Non-Target Arthropod Field Studies (NTA) in-crop and off-crop

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In accordance with the latest workshop for non-target arthropod field studies (ESCORT 3; Alix et al. 2012) and the RIVM guidance document (De Jong et al. 2010), field studies are separated into in-crop and off-crop non-target arthropod field studies. Depending on the requested study type, we can adapt the study design to your requirements.

In-crop studies in arable crops and orchards
The protection goal for an in-crop study is the preservation of the ecological relevant functions of the cropping area. For these studies the species composition and abundance of arthropods is monitored in a representative crop with at least two sampling methods over at least one year. We have experience with various sampling methods in Southern, Central and Northern Europe.

Off-crop studies with non-target arthropods
The aim of the study is to monitor the impact of the plant protection product on diversity and abundance of off-crop non-target arthropods in natural communities that may be exposed to spray drift. Studies in an off-crop system (e.g. meadow) are treated with different rates of the plant protection product to determine distinct endpoints as the NOER (no-observed-effect-rate) and the NOEAER (no-observed-ecological-adverse-effect-rate). The sampling period lasts for about two months and should include a diverse array of arthropods (see De Jong et al. 2010).
Different sampling methods and time scales can be combined to cover different arthropod groups and observe population dynamics of populations and communities:

**Ground-dwelling arthropods**
- Pitfall traps
- Photo-eclectors (emergence traps)
- Suction samples (e.g. D-vac, Vortis)

**Foliage-dwelling arthropods**
- Suction samples (e.g. D-vac, Vortis)
- Sweep-netting
- Visual assessment
- Beating
- Inventory sampling (misting) (orchards)

**Aerial arthropods**
- Window traps
- Yellow water traps
- Suction traps
- Light traps
- Malaise traps

**Soil-dwelling arthropods**
- Soil cores with heat extraction

Eurofins Agroscience Services is part of Eurofins Scientific, a leading provider of analytical services. 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.