



**SLOVENSKI STANDARD
SIST EN ISO 29200:2020**

01-november-2020

**Kakovost tal - Ocenjevanje genotoksičnih učinkov na višje rastline -
Mikronukleusni preskus z bobom (*Vicia faba*) (ISO 29200:2013)**

Soil quality - Assessment of genotoxic effects on higher plants - *Vicia faba* micronucleus test (ISO 29200:2013)

Bodenbeschaffenheit - Beurteilung der genotoxischen Wirkungen auf höhere Pflanzen - Mikrokern-Prüfung mit *Vicia faba* (ISO 29200:2013)

Qualité du sol - Évaluation des effets génotoxiques sur les végétaux supérieurs - Essai des micronoyaux sur *Vicia faba* (ISO 29200:2013)

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Ta slovenski standard je istoveten z: EN ISO 29200:2020

ICS:

13.080.30 Biološke lastnosti tal Biological properties of soils

SIST EN ISO 29200:2020

en,fr,de

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EUROPEAN STANDARD

EN ISO 29200

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2020

ICS 13.080.30

English Version

Soil quality - Assessment of genotoxic effects on higher plants - *Vicia faba* micronucleus test (ISO 29200:2013)

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European foreword

The text of ISO 29200:2013 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 29200:2020 by Technical Committee CEN/TC 444 "Environmental characterization of solid matrices" 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of an identical text or by endorsement, at the latest by November 2020, and conflicting national standards shall be withdrawn at the latest by November 2020.

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INTERNATIONAL
STANDARD

ISO
29200

First edition
2013-09-01

**Soil quality — Assessment of
genotoxic effects on higher plants —
Vicia faba micronucleus test**

*Qualité du sol — Évaluation des effets génotoxiques sur les végétaux
supérieurs — Essai des micronoyaux sur *Vicia faba**

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Reference number
ISO 29200:2013(E)

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Case postale 56 • CH-1211 Geneva 20
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Published in Switzerland

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ISO 29200:2013(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.

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

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Introduction

In the field of assessment of the quality of soils and soil materials, it appears necessary to determine *in vivo* their genotoxic potential which may be induced by pollution or by a decontamination process. Indeed, genotoxic agents have the ability to damage the genome of living organisms or to interfere with its functioning, but they are not always detected by chemical analysis or classical ecotoxicological tests. Actually, genotoxic effects are often observed at sublethal concentrations, where no toxic effect (e.g. survival or growth) can be observed in the short term but some long term effects may be feared in living organisms. Moreover, higher plants, like *Vicia faba* (broad bean) are ecologically relevant to assess soils and soil materials quality.

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