

TAIMEDE BIOSTIMULAATORID. NÕUETEKOHASUS. OSA
4: BIOSTIMULAATORI KASUTAMISEST TULENEVATE
KVALITEEDINÄITAJATE MÄÄRAMINE

Plant biostimulants - Claims - Part 4: Determination of
quality traits resulting from the use of a plant
biostimulant

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 17700-4:2024 sisaldab Euroopa standardi EN 17700-4:2024 ingliskeelset teksti. Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 27.11.2024. Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	This Estonian standard EVS-EN 17700-4:2024 consists of the English text of the European standard EN 17700-4:2024. This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation. Date of Availability of the European standard is 27.11.2024. The standard is available from the Estonian Centre for Standardisation and Accreditation.
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English Version

Plant biostimulants - Claims - Part 4: Determination of
quality traits resulting from the use of a plant biostimulant

Biostimulants des végétaux - Allégations - Partie 4 :
Détermination des caractéristiques qualitatives
résultant de l'utilisation d'un biostimulant des
végétaux

Pflanzen-Biostimulanzien - Auslobungen - Teil 4:
Bestimmung der Qualitätsmerkmale, die sich aus der
Verwendung eines Pflanzen-Biostimulans ergeben

This European Standard was approved by CEN on 26 August 2024.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 17700-4:2024) has been prepared by Technical Committee CEN/TC 455 “Plant biostimulants”, the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2025, and conflicting national standards shall be withdrawn at the latest by May 2025.

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 supersedes CEN/TS 17700-4:2022.

EN 17700-4:2024 includes the following significant technical change with respect to CEN/TS 17700-4:2022:

- an informative Annex ZA on the relationship of this European standard and the essential requirements of Regulation (EU) 2019/1009 has been added.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

The EN 17700 series, *Plant biostimulants — Claims*, consists of the following parts:

- *Part 1: General principles;*
- *Part 2: Nutrient use efficiency resulting from the use of a plant biostimulant;*
- *Part 3: Tolerance to abiotic stress resulting from the use of a plant biostimulant;*
- *Part 4: Determination of quality traits, resulting from the use of a plant biostimulant;*
- *Part 5: Determination of availability of confined nutrients in the soil or rhizosphere.*

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 implement this European Standard: 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, Türkiye and the United Kingdom.

Introduction

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 [1] laying down rules on the making available on the market of EU fertilising products (“FPR” or “Fertilising Products Regulation”).

This standardization request, presented as SR M/564 and relevant amendments, also contributes to the Communication on “Innovating for Sustainable Growth: A Bio economy for Europe”. The interest in plant 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.

This document has been developed to provide guidance for a consistent approach to justify the claims associated with the use of plant biostimulants.

The definition of plant biostimulants in Regulation (EU) 2019/1009 [1] is claims-based. For this reason, demonstrating that a product is indeed a *bona fide* plant biostimulant depends on a demonstration of its function.

The placement of a plant biostimulant on the market does not guarantee effectiveness under all conditions, as many factors can influence the performance of a plant biostimulant in the field.

Plant biostimulants can be applied in multiple ways: to the soil, on plants, as seed treatment, etc.

This document is applicable to all application types of plant biostimulants.

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 rules.

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

1 Scope

This document gives guidance on a consistent approach to justify the claims associated with the use of plant biostimulants.

This document is aimed primarily at manufacturers, laboratories, researchers, technical centres and companies that intend to place plant biostimulants on the market, as well as notifying authorities, notified bodies, and market surveillance authorities.

To be in compliance with this standard, it is important to also follow the recommendations and quality criteria described in the standard EN 17700-1:2024 on general principles to demonstrate plant biostimulant claims.

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.

EN 17700-1:2024, *Plant biostimulants — Claims — Part 1: General principles*

EN 17724:2024, *Plant biostimulants — Terminology*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 17700-1:2024, EN 17724:2024, and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp/>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

quality trait

desired attribute(s) of a crop regarding agronomical and/or marketable traits

[SOURCE: EN 17724:2024, 3.1.4]

3.2

agronomical trait

property related to plant phenotype such as state, relative development, or amount of a plant organ (or part), a plant cycle stage or a plant component that has proven contribution to one or more key performance characteristics in plant production such as yield, plant value, end use or quality parameter

EXAMPLE Photosynthetic activity, flower number, root length, root density, foliar biomass, germination rate, flower fertility, root growth, root development, seedling emergence, dry matter content, tillering, vigour, plant biomass, uniformity of flowering, anticipation of flowering, uniformity in fruit set, increase in fruit set or tuber set, fruit number, pod size, pod length, spikelet size, spike length, increase of seed protein content and increase in antioxidants.

[SOURCE: EN 17724:2024, 3.1.4.1]