

# Terrestrial ecotoxicity: Plant test (OECD 208)

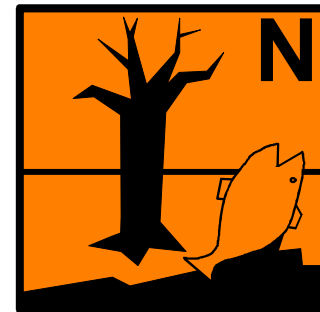
- **Objective:** toxic effects on producers in the terrestrial ecosystem, toxic effects on crops

- **Principle:** seedling emergence and early growth of higher plants following exposure to the test substance in/on soil is assessed for different plant species (3-8 species)

- **Development Stage:** routine

- **Results / data:** EC50, NOEC, LOEC

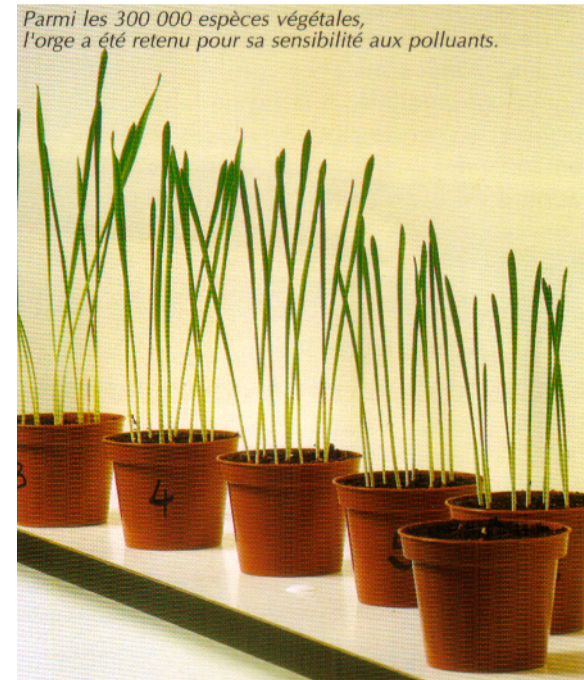
- **Applicability Domain:** hazard assessment (R56), risk assessment, PNEC calculations



# Terrestrial ecotoxicity: Plant test (OECD 208)

## Experimental layout

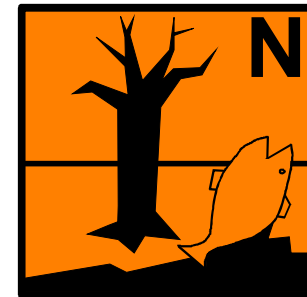
**Different plant species are grown on a concentration series of the test substance in artificial soil.**



**Emergence and biomass are evaluated after a suitable period of growth (depending upon the species)**

# Terrestrial ecotoxicity: Worm test (OECD 207)

- **Objective:** acute toxicity for soil organisms (consumers)
- **Principle:** earthworms (*Eisenia fetida*) are exposed to a dilution series of the test substance in soil. Weight and survival are assessed after 7 and 14 days of exposure.
- **Development Stage:** R&D / validation stage / routine
- **Results / data:** LC50, EC50
- **Applicability Domain:** hazard assessment (R56), risk assessment, PNEC calculations



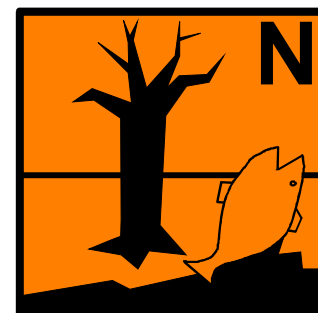
# Terrestrial ecotoxicity: Chronic Worm test (OECD 222)

- **Objective:** Chronic toxicity for soil organisms (consumers)

- **Principle:** adult organisms (*Eisenia fetida*) are exposed to a dilution series of the test substance. Growth and mortality are assessed after 4 weeks of exposure. The adults are then removed and the effects on reproduction are assessed after a further 4 weeks by counting the number of offspring present in the soil.

- **Development Stage:** routine

- **Results / data:** NOEC, LOEC, EC<sub>x</sub>

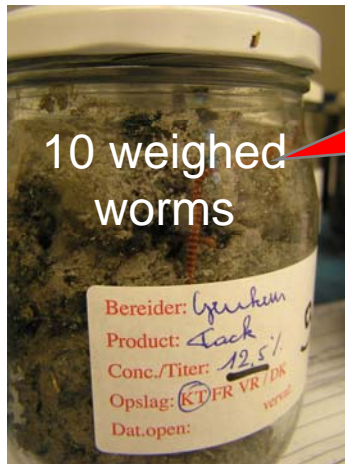


- **Applicability Domain:** hazard assessment (R56), risk assessment, PNEC calculations

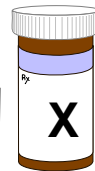
# Terrestrial ecotoxicity: Worm Tests



## Experimental layout



250 g artificial ground



6 concentrations

3 replicates/concentration

OECD 207: acute tox: 7 days

OECD 222: chronic tox: 4 weeks

Mortality check  
Reduction in weight