



## Optimized Zonal Trial Planning (OZTP)

### Output

Traceable selection of the optimal spatial distribution of trial sites for zonal registrations of plant protection products elaborated for the submission to the registration authorities

### Benefits

- Higher probability of successful trial results in combined crop/pest trials
- Optimized/minimized numbers of trials for providing the zonal dataset required
- Awareness of substitutable trials sites for pre-selection before trials start
- Traceable selection of trial sites covering the full range of conditions requested
- Improved and traceable coping with the EPPO guidelines
- Increased reliability for the registration authorities that trials are sited and spatially distributed for successfully covering all conditions and testing the PPP performance

### Input of the customer

- Countries of interest, crops, BBCH stages, diseases

### Project steps

- Phase 1:  
Identification of regional risk levels of pest occurrences based on the analysis of regional conditions, generation of risk maps in addition to maps of crop phenology, main cropping areas, satellite image information
- Expert meeting with the customer/consultant for identifying the sites of interest
- Phase 2:  
Characterization of the trial sites of interest, identification of substitutable pairs of sites and display in a transfer matrix, elaboration of charts for the inter-site comparison of the key factors, summary and conclusion



## Results

- Phenology maps:  
Displaying the occurrence of the BBCH stages of interest for each crop of interest in a 25 x 25 km grid over all countries of interest
- Risk maps:  
Displaying the risk for each crop/pest combination to occur in 5 classes in a 25 x 25 km grid over all countries of interest
- Superimposed risk maps:  
Displaying the superimposed absolute and relative risk for all pests in each crop in 5 classes in a 25 x 25 km over all countries of interest
- Cluster maps:  
Displaying clusters with high probability for the occurrence of all pests of interest in all crops of interest in 5 classes in a 25 x 25 km over all countries of interest
- Description of trial sites:  
Maps, graphs, figures, tables for all relevant parameters of the selected trial sites i.e. land use, soil type and texture, min/max/average air temperature, precipitation, air humidity, dynamic of biomass development, each based on long term averages
- Transfer Matrix  
Matrix displaying the substitutability of trial sites, based on the analyses of the relevant site characteristics
- Parameter Digest  
Overview figures representing the spectra of the relevant parameters in histograms
- Summary and conclusion  
Comprehensive and traceable overview of the methods used and the findings analyzed as an accompanying text for the submission to the registration authorities

## The data used

- Long term averaged data of satellite images, weather, soil, land use, phenology, diverse models

## Delivery

- 1 – 3 months