

## DELIVERABLE 10.6

### Video clip on the project

<b>Project Acronym</b>	<b>ENTOMATIC</b>
<b>Project Reference:</b>	<b>605073</b>
<b>Project Title:</b>	<b>Novel automatic and stand-alone integrated pest management tool for remote count and bioacoustic identification of the Olive Fly (<i>Batrocera oleae</i>) in the field</b>

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### Deliverable 10.6 – Video clip on the project

**Revision: v2.0**

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<b>Dissemination Level</b>		
<b>P</b>	<b>Public</b>	<b>X</b>
<b>C</b>	<b>Confidential, only for members of the consortium and the Commission Services</b>	

## Revision History

Revision	Date	Author	Organisation	Description
v1	27/12/2017	Albert Bel	UPF	First version of the report with the documentation and comments received by the different authors.
v2	26/07/2018	Albert Bel	UPF	Revision of the document following reviewer's comments

**Statement of originality:**

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

## EXECUTIVE SUMMARY

This deliverable contains the ENTOMATIC video clips available at the YouTube channel of the project. Both video clips created has helped and will help all the dissemination actions performed by the members of the consortium.

The first video clip from TEIC is more centred on the technical part of the project and shows how the trap works and how the flies are recognized by the bioacoustics sensor. The second video coordinated by UPF has focused on the impact of the project and the final results of it. Both videos are, as said above, available at the YouTube channel of the project [https://www.youtube.com/channel/UC-  
vdgLKXdKdOmY7tibno2GQ/videos?view\\_as=subscriber](https://www.youtube.com/channel/UC-vdgLKXdKdOmY7tibno2GQ/videos?view_as=subscriber)

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# 1 TECHNICAL VIDEOCLIP

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The general videoclip can be found at the youtube channel of the project:

[https://www.youtube.com/channel/UC-vdgLKXdKdOmY7tibno2GQ?view\\_as=subscriber](https://www.youtube.com/channel/UC-vdgLKXdKdOmY7tibno2GQ?view_as=subscriber)

The direct link is the following:

<https://www.youtube.com/watch?v=6ZDE3rrjtb0>

## 1.1 PURPOSE OF THE VIDEOCLIP

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This videoclip was designed to explain the performance of the trap. More specifically, the video makes a complete explanation of how the flies are detected at the entrance of the trap and how the sensor determines if it is an olive fruit fly or not. Moreover, a general description of the main electronic hardware designed and installed at the prototype are also presented. The video has a duration of 5 minutes and finalises with a summary of the general concept of the global system.

## 1.2 TARGETED AUDIENCE

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The project is intentionally designed for a technical audience. Moreover, the vocabulary used is not that difficult to be understood by any person interested in the performance of the novel system that ENTOMATIC offers.

## 1.3 KEY FEATURES

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The video was directed and edited by Nikitas Almpanis, supervised by Manos Kasapakis and narrated by Natasha Krikiani.

## 1.4 STRUCTURE

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The video is divided in 2 main section: the performance of the sensor, more concretely how the flies are detected and classified, once they are entering in the trap; and, electronic hardware installed at the trap.



**Figure 1.1. First images of the video**

**The sensor:**

At this part of the video an in-depth explanation of the sensor is done. Images show how the led array emitter detects every time a fly or insect enters to the trap. This sensor is installed at the bottom part of trap, at the entrance of the McPhail entrance funnel. The light emitted by the leds are captured by the light-guide receiver, capturing any insect. The second part explains how the sensor determines if the entering fly is an olive fruit fly or not. The images show how the recognizes the kind of insect entering to the trap. The ENTOMATIC trap is able to identify the olive fruit fly, among other insects, thanks to the spectrum of the wing beats of the *Bactrocera Oleae*.



**Figure 1.2. Captions of the performance of the sensor**

**Electronic hardware:**

In this other part of the video, it is presented the different electronic hardware that have been designed and installed in the trap: the light sensor to detect the flies, installed at the funnel entrance of the trap; the battery installed at the top cage; the antenna to transmit the data; the SD card to collect all the data captured; the CPU that process all the data gathered to identify the insects entering; the temperature and humidity sensor; and, the GPRS card to transmit the data to the cloud center.



**Figure 1.3. Hardware of the sensor**

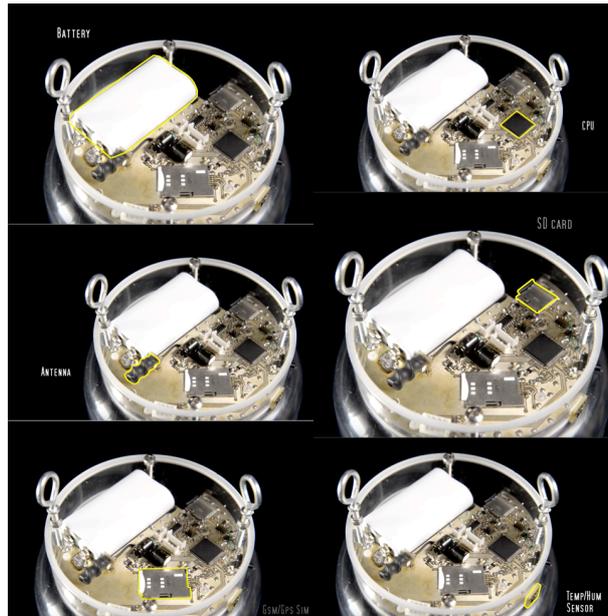


Figure 1.4. Hardware for data transmission

**ENTOMATIC trap versus traditional trap:**

Finally, a brief explanation of the big picture of the system is shown. The ENTOMATIC system, with this improved McPhail trap, will become a new element, at regional level, that will be easily scalable to a country level and global level, thanks to the connectivity offered by the mobile networks.

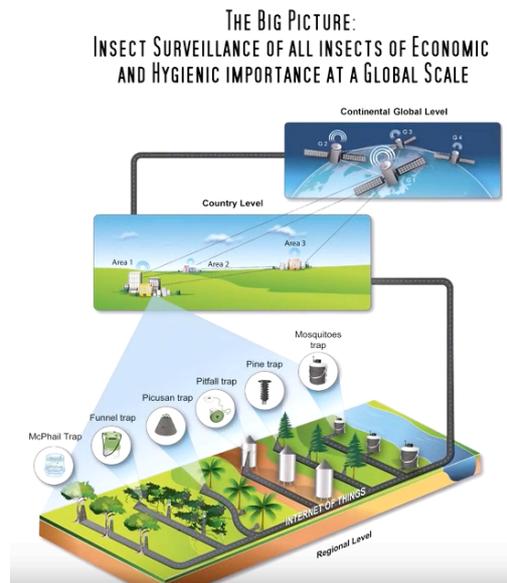


Figure 1.5. ENTOMATIC global system

## 2 GENERAL VIDEOCLIP

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The general videoclip can be found at the youtube channel of the project:

[https://www.youtube.com/channel/UC-vdgLkXdKdOmY7tibno2GQ?view\\_as=subscriber](https://www.youtube.com/channel/UC-vdgLkXdKdOmY7tibno2GQ?view_as=subscriber)

The direct link is the following:

<https://www.youtube.com/watch?v=GOXsBWBRsMc&t=76s>

### 2.1 PURPOSE OF THE VIDEOCLIP

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The intention of this second videoclip is to obtain a general information of the project. We present the main problem that olive producers have with the Olive fruit fly plague. Moreover, the impact that these novel trap system is also presented, and the expected benefits that they will provide. In 3 minutes, the project is briefly presented, and the main impact of this novel system is also explained.

### 2.2 TARGETED AUDIENCE

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The project is intentionally designed for a general audience. The terminology used is simple to be easily understandable, and presents the main features that the ENTOMATIC system will offer to the olive producers. The main issues that the project is covering are presented and the benefits of the new system developed are presented.

### 2.3 KEY FEATURES

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The video was directed and edited by Elisabet Ficapal, supervised by Núria Pérez and Gerard Vall-Ilovera and narrated by Albert Bel and Boris Bellalta.

### 2.4 STRUCTURE

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The video is divided in 4 main section: introduction of the main problem that is trying to solve the project, the impact of the Olive fruit fly plague, the comparison of the ENTOMATIC trap versus traditional methods and the presentation of the consortium.

#### **Introduction to the problem:**

Brief introduction to the objective of the project: the fight against the olive fruit fly. Which is the main problem that ENTOMATIC is solving.



**Figure 2.1. Captions of the introduction to the problem**

### Impact of the plague in the olive sector:

In this section, we present the major problems that the Olive fruit fly causes to the olives and, hence the olive oil. The losses in terms of production and oil quality are highlighted. But, ENTOMATIC also wants to have a high impact in the reduction of the pesticide's usage. By means of offering a precise estimation of the plague, the plant treatments could be reduced, and, hence, a protection of the environment is also achieved.

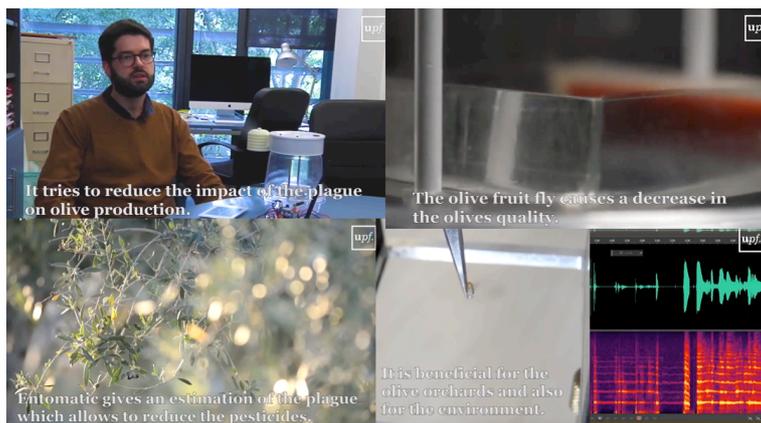


Figure 2.2. Main impact of the project

### ENTOMATIC trap versus traditional trap:

Main differences between the traditional traps and ENTOMATIC solution are presented. The number of flies, that nowadays are manually counted, are identified automatically by the sensor installed at the traps, and sends all this gathered data through a radio module.



Figure 2.3. ENTOMATIC versus traditional systems

**ENTOMATIC consortium:**

In the last part of the video it is presented the consortium participating in the project and we mention that ENTOMATIC belongs to the 7<sup>th</sup> Framework Programme of the European Commission.



**Figure 2.4. ENTOMATIC consortium video part**