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Soil quality - Effects of pollutants on earthworms - Part 3: Guidance on the determination of effects in field situations (ISO 11268-3:2014)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/15

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EUROPEAN STANDARD

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English Version

**Soil quality - Effects of pollutants on earthworms - Part 3:
Guidance on the determination of effects in field situations (ISO
11268-3:2014)**

Qualité du sol - Effets des polluants vis-à-vis des vers de
terre - Partie 3: Lignes directrices relatives à la
détermination des effets sur site (ISO 11268-3:2014)

Bodenbeschaffenheit - Wirkungen von Schadstoffen auf
Regenwürmer - Teil 3: Anleitung für die Bestimmung von
Wirkungen unter Freilandbedingungen (ISO 11268-3:2014)

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Contents	Page
European foreword.....	3

European foreword

The text of ISO 11268-3:2014 has been prepared by Technical Committee ISO/TC 190 “Soil quality” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 11268-3:2015 by Technical Committee CEN/TC 345 “Characterization of soils” the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by February 2016, and conflicting national standards shall be withdrawn at the latest by February 2016.

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Endorsement notice

The text of ISO 11268-3:2014 has been approved by CEN as EN ISO 11268-3:2015 without any modification.

Soil quality — Effects of pollutants on earthworms —

Part 3: Guidance on the determination of effects in field situations

Qualité du sol — Effets des polluants vis-à-vis des vers de terre —

Partie 3: Lignes directrices relatives à la détermination des effets sur site





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Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Units	1
4 Principle	1
5 Reagents and material	2
6 Apparatus	2
7 Procedure	2
7.1 Sampling of earthworm populations.....	2
7.2 Preservation.....	3
7.3 Determination of biomass.....	3
8 Preparation for the test	3
8.1 Test site.....	3
9 Procedure	6
9.1 Application of test substance.....	6
9.2 Sampling dates.....	6
9.3 Reference substance.....	7
10 Data assessment	7
10.1 End points.....	7
10.2 Identification of earthworm species.....	8
10.3 Determination of biomass with gut content.....	8
11 Calculation and expression of results	8
12 Validity of the test	8
13 Test report	9
Annex A (informative) Additional requirements of pesticide testing	10
Annex B (informative) Information on specific earthworm species or communities in different climatic or geographic regions	11
Bibliography	12

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 190, *Soil quality*, Subcommittee SC 4, *Biological methods*.

This second edition cancels and replaces the first edition (ISO 11268-3:1999), which has been technically revised.

ISO 11268 consists of the following parts, under the general title *Soil quality — Effects of pollutants on earthworms*:

- *Part 1: Determination of acute toxicity to Eisenia fetida/Eisenia andrei*
- *Part 2: Determination of effects on reproduction to Eisenia fetida/Eisenia andrei*
- *Part 3: Guidance on the determination of effects in field situations*

Introduction

The earthworm field test is based on a method being developed by the German Federal Biological Research Centre for Agriculture and Forestry for the testing of pesticides.^[6] Later, it was internationally standardized by the International Organization for Standardization (ISO), taking into account results and recommendations of an international workshop in 1991 in Sheffield, United Kingdom, ^[7] “Ecotoxicology of Earthworms”, as a tool for characterizing soil quality. Growing experience has shown that the practical performance of the test can be improved. In two meetings organized by the Federal Biological Research Centre for Agriculture and Forestry (Braunschweig, 2002) and by the German Federal Agency for Consumer Protection and Food Safety (Lille, 2005), an ad-hoc working group of experts from various countries and institutions proposed recommendations that should be taken into account if revision has been approved by voting in the periodical review. A report of the discussions, comments, and recommendations has been published.^[8]

In cases where earthworms and other organisms are used as bioindicators to assess the soil quality of a site as a habitat for soil organisms, guidance for extraction procedures and advice for planning a survey is given in ISO 23611-1 to ISO 23611-6.

Soil quality — Effects of pollutants on earthworms —

Part 3:

Guidance on the determination of effects in field situations

1 Scope

This part of ISO 11268 specifies techniques for determining the effects of substances on earthworms in the field and provides a basis for determining the effects of chemicals applied to or incorporated into soil, including soil injections or drilled pelleted formulations.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 10390, *Soil quality — Determination of pH*

ISO 10694, *Soil quality — Determination of organic and total carbon after dry combustion (elementary analysis)*

ISO 11274, *Soil quality — Determination of the water-retention characteristic — Laboratory methods*

ISO 11277, *Soil quality — Determination of particle size distribution in mineral soil material — Method by sieving and sedimentation*

ISO 23611-1, *Soil quality — Sampling of soil invertebrates — Part 1: Hand-sorting and formalin extraction of earthworms*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN