

DIN EN ISO 21570:2013-08 (E)

Foodstuffs - Methods of analysis for the detection of genetically modified organisms and derived products - Quantitative nucleic acid based methods (ISO 21570:2005 + Cor 1:2006 + Amd 1:2013)

Contents	Page
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Principle	6
5 Reagents	6
6 Apparatus and equipment	6
7 Guidelines concerning the procedure	7
8 Interpretation	8
9 Expression of results	9
10 Test report	9
Annex A (informative) Target taxon-specific methods	11
A.1 Target taxon-specific method for the absolute quantitation of the adh1 gene DNA of maize using real-time PCR	11
A.2 Target-taxon-specific method for the detection of DNA derived from rice	16
A.3 Target-taxon-specific method for the detection of components derived from tomato (Lycopersicon esculentum)	24
Annex B (informative) Screening methods	32
B.1 Screening method for the relative quantitation of the 35S-promoter DNA of soya bean line GTS 40-3-2 using real-time PCR	32
Annex C (informative) Construct-specific methods	40
C.1 Construct-specific method for the quantitation of soya bean line GTS 40-3-2 DNA using real-time PCR (Method 1)	40
C.2 Construct-specific method for the quantitation of soya bean line GTS 40-3-2 DNA using real-time PCR (Method 2)	47
C.3 Construct-specific method for the quantitation of Event176 maize DNA using real-time PCR	54
C.4 Construct-specific method for the quantitation of soya bean line GTS 40-3-2 DNA using real-time PCR	61
C.5 Construct-specific method for the quantitation of maize line MON 810 DNA using real-time PCR	69
C.6 Construct-specific method for the quantitation of maize line Event176 DNA using real-time PCR	76

C.7	Construct-specific method for the quantitation of maize line Bt11 DNA using real-time PCR	83
C.8	Construct-specific method for the quantitation of maize line GA21 DNA using real-time PCR	91
C.9	Construct-specific method for the quantitation of maize line T25 DNA using real-time PCR	98
	Annex D (informative) Event-specific methods	107
D.1	Event-specific method for the absolute and relative quantitation of maize line Bt11 DNA based on real-time PCR	107
D.2	Event-specific method for the relative quantitation of maize line MON 810 DNA using real-time PCR	113
	Bibliography	120