practice. This document does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

IMPORTANT — It is absolutely essential that tests conducted in accordance with this document be carried out by suitably trained staff.

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1 Scope

This document describes a method for the detection of *Salmonella* spp. in biostimulants of the following Product Function Categories (PFCs) and Component Material Category (CMC) of EU fertilizing products, as described in the Regulation (EU) 2019/1009 of the European Parliament and of the Council [1]:

— PFC 6(A): Microbial plant biostimulant;

— PFC 6(B): Non-microbial plant biostimulant;

— CMC 7: Microorganisms.

It requires three successive steps: a selective enrichment, an isolation on a chromogenic agar, and if positive a confirmation with a serological test (and if required, a selective media).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CEN/TS 17708, *Plant biostimulants — Preparation of sample for microbial analysis*

CEN/TS 17724, *Plant Biostimulants — Terminology*

EN ISO 7218:2007,[1] *Microbiology of food and animal feeding stuffs — General requirements and guidance for microbiological examinations (ISO 7218:2007)*

EN ISO 11133:2014,[2] *Microbiology of food, animal feed and water — Preparation, production, storage and performance testing of culture media (ISO 11133:2014)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in CEN/TS 17724 and the following apply.

3.1
***Salmonella* spp.**
microorganisms which form typical colonies on solid selective media described and which display the morphological, physiological and biochemical characteristics described when the analysis is carried out in accordance with this document

3.2
detection of *Salmonella* spp.
determination of the detection or not detection of *Salmonella* spp. (3.1), in 25 g or 25 ml of product, when tests are carried out in accordance with this document

[1] As amended by EN ISO 7218:2007/A1:2013.
[2] As amended by EN ISO 11133:2014/A1:2018 and EN ISO 11133:2014/A2:2020.

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