

PHYTOTOXKIT LIQUID samples

HIGHER PLANTS Toxicity TEST

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

Conform with ISO Standard 18763

The PHYTOTOXKIT LIQUID SAMPLES contains all the materials to perform a phytotoxicity test with three plant species at one selected concentration of a toxicant 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)

PHYTOTOXKIT LIQUID SAMPLES applicable for toxicity screening of chemicals - leachates of soils or solid wastes - sediment pore waters and elutriates - wastewaters and other research applications



3 days Higher Plants Toxicity Test For Toxicity Screening of

Chemicals - Leachates of Soils and Solid wastes -
Sediments pore waters and elutriates - Wastewaters

CONTENTS OF THE PHYTOTOXKIT LIQUID SAMPLES

The PHYTOTOXKIT LIQUID SAMPLES contains all materials to perform either a **limit** test with three plant species (or on demand a **complete** test with one plant species).

- 18 transparent test containers with a foam pad, a parafilm sheet, a thick white filter paper and a black filter paper - holders for the test containers and tubes with seeds of 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.
- The three test species have been selected for the Phytotoxkit Liquid 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 Liquid 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; free-ware 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.
- The PHYTOTOXKIT LIQUID 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