

**DIN ISO 23611-1****DIN**

ICS 13.080.30

**Soil quality –  
Sampling of soil invertebrates –  
Part 1: Hand-sorting and formalin extraction of earthworms  
(ISO 23611-1:2006)  
English version of DIN ISO 23611-1:2007-02**

Bodenbeschaffenheit –  
Probenahme von Wirbellosen im Boden –  
Teil 1: Handauslese und Formalinextraktion von Regenwürmern (ISO 23611-1:2006)  
Englische Fassung DIN ISO 23611-1:2007-02

Document comprises 16 pages

## Contents

	Page
<b>National foreword .....</b>	<b>2</b>
<b>National Annex NA (informative) Bibliography .....</b>	<b>3</b>
<b>Introduction .....</b>	<b>4</b>
1     Scope .....	5
2     Terms and definitions .....	5
3     Principle .....	6
4     Reagents .....	6
5     Apparatus .....	6
6     Procedure .....	7
6.1     Sampling of the earthworms .....	7
6.2     Preservation .....	9
6.3     Determination of biomass .....	9
7     Data assessment .....	9
8     Study report .....	10
<b>Annex A (informative) Other methods for sampling .....</b>	<b>11</b>
<b>Annex B (informative) Species determination in peregrine earthworms .....</b>	<b>12</b>
<b>Annex C (informative) The modified TSBF Method .....</b>	<b>13</b>
<b>Bibliography .....</b>	<b>14</b>

## National foreword

This standard has been prepared by Technical Committee ISO/TC 190 "Soil quality".

The responsible German body involved in its preparation was the *Normenausschuss Wasserwesen* (Water Practice Standards Committee), Technical Committee NA 119-01-02-04 UA *Biologische Verfahren*.

Expert assistance and specialized laboratories will be required to perform the analysis described in this standard.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. DIN shall not be held responsible for identifying any or all such patent rights.

ISO 23611 consists of the following parts, under the general title *Soil quality — Sampling of soil invertebrates*:

- *Part 1: Hand-sorting and formalin extraction of earthworms*
- *Part 2: Sampling and extraction of micro-arthropods (Collembola and Acarina)*
- *Part 3: Sampling and soil extraction of enchytraeids*
- *Part 4: Sampling, extraction and identification of free-living stages of terrestrial nematodes*

The DIN Standards corresponding to the International Standards referred to in the bibliography of the ISO Standard are as follows:

ISO 10381-1	DIN ISO 10381-1
ISO 10390	DIN ISO 10390
ISO 10694	DIN ISO 10694
ISO 11268-3	DIN ISO 11268-3
ISO 11272	DIN ISO 11272
ISO 11274	DIN ISO 11274
ISO 11277	DIN ISO 11277
ISO 11461	DIN ISO 11461
ISO 11465	DIN ISO 11465

## National Annex NA (informative)

### Bibliography

DIN ISO 10381-1, *Soil quality — Sampling — Part 1: Guidance on the design of sampling programmes*

DIN ISO 10390, *Soil quality — Determination of pH*

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

DIN ISO 11268-3, *Soil quality — Effects of pollutants on earthworms — Part 3: Guidance of the determination of effects in field situations*

DIN ISO 11272, *Soil quality — Determination of dry bulk density*

DIN ISO 11274, *Soil quality — Determination of the water retention characteristics — Laboratory methods*

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

DIN ISO 11461, *Soil quality — Determination of soil water content as a volume fraction using coring sleeves — Gravimetric method*

DIN ISO 11465, *Soil quality — Determination of dry matter and water content on a mass basis — Gravimetric method*