

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

Biostimulanzien für die pflanzliche Anwendung -
Angaben - Teil 4: Bestimmung der Qualitätsmerkmale,
die sich aus der Verwendung eines Biostimulans für die
pflanzliche Anwendung ergeben

This Technical Specification (CEN/TS) was approved by CEN on 3 January 2022 for provisional application.

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (CEN/TS 17700-4:2022) 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.

The CEN/TS 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 nutrient in the soil or rhizosphere.*

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Introduction

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

The definition of plant biostimulants to be used in the regulation on fertilizing materials is claims-based.

For this reason, demonstrating that a product is indeed a bona fide plant biostimulant depends on a demonstration of its effect.

The placing of a plant biostimulant on the market should never be considered to guarantee effectiveness under all conditions, as many factors may influence the performance of a plant biostimulant in the field.

Plant biostimulants used in agriculture can be applied in multiple ways: on soil, on plant, as seed treatment, etc. This document is applicable to all application types of plant biostimulants in agriculture.

1 Scope

This document provides guidance for justifying quality traits claims of plant biostimulants used in agriculture.

This document is aimed primarily at manufacturers, laboratories, companies which will put the products on the market, notifying authorities, notified bodies, and market surveillance authorities.

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 17700-1:2022, *Plant biostimulants — Claims — Part 1: General Principles*

CEN/TS 17724:2022, *Plant biostimulants — Terminology*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in CEN/TS 17700-1, CEN/TS 17724 and the following apply.

3.1

quality trait

desired attribute of a crop regarding agronomical and marketable traits

3.2

agronomical trait

property related to plant phenotype as state, relative development, or amount of a plant organ (or part), a plant cycle stage or a plant component that has proven contribution in 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

3.3

marketable trait

property which can improve the marketable value and/or marketable part of the crop such as a nutritional, organoleptic or techno-functional property, physical characteristic of the harvest

3.4

nutritional property

content of substances normally consumed as a constituent of food or feed

- (a) which provides energy; or
- (b) which is needed for growth, development and maintenance of healthy life; or
- (c) a deficit of which will cause characteristic bio-chemical or physiological changes to occur

EXAMPLE protein, fat, carbohydrates, vitamins, minerals