



**SLOVENSKI STANDARD**  
**kSIST FprEN ISO 22030:2011**  
**01-april-2011**

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**Kakovost tal - Biološke metode - Kronična toksičnost za višje rastline (ISO 22030:2005)**

Soil quality - Biological methods - Chronic toxicity in higher plants (ISO 22030:2005)

Bodenbeschaffenheit - Biologische Verfahren - Chronische Toxizität in höheren Pflanzen (ISO 22030:2005)

Qualité du sol - Méthodes biologiques - Toxicité chronique sur les plantes supérieures (ISO 22030:2005)

**Ta slovenski standard je istoveten z: FprEN ISO 22030**

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**ICS:**

13.080.30      Biološke lastnosti tal      Biological properties of soils

**kSIST FprEN ISO 22030:2011**      **en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**FINAL DRAFT**  
**FprEN ISO 22030**

December 2010

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ICS 13.080.30

English Version

## Soil quality - Biological methods - Chronic toxicity in higher plants (ISO 22030:2005)

Qualité du sol - Méthodes biologiques - Toxicité chronique sur les plantes supérieures (ISO 22030:2005)

Bodenbeschaffenheit - Biologische Verfahren - Chronische Toxizität in höheren Pflanzen (ISO 22030:2005)

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If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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## Foreword

The text of ISO 22030:2005 has been prepared by Technical Committee ISO/TC 190 "Soil quality" of the International Organization for Standardization (ISO) and has been taken over as FprEN ISO 22030:2010 by Technical Committee CEN/TC 345 "Characterization of soils" the secretariat of which is held by NEN.

This document is currently submitted to the Unique Acceptance Procedure.

### Endorsement notice

The text of ISO 22030:2005 has been approved by CEN as a FprEN ISO 22030:2010 without any modification.

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**Soil quality — Biological methods —  
Chronic toxicity in higher plants**

*Qualité du sol — Méthodes biologiques — Toxicité chronique sur les  
plantes supérieures*

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**ISO 22030:2005(E)****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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 22030 was prepared by Technical Committee ISO/TC 190, *Soil quality*, Subcommittee SC 4, *Biological methods*.

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## Introduction

This International Standard describes a procedure for evaluating the quality of soils of different origin carrying unknown contaminations. The method, slightly modified, can also be used to measure the toxicity of known chemicals incorporated into soil.

The evaluation of the inhibition and chronic toxicity is based on emergence, vegetative growth and reproductive capacity of at least two species of higher plants.

This International Standard is based on:

- a) results of the research project “Development of a chronic bioassay using higher plants”, sponsored by the German Ministry for Education and Research (BMBF), Bonn [3], and
- b) discussions within the joint project “Ecotoxicological Test Batteries” forming part of the BMBF Joint Research Group “Processes for the Bioremediation of Soil” [10].

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