



# Innovative Real-time Monitoring and Pest control for Insects – INSECTLIFE (LIFE13 ENV/HU/001092)

**PROJECT LOCATION:** Budapest

**BUDGET INFO:** **Total amount:** 3,008,627 Euro

**49.50 % EC Co-funding:** 1,489,270 Euro

**DURATION: Start:** 01/06/2014- **End:** 31/12/2018

## **PROJECT'S IMPLEMENTORS:**

**Coordinating Beneficiary:** Centre for Agricultural Research, Hungarian Academy of Sciences

**Associated Beneficiary(ies):** Deák Delta Ltd., HELION Engineering Consulting Service Ltd., University of Zagreb, Faculty of Agriculture



## BACKGROUND and AIMS:

The aim of the project is to build a real-time monitoring sensor-system for pest management that could fulfil both the requirements of farming needs and higher scale environmental policies concerning pest occurrences data.

This innovation is based on two elements:

- EDAPHOLOG sensing and data communication system that was developed in the frame of MEDAPHON LIFE+ project ([www.medaphon.hu](http://www.medaphon.hu))
- CSALOMON trap system that is a large pheromone trap family.



## MAIN EU POLICY(IES) TARGETED:

Integrated Pest Management, Precision Agriculture

# MAIN ACTIVITIES:

## B1 Probe and sensor development

probe development, sensor development, abiotic sensors

## B2 Probe and sensor testing

accuracy and relative effectiveness compared to traditional traps using it on many insect pests in fields

## B3 Data Communications

The sensor data will be transmitted via WEB/GPRS system. A WEB interface tailored to user accounts will be developed. The data of the current user will be graphically illustrated in graphs and maps.

## B4 Modeling, Forecasting

The time resolution of the detected data will be higher with an order of magnitude compared to the previous option: This creates the possibility of an entirely new forecasting system to be set up.

## B5 Demonstration field trials

The developed prototype will be used on Hungarian and Croatian model farms and on long-term field test sites. The studies will be implemented to show that the device is more efficient compared to currently existing methods.

## C1 Environmental improvement monitoring

We will show that the operation of the plant protection system becomes much more economical. Furthermore, we also quantify the environmental impact savings and the reduction of pesticide use as an agricultural load.

## D1. Dissemination

### E1. Project management and monitoring

# EXPECTED RESULTS:

## Prototype of the monitoring sensor system

