



Biopesticide Testing

Smithers brings decades of scientific insight and practical expertise in the evaluation of biopesticides, encompassing microbial pesticides, complex proteins, biological chemical extracts, and emerging nucleic acid-based technologies. At Smithers, our Biosafety Level 2 (BSL-2) compliant microbiology laboratory provides the rigor and capacity essential for advanced regulatory testing, including analytical dose verification for

ecotoxicology studies, comprehensive analysis of samples (5-Batch), and storage stability assessments. With a foundation in GLP compliance and alignment to global regulatory guidelines, we deliver both guideline-driven and research-stage studies that enable our partners to bring innovative biopesticide solutions to market with confidence and scientific integrity.





Microbial Pesticide Testing

Smithers provides comprehensive support for the regulatory environmental testing of microbial pesticides, as well as other biological and conventional products, with global capabilities aligned with EPA, EU, and OECD requirements and test designs.

Aquatic Ecotoxicology

- Freshwater and marine species
- Invertebrates: *Daphnia*, shrimp
- Fish: freshwater and marine
- Full suite of EPA and OECD studies
- Acute and chronic test capabilities

Terrestrial Ecotoxicology

- Non-target insects, including honey bee larval & adult testing
- Broad range of EPA & OECD terrestrial ecotoxicology studies

Product Analysis

- Storage stability studies to support shelf-life and global registration requirements
- Physical and chemical characteristics testing in alignment with EPA and OECD guidelines
- Contaminant analysis to identify and quantify impurities
- 5-Batch analysis for technical equivalence, compliance, and regulatory submissions

Analytical Support

- Certificates of Analysis (CoA)
- Survivability & suspendability, and diet assessments
- Enumeration method development, transfer, and validation

Natural Product Testing Expertise

Smithers offers full suite ecotoxicology, environmental fate & metabolism, product chemistry and residue testing laboratory services for full or abbreviated regulatory requirements.

Botanical & Natural Products

- Plant extracts— expertise with complex mixtures & multiple actives
- Proteins & peptides — from mixtures to purified natural & recombinant actives
- Specialists in *Bacillus thuringiensis* (Bt) Cry protein testing
- Inorganic & organic compounds of natural origin
- Nucleic acids including RNA molecules

Semiochemicals

- Pheromones
- Attractants
- Repellents

PARTNER WITH SMITHERS

Delivering trusted, science-driven testing solutions for global registration success

Learn more about our offerings at www.smithers.com or contact us to discuss your testing needs.

Environmental Risk Sciences Division

infoERS@smithers.com
www.smithers.com

Wareham, Massachusetts, U.S.A.
Tel: +1 508 295 2550

Tokyo, Japan
Tel: +81 (3) 6862 7082

Harrogate, U.K.
Tel: +44 (0) 1423 532710

Derby, U.K.
Tel: +44 (0) 1332 987480



Copyright © 2025 Smithers ERS LLC
All rights reserved. | Pub. 10/25