PREDATORY MITE FIELD STUDIES

Welcome To Eurofins Agroscience Services

The toxic effects of plant protection products (PPPs) to predatory mites are tested following the latest IOBC guideline (Blümel et al. 2000). Eurofins Agroscience Services has experience in conducting these studies since the early nineties.

Principles

The basic design consists of control and test item plots with five replicates, and reference plots with three replicates. Most studies are conducted in grape vine or in apple orchards. The plot size in grape vine is about fifteen plants whereas in apple, eight trees are taken per plot. To ensure that there is no contamination within the different plots, samples are only taken from the inner eleven vine plants or six apple trees respectively.

The applications are performed with an atomiser (apple) or a knapsack sprayer (vine). To minimise the risk of contamination during the application, all control plots are addressed first, followed by the treatment plots (if requested with increasing concentrations) and finally the reference item.

The number of samplings taken depends on the number of applications. In general five samplings are done, one before the first application, with subsequent samplings in defined periods after each application. The last sampling is done four weeks after the last application.

At every sampling, flower buds or leaves are taken. The sample components are washed using the Boller (1984) method, where the mites are caught with sieves. After washing is completed, the mites are counted and determined.
Location of trial sites
We have experience with predatory mite studies across Europe and trials can be performed in Northern, Central and Southern Europe. Over recent years, expert teams have been established in Germany, France and Spain.

We have performed trials on orange, apple, plums, in grape vine and on annual crops (maize).

Special skills
• Mite determination and preparation in-house
• Long-term co-operation with farmers
• Special application techniques possible (funnel sprayer)
• Potential to develop and adapt test designs for special requests
• Statistics using SAS

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The Agroscience Group offers unparalleled expertise to the crop protection industry; with over 750 staff globally and more than 80 fully owned facilities across 25 countries, we are committed to developing and growing in order to meet the needs of the Agroscience industry.