



Original thinking... applied



Water-Sediment *Myriophyllum spicatum* Toxicity Test

This test is designed to determine the effects of the test material on the growth of *Myriophyllum spicatum* plants.

Apices of non-flowering *Myriophyllum spicatum* plants in sediment are exposed to a series of concentrations of the test material. Exposure is either via addition of test material to overlying water or by spiking sediment and planting apices into the treated sediment.

Assessments made at the end of the 14 day exposure period include fresh and dry weight, and shoot length. Qualitative observations of effects such as growth deformities, chlorosis and necrosis are also made. Samples are taken for analysis at the start and end of the exposure period to determine the concentrations tested.

EC₅₀ values – the concentration of the test chemical which is estimated to cause a 50% of the average specific growth rate and yield within a defined exposure period are calculated. In addition, the No Observed Effect Concentration (NOEC) and Lowest Observed Effect Concentration (LOEC) values will also be calculated.

Test Guidelines and References

OECD Guidelines for the Testing of Chemicals.

Guideline 239: Water-Sediment *Myriophyllum spicatum* Toxicity Test, adopted 26 September 2014.

FERA'S WORK IN AQUATIC ECOTOXICOLOGY

Fera offers a full package of studies to GLP compliant studies on aquatic organisms. Fera tests for the potential toxic effects of plant protection active ingredients and products, veterinary products, biocides, industrial chemicals and their significant metabolites in accordance with current OECD and if appropriate EPA guidelines, covering the requirements for the registration process.

All of Fera's studies are planned and performed by an experienced team of scientists and technical personnel, with the analytical dose verification and fate of the active ingredient(s) performed as close as possible in parallel to the biological part of the study. We can also adapt our services to provide bespoke tests that meet your specific data requirements.

MORE ABOUT FERA

Fera is based at the National Agri-Food Innovation Campus near York, UK.

We work closely with plant protection and veterinary medicine product manufacturers to help develop effective, sustainable and safe chemical products that minimise ecosystem impacts and pollution, while maximising the beneficial effects for crops, plants and animals.

Combining the extensive expertise of our scientists with advanced resources and GLP-compliant laboratories, we provide valuable support to companies in their chemical evaluation and registration efforts.

GET IN TOUCH

For more information and to book a test, call Fera on **+44 (0)300 100 0321**, email **sales@fera.co.uk** or visit **www.fera.co.uk/chemical-regulation**

