

AQUATIC TOXICOLOGY

STRONGER TOGETHER

Welcome to Eurofins Agrosience Services

We are a leading provider of product development consultancy and technical support to the crop protection industry. Our technical activities involve conducting field and laboratory studies to determine the safety and efficacy of new agrochemicals and crop varieties. With over 25 years of experience, Eurofins Agrosience Services offers outstanding technical knowledge and project management skills. By acquiring a carefully selected range of CRO's, we have created a unique portfolio of expertise that provides analytical, regulatory and field support to plant breeders, agrochemical, biopesticide, biocide and fine chemical manufacturers.

Eurofins Agrosience Services offers a full package of studies to GLP on aquatic non-target organisms, on microorganisms and ready biodegradability tests. All studies are planned and performed by an experienced team of scientists and technical personnel in accordance with the most recent guidelines (OECD, EPA, OPPTS), covering the requirements for registration of plant protection products (PPPs), pharmaceutical products and REACH. The analytical dose verification and fate of the active ingredient is performed as close as possible in parallel to the biological part of the study.

Algae and Aquatic Plants

The toxic effects of PPPs, chemicals and metabolites on algae and aquatic plants are examined using different types of study designs in accordance with current OECD and EPA guidelines. Depending on demand, algae studies can be performed with different species of green algae, blue green algae, diatoms or sea water diatoms. Aquatic plant studies can be performed either on *Lemna* or *Myriophyllum*. To meet specific demands we have different species cultured in-house.

Aquatic Invertebrates

We perform studies with *Daphnia*, *Chironomus*, *Gammarus*, *Asellus*, *Hyalella* and *Lumbriculus*. For all mentioned genus, in-house cultures are available. Test designs can be adapted to your needs with respect to the test item or application technique. Different combinations of invertebrate genus are offered in microcosm test designs.

Fish

Toxicity, growth and bioaccumulation tests are offered with rainbow trout and carp (local supplier) or zebrafish (in-house culture). Depending on the test item, static, semi-static or flow through test designs are applied. To expand our technical capabilities, six new flow-through systems have been added to our aquatic laboratory including forty aquaria.

Microorganisms and Ready Biodegradability

The toxicity of any test item on microorganisms is assessed by the respiration inhibition test in accordance with OECD 209.

Ready biodegradability is assessed by tests as per OECD 301, e.g. by the closed bottle test (OECD 301D). These tests are commonly performed in fresh water, however, seawater can be used where adequate (OECD 306).

Accompanying Analysis

For all aquatic tests, accompanying analytical determinations of the test item are required. The determinations are done in-house following SANCO/3029/99 rev. 4 by the chemistry department.

Special Skills

- Microcosm studies adapted on sponsors demands
- Water / Sediment Test with spray application (spray cabin)

Eurofins Scientific Group

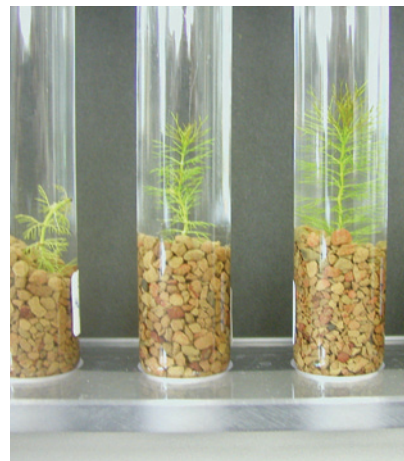
Eurofins Scientific is a life sciences company that serves a wide range of industries including the pharmaceutical, agricultural, food and environmental sectors.

Today the Eurofins Group is a leading provider of analytical services with:

- An international network of 150 laboratories across 30 countries in Europe, the USA, Asia and South America
- About 9,500 staff
- A portfolio of over 40,000 reliable analytical methods
- More than 80 million assays per year to establish the safety, composition, authenticity, origin, traceability, identity and purity of biological substances



Lemna gibba liquid culture



Myriophyllum sp.



Rainbow trout