

DIN EN 17716:2025-03 (E)

Plant biostimulants - Determination of Escherichia coli

Contents		Page
European foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	7
4	Principle	7
4.1	Qualitative method	7
4.2	Quantitative method	7
5	Diluent and culture media	8
5.1	General	8
5.2	Broth and culture media in the qualitative method	8
5.2.1	Enrichment broth	8
5.2.2	Selective culture media: Tryptone-Bile-Glucuronic agar (TBX) for isolation 5.3 Diluent and culture media in the quantitative method	8
5.3.1	Diluent	8
5.3.2	Culture media: Tryptone-Bile-Glucuronic agar (TBX)	8
6	Apparatus and glassware	8
7	Handling of plant biostimulants and sampling	8
8	Procedure	9
8.1	General	9
8.2	Qualitative method	9
8.2.1	General	9
8.2.2	Incubation of the inoculated enrichment broth	9
8.2.3	Detection and identification of E. coli	9
8.3	Quantitative method	10
8.3.1	Test portion and initial suspension	10
8.3.2	Serial dilutions	10
8.3.3	Inoculation (surface plate method) and incubation	10
8.3.4	Counting the colony-forming units	11
9	Expression of results	11
9.1	Expression of results in the qualitative test	11
9.2	Expression of results in the quantitative test	11
10	Test report	12
Annex A (normative) Composition and preparation of culture media and reagents		13
A.1	General	13
A.2	Enrichment broth	13
A.3	Other enrichment broth	14
A.4	Selective agar for isolation	14
A.5	Other selective agar for isolation	15

A.6	Selective agar for confirmation	16
	Annex B (normative) Neutralization of the antimicrobial properties of the product	17
B.1	General	17
B.2	Suitability of the detection method	17
B.3	Interpretation of suitability test results	18
	Annex C (informative) Interlaboratory study	19
C.1	Materials used in the interlaboratory study	19
C.2	Results of the interlaboratory study	20
	Annex ZA (informative) Relationship of this European Standard and the essential requirements of Regulation (EU) 2019/1009 making available on the market of EU fertilising products aimed to be covered	22
	Bibliography	23