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**Kakovost tal - Laboratorijske metode za določevanje mikrobnega dihanja v tleh**  
**(ISO 16072:2002)**

Soil quality - Laboratory methods for determination of microbial soil respiration (ISO 16072:2002)

Bodenbeschaffenheit - Laborverfahren zur Bestimmung der mikrobiellen Bodenatmung  
(ISO 16072:2002)

Qualité du sol - Méthodes de laboratoire pour la détermination de la respiration  
microbienne du sol (ISO 16072:2002)

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**ICS:**

13.080.30

Biološke lastnosti tal

Biological properties of soils

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 16072**

June 2011

ICS 13.080.30

English Version

**Soil quality - Laboratory methods for determination of microbial  
soil respiration (ISO 16072:2002)**

Qualité du sol - Méthodes de laboratoire pour la  
détermination de la respiration microbienne du sol (ISO  
16072:2002)

Bodenbeschaffenheit - Laborverfahren zur Bestimmung der  
mikrobiellen Bodenatmung (ISO 16072:2002)

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## Foreword

The text of ISO 16072:2002 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 16072:2011 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of an identical text or by endorsement, at the latest by December 2011, and conflicting national standards shall be withdrawn at the latest by December 2011.

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

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# INTERNATIONAL STANDARD

**ISO  
16072**

First edition  
2002-12-15

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## Soil quality — Laboratory methods for determination of microbial soil respiration

*Qualité du sol — Méthodes de laboratoire pour la détermination de  
la respiration microbienne du sol*

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## ISO 16072:2002(E)

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## 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 16072 was prepared by Technical Committee ISO/TC 190, *Soil quality*, Subcommittee SC 4, *Biological methods*.

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## Introduction

This International Standard is derived from the German standard DIN 19737 (see [1]). It describes methods for the determination of microbial soil respiration in the laboratory.

Microbial soil respiration results from the mineralization of organic substances. In this process, organic substances are oxidized to the end products carbon dioxide and water, with concurrent uptake of O<sub>2</sub> for aerobic microorganisms. The soil respiration is measured by the determination of O<sub>2</sub> consumption and/or by CO<sub>2</sub> release. Respiration is a measure of the overall activity of soil microorganisms.

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