

About Battelle

Battelle is the world's largest nonprofit independent research and development organization, providing innovative solutions to the world's most pressing needs through its four global businesses: Health and Life Sciences, National Security, Energy Technology, and Laboratory Management. It advances scientific discovery and application by conducting \$5 billion in global R&D annually through contract research, laboratory management, and technology commercialization.



Plant Metabolism

Battelle offers the full range of studies to support agrochemical development and global registration (EU, EPA, and JMAFF). Battelle's services range from single studies to program management, including dossier preparation and submission.

All senior staff are industry-trained with more than 125 years of combined experience and a proven track record in successfully completing programs of work.

At our GLP-compliant facilities, we have modern purpose-built laboratories including all the equipment and instruments required for plant metabolism and confined crop rotation studies.

The studies can be conducted in the greenhouse under environmentally controlled conditions or outside at our dedicated field plot facility where typical farming and climatic conditions can be more closely simulated.

A wide range of crops can be studied including cereals, vegetables, top fruit, and vines.

The application is made as intended for the commercial use pattern (seed-treatment, pre-emergence, or post-emergence) using a small plot sprayer.

Battelle has the expertise to formulate the radio-labelled active substance to mimic the commercial product.

Following sampling, residue is extracted from the plant matrix and profiled by HPLC coupled to radio chemical detectors and TLC using instant imager and phosphor imager technology.

Metabolites are identified using co-chromatography with known markers. Unknown metabolites are identified using HPLC coupled to a tandem mass spectrometer.

Studies are tailored to individual customer's requirements and to fulfill current regulatory guidelines.