

AQUATIC INVERTEBRATES STUDIES

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.

The toxic effects of plant protection products (PPPs), pharmaceuticals and chemicals to aquatic invertebrates are tested in accordance with the latest OECD and OPPTS guidelines.

Studies with *Daphnia*

Effects on daphnids are assessed in accordance with relevant guidelines OECD 202 or OPPTS 850.1010 (acute testing) and OECD 211 or OPPTS 850.1300 (chronic testing). Studies can be performed with *Daphnia magna* or *Daphnia pulex*. Both species are cultured in-house.

Studies with *Gammarus* and *Asellus*

Effects on Gammarids and Asellids are assessed following OPPTS 850.1020 as an acute test. The study design can be adapted on demand. An in-house culture of both *Gammarus pulex* and *Asellus aquaticus* is available.

Studies with *Hyalella*

Effects on *Hyalella azteca* are assessed following OPPTS 850.1735 in a water-sediment system. *H. azteca* is cultured and reared in-house.

Studies with *Chironomus*

Effects to the sediment-dwelling larvae *Chironomus riparius* are routinely tested in accordance with the recent OECD guidelines. Acute Toxicity Tests are performed according to the recent OECD draft guideline (2010). The prolonged exposure is assessed depending on the exposure scenario as a spiked sediment test (OECD 218) or spiked water test (OECD 219).

The effects of life-long exposure of different test items are tested with the Chironomid Life-Cycle Toxicity Test following OECD guideline 233.

We are experienced in ¹⁴C-labelled testing schemes and perform this in-house.

Studies with *Lumbriculus*

The endobenthic aquatic oligochaet *Lumbriculus variegatus* is used to study the effects of sediment bound substances in accordance with OECD guideline No. 225 in a water-sediment system. Effects can also be assessed in an acute toxicity test.

Bioaccumulation studies with in-house analytics for this test species are also possible.

Eurofins Scientific Group

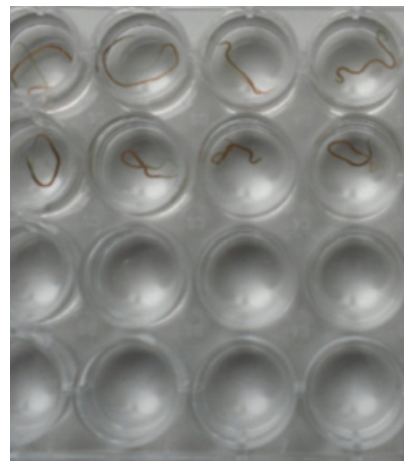
Eurofins Scientific is a life sciences company that serves a wide range of industries including the pharmaceutical, agricultural, food and environmental sectors.

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

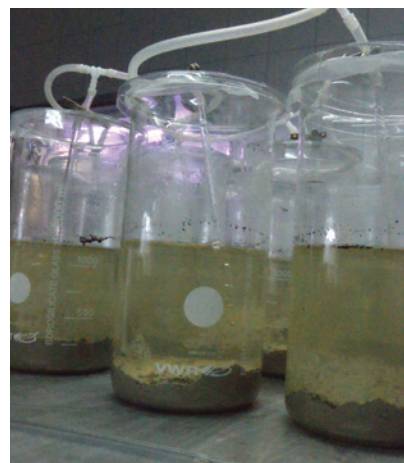
- An international network of 150 laboratories across 30 countries in Europe, the USA, Asia and South America
- About 9,500 staff
- A portfolio of over 40,000 reliable analytical methods
- More than 80 million assays per year to establish the safety, composition, authenticity, origin, traceability, identity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



Male adult non-biting midges



Acute toxicity testing with *Lumbriculus variegatus*



Set-up for Water/Sediment Test