

## Aquatic invertebrates studies

### Welcome to Eurofins Agrosience Services

The toxic effects of plant protection products (PPPs), pharmaceuticals and chemicals to aquatic invertebrates are tested in accordance with the latest OECD, OPPTS and JAMAFF 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 on reproduction). Studies are usually performed with *Daphnia magna*. Several additional species are available on request.

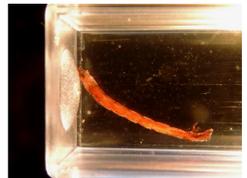
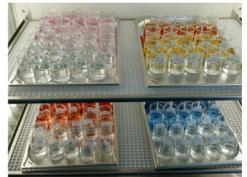
#### Studies with *Chironomus*

Acute Toxicity Tests on the sediment-dwelling larvae *Chironomus riparius* are routinely performed according to OECD guideline 235 (2011). The prolonged exposure is assessed depending on the exposure scenario as a spiked sediment test (OECD 218) or spiked water test (OECD 219). Organisms are cultured in-house and available during the whole year.

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

#### Studies with *Lumbriculus*

For assessing the effects of prolonged exposure of the endobenthic aquatic oligochaete *Lumbriculus variegatus* we perform tests according to OECD guideline 225 using spiked sediment to study the effects of sediment bound substances. Effects can also be assessed in an acute toxicity test. Bioaccumulation studies with in-house analytics for this test species are also possible.



### Studies with additional Invertebrates

To account for the requirements of higher-tier effect assessments based on laboratory toxicity tests with additional species more than ten further invertebrates are available. Exemplary genera are: *Chaoborus*, *Culex*, *Cyclopoida*, *Zygoptera*, *Ephemeroptera*, *Trichoptera*, *Daphnia obtusa*, *Daphnia pulicaria*, *Daphnia longispina* and *Daphnia curvirostris*. For most of the mentioned genera and species, in-house cultures are available. According to the (special) requirements most suitable OECD and OPPTS guidelines are used while test designs and durations are adapted.

### Special skills:

All tests can be performed static, semi-static or for some species also in flow-through test design. All kinds of pulsed-dose application can be realized.

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### Eurofins Agrosience Services Group

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