ISO 21285:2019 (E)

Soil quality — Inhibition of reproduction of the soil mite (Hypoaspis aculeifer) by soil contaminants

Contents

Foreword

Introduction

1 Scope

2 Normative references

3 Terms and definitions

4 Principle

5 Reagents and material

5.1 Biological material
5.2 Test mixtures
5.3 Reference substance

6 Apparatus

7 Procedure

7.1 Experimental design
7.1.1 General
7.1.2 Range-finding test (preliminary test)
7.1.3 Definitive test
7.1.4 Limit test
7.2 Preparation of test mixtures
7.2.1 Testing contaminated soil
7.2.2 Testing substances added to the test substrate
7.2.3 Preparation of control containers
7.3 Addition of the biological material
7.4 Test conditions and measurements
7.5 Feeding of the mites
7.6 Determination of surviving predatory mites

8 Calculation and expression of results

8.1 Calculation
8.2 Expression of results

9 Validity of the test

10 Statistical analysis

10.1 General
10.2 Single-concentration tests
10.3 Multi-concentration tests
10.3.1 Range-finding test
10.3.2 Definitive test

11 Test report

Annex A (informative) Techniques for rearing and breeding of predatory mites

A.1 Rearing of Hypoaspis (Geolaelaps) aculeifer
A.2 Rearing of Typrophagus putrescentiae
A.3 Synchronisation of cultures

Annex B (normative) Determination of water-holding capacity

B.1 General
B.2 Apparatus
B.3 Procedure
B.4 Calculation of water-holding capacity (wwh)

Annex C (informative) Guidance on adjustment of pH of artificial soil

Annex D (informative) Extraction and counting of predatory mites

Annex E (informative) Basic information on the biology of Hypoaspis (Geolaelaps) aculeifer

Page count: 21