



SAFETY ASSESSMENT

Species

- Trout (*Oncorhynchus mykiss*)
- Salmon (*Salmo salar*)
- Common carp (*Cyprinus carpio*)
- Shellfish (e.g., *Mytilus edulis*)
- Other species are available

Administrative Routes

- Aqueous exposure
- Dietary (feed incorporation)
- Oral gavage
- Treatment bath/immersion

Fish Metabolism and Feeding Studies

Charles River has over four decades of experience performing regulatory studies for both agrochemical and animal health products. Our experienced scientists have been conducting fish metabolism and feeding studies since the 1990s.

Metabolism Studies

Metabolism studies using radiolabeled test items can be conducted at our facility in both marine and freshwater species. We have also partnered with several other laboratories to accommodate large study designs. Using our knowledge and experience of fish metabolism from the animal health sector, we have adapted study designs to meet fish metabolism requirements for agrochemicals, as a complement to our livestock metabolism capabilities.

Feeding Studies

To meet regulatory requirements, residue depletion studies must be performed to establish minimum residue levels (MRL) and an appropriate withdrawal period. Working closely with our analytical chemistry group and partner laboratories, we can offer residue depletion studies along with concurrent residue analysis.

Feed Incorporation

In addition to testing items through an aqueous exposure, our experienced scientists are able to incorporate test items into feed pellets, allowing for both homogeneity of the test item and palatability to the fish. Established techniques ensure the test item remains in the feed until ingestion, with added coatings if required, and remains stable during administration.

EVERY STEP OF THE WAY

Study Design

Various study designs are available to reduce any potential issues related to the recirculation of test items and/or excreted metabolites, ensuring a single controlled-exposure route.

Support Services

We offer complete metabolic study services, from assisting with procurement of radiolabeled test items from special synthesis laboratories, to structural elucidation of novel metabolites extracted from fish tissues using the latest analytical equipment and techniques.

We can also support your feeding studies with a dedicated analytical team, which uses the latest analytical equipment and is highly experienced in the development and validation of methods in the conduct of non-radiolabeled studies.