

# DIN EN ISO 21285:2021-02 (E)

## Soil quality - Inhibition of reproduction of the soil mite (*Hypoaspis aculeifer*) by soil contaminants (ISO 21285:2019)

---

<b>Contents</b>	<b>Page</b>
European foreword .....	3
Foreword .....	4
Introduction .....	5
<b>1 Scope</b> .....	<b>6</b>
<b>2 Normative references</b> .....	<b>6</b>
<b>3 Terms and definitions</b> .....	<b>7</b>
<b>4 Principle</b> .....	<b>8</b>
<b>5 Reagents and material</b> .....	<b>9</b>
5.1 Biological material .....	9
5.2 Test mixtures .....	9
5.3 Reference substance .....	10
<b>6 Apparatus</b> .....	<b>11</b>
<b>7 Procedure</b> .....	<b>11</b>
7.1 Experimental design .....	11
7.1.1 General .....	11
7.1.2 Range-finding test (preliminary test) .....	12
7.1.3 Definitive test .....	12
7.1.4 Limit test .....	12
7.2 Preparation of test mixtures .....	13
7.2.1 Testing contaminated soil .....	13
7.2.2 Testing substances added to the test substrate .....	13
7.2.3 Preparation of control containers .....	14
7.3 Addition of the biological material .....	14
7.4 Test conditions and measurements .....	14
7.5 Feeding of the mites .....	14
7.6 Determination of surviving predatory mites .....	15
<b>8 Calculation and expression of results</b> .....	<b>15</b>
8.1 Calculation .....	15
8.2 Expression of results .....	15
<b>9 Validity of the test</b> .....	<b>15</b>
<b>10 Statistical analysis</b> .....	<b>16</b>
10.1 General .....	16
10.2 Single-concentration tests .....	16
10.3 Multi-concentration tests .....	16
10.3.1 Range-finding test .....	16
10.3.2 Definitive test .....	16
<b>11 Test report</b> .....	<b>17</b>
<b>Annex A (informative) Techniques for rearing and breeding of predatory mites</b> .....	<b>19</b>
<b>Annex B (normative) Determination of water-holding capacity</b> .....	<b>20</b>
<b>Annex C (informative) Guidance on adjustment of pH of artificial soil</b> .....	<b>21</b>
<b>Annex D (informative) Extraction and counting of predatory mites</b> .....	<b>22</b>
<b>Annex E (informative) Basic information on the biology of <i>Hypoaspis (Geolaelaps) aculeifer</i></b> .....	<b>23</b>
<b>Bibliography</b> .....	<b>24</b>