

PHYTOTOKKIT solid samples

HIGHER PLANTS Toxicity TEST

3 days germination and early growth test with
seeds of 3 higher plants

Conform with ISO Standard 18763

The PHYTOTOKKIT SOLID SAMPLES contains all the materials to perform **one complete test with one monocotyl and two dicotyl plant species**, in three replicates



Standardised small-scale bioassays with the seeds of higher plants, the monocotyl *Sorghum saccharatum* (Sorgho) and the dicotyls *Lepidium sativum* (garden cress) and *Sinapis alba* (mustard)

PHYTOTOKKIT SOLID SAMPLES applicable for toxicity screening of soils - sludges - sediments - composts - chemicals - pesticides - biocides - effluents for irrigation - solid wastes and other



CONTENTS OF THE PHYTOTOXKIT SOLID SAMPLES

The PHYTOTOXKIT SOLID SAMPLES contains all materials to perform one complete phytotoxicity test with three test species.

- 18 transparent test containers with black filter paper in holders, 9 bags with OECD reference soil, tubes with seeds of three test species
- Detailed Standard Operating Procedure
- Quality Control specification sheet

REPRODUCIBILITY

COST-EFFECTIVENESS

USER-FRIENDLINESS

- The calibrated high quality seeds, the special standard test containers and materials are a guarantee for the high repeatability and reproducibility of the assays, in comparison to conventional assays on plants.
- Three test species have been selected for the Phytotoxkit Solid Samples because of their very rapid germination and growth of their roots and shoots, which allow observations and scoring after only 3 days.
- Phytotoxkit assays can also be applied with any other type of seeds, with adaptation of the exposure time in function of the speed of germination and growth of the plants.
- The Phytotoxkit Solid Samples has easy to follow instructions for the conduct of the toxicity test.
- Direct observation of the germinated seeds and measurement of the roots (and shoots) in the unique transparent test containers is enabled by digital image analysis.
- Digital image capturing of the germinated seeds in the test containers can be performed with any type of camera; freeware image analysis can be applied for subsequent length measurements.
- Vertical incubation of the flat test containers in their holders is standard requiring a minimum of shelf- and incubation space.

SENSITIVITY

VALIDATION

- The Phytotoxkit assay is used in many environmental laboratories and research institutes worldwide and has been validated by an extensive international interlaboratory comparison.
- The PHYTOTOXKIT SOLID SAMPLES strictly adheres to the protocols for regulatory testing prescribed by international organisations; ISO Standard 18763.
- A substantial number of publications, posters, reports and reviews can be found on www.microbiotests.com