



Original thinking... applied

## Residues in Rotational Crops Test

We carry out this test to determine the amount of residues of a chemical which may be accumulated, via soil uptake, into rotational crops.

Data from this test can be used to establish crop rotation restrictions, assess the significance of residues for dietary risk assessment and determine if maximum residue limits (MRLs) will be needed in rotational crops.

We apply a typical end-use chemical product to a field plot and then test representative rotational crops from the root and tuber vegetable, small grain and leafy vegetable crop groupings in order to determine the levels of residue uptake under actual field conditions. The crops are planted at three rotational intervals and tests take place at two different sites.

If a crop that is important to the rotation is not covered by these three groupings, we will include an additional representative group.

We analyse all of the plant parts defined as raw agricultural commodities (RACs), including the leaves of the root and tuber vegetables.

### Test guidelines

**OECD Guidelines for the Testing of Chemicals.** OECD Test Guideline 502: Metabolism in Rotational Crops.

### **U.S. Environmental Protection Agency (1996).**

OPPTS Harmonized Test Guideline 860.1850. Confined Accumulation in Rotational Crops.

### **U.S. Environmental Protection Agency (1996).**

OPPTS Harmonized Test Guideline 860.1900. Field Accumulation in Rotational Crops.

# FERA'S WORK IN ANIMAL AND PLANT METABOLISM

Metabolism studies play a crucial role in providing the data which supports chemical companies in completing thorough environmental risk assessments.

Fera's support and expertise helps chemical companies to achieve successful product registrations and operate ongoing due diligence. Our metabolism studies include a range of regulatory compliant tests to assess the nature of residues and the test substance's metabolic pathways in animals and plants/crops, and we provide a range of services from single studies to complex, whole programmes, including dossier preparation and submission.

Fera's multidisciplinary teams combine decades of agrochemical and veterinary drug industry experience with world-class technical expertise and analytical capabilities.

We operate in GLP-compliant facilities in the UK and provide regulatory compliant studies for submission in all geographic regions.

## MORE ABOUT FERA

Fera is based at the National Agri-Food Innovation Campus near York, UK.

We work closely with plant protection and veterinary medicine product manufacturers to help develop effective, sustainable and safe chemical products that minimise ecosystem impacts and pollution, while maximising the beneficial effects for crops, plants and animals.

Combining the extensive expertise of our scientists with advanced resources and GLP-compliant laboratories, we provide valuable support to companies in their chemical evaluation and registration efforts.

## GET IN TOUCH

For more information and to book a test, call Fera on **+44 (0)300 100 0321**, email **[sales@fera.co.uk](mailto:sales@fera.co.uk)** or visit **[www.fera.co.uk/chemical-regulation](http://www.fera.co.uk/chemical-regulation)**

