



Predatory Soil Mite (*Hypoaspis aculeifer*)

For plant protection product applied directly to the soil granules, seed treatments and pellets) or where contamination of the soil is possible, registration data are required on non-target soil organisms under EU Regulation (EC) No 1107/2009.

For endo/ectoparasiticides (veterinary medicines) some regulatory authorities (VICH) require information on the

toxicity to non-target arthropods including collembola and predatory soil mites. This is endorsed by the EU in order to assess the risk for terrestrial vertebrates.

The predatory mite *Hypoaspis aculeifer* is considered to be a relevant representative of soil fauna and predatory mites in particular. It is distributed worldwide and is easily reared in the laboratory, and is an ecologically relevant test species.

LABORATORY TESTS

REPRODUCTION TEST

Fera offers standard laboratory tests with the *Hypoaspis aculeifer* following OECD guidelines.

How we carry out the tests

Female mites are exposed to the test compound in a treated artificial soil (according to OECD requirements). The product to be tested is incorporated into the substrate. Effects on mortality and reproductive output are assessed after 14 days of exposure, when mites are extracted from the test system via a heat gradient and counted.

Endpoints

Endpoints for the test are:

- Mortality after 14 days of exposure
- Reproductive capacity of female mites
- EC₁₀ (dose rate causing 10% reduction in reproductive rate), and/or NOEC (no observable effect concentration)

ADDITIONAL TESTING

Fera's studies are GLP-compliant and can be adapted to provide bespoke tests that meet your specific data requirements. Fera also offers in-house dose verification or residue analysis to validated methods.

Test guidelines

OECD Guideline No. 226 (2016) for the Testing of Chemicals
"Predatory mite (*Hypoaspis (Geolaelaps) aculeifer*) reproduction test in soil".

MORE ABOUT FERA

Fera is based at the National Agri-Food Innovation Campus near York, UK. We have a long track record of developing and providing ecotoxicology services to support environmental risk assessments for companies developing plant-protection and veterinary medicine products.

Our scientists combine extensive expertise with Fera's advanced resources and GLP-compliant laboratories, to assess the impact of plant protection and veterinary medicine products on soil organisms.

As a leading CRO for the development and registration of veterinary medicine products, you will have access to unrivalled expertise to assist with the regulatory requirements for your veterinary medicine submissions or extensions.

We'll work in partnership with you to devise and conduct the appropriate tests to provide the essential data you need for robust environmental risk assessments.

GET IN TOUCH

For more information and to book a test, call Fera on **+44 (0)300 100 0321**, email **sales@fera.co.uk** or visit **www.fera.co.uk/terrestrial-ecotoxicology**

