

Name and surname:

UCO:

Date:

Name at least three reasons why, in addition to chemical analyzes and limits, ecotoxicological bioassays should be involved in the assessment of soil, water and sediments.

What do we mean by "rapid screening bioassay – a commercially available toxkit"?

In what two fundamental conceptual approaches can bioassays be involved in ecotoxicological research / evaluation?

List at least three possible ways of classifying ecotoxicological bioassays, including the basic categories belonging to each of these classifications.

List at least 2 bioassays that are OECD standard and 2 bioassays that are ISO standard (literal name is not needed) for water producers / consumers / destructants and for soil producers / consumers / destructants.

Can the ecotox bioassays be used also for the testing of real environmental samples (not only for the testing of chemicals) ?

Which are the most often parameters derived from the concentration-response data ?

Can you draw example of concentration-response relationship, describe what is what and which outputs can be derived from it?

There is 1 mg of fungicide tebuconazole dissolved in 50 ml of water. Will this concentration cause any mortality of *Daphnia* if you know that LC50 (*D. magna*, 24 h) for tebuconazole is 4 µg/ml ?

*Folsomia candida* (soil springtail) test was performed for the insecticide toxaphene. Because toxaphene is insoluble, volatile solvent was used to introduce it to the soil in the test preparation. So, there was

control (water) and solvent control (solvent with no toxaphene). Estimate approximately LOEC, NOEC and EC50 for the *Folsomia candida* from the test results ([www.bit.ly/3GEnQgG](http://www.bit.ly/3GEnQgG))