

LIFE+ “Multibiosol”

Innovative fully biodegradable mulching films & fruit protection bags for sustainable agricultural practices LIFE14 ENV/ES/000486

Summary

Plastic has become fundamental in agriculture- **the total consumption of plastic films for agriculture purposes in Europe exceeded 500.000 metric tons in 2013**. This material has different applications in agriculture. For example, it can be used for **mulching**, avoiding soil evaporation and weed control. It also can be used to manufacture **bags for fruits**, which protect them from insects and larvae. But the problem is that this plastic it is not usually recycled (since it is time-consuming and expensive), but rather burned or buried in soil, provoking extreme environmental damage. Therefore, governments and farmers demand cost-efficient, and environmentally responsible solutions.

To tackle this technological and environmental challenge, a consortium of well experienced entities prepared a project proposal called **MULTIBIOSOL**, which finally was approved by the European Commission in the frame of the LIFE program. The project, led by AITIIP Technological Centre, intends to **develop a new bioplastic film made from renewable raw materials that are not petro-based** and do not compete in food markets. Moreover, this film will be completely **biodegradable**, avoiding waste management and environmental damage.

AITIIP Technological Centre leads this project of **7 partners in total from 3 different countries**. AITIIP will be the manufacture partner, as it have years of experience in working with plastics and bioplastics. **FACA**, the Aragonese agribusiness cooperative federation will bring their knowledge of the farming sector. **PCTAD**, a Spanish private research entity will analyse and validate post-harvest effects. **CSIC**, the Spanish national research agency, will be in charge of pre-harvest analysis. **TRANSFER**, a Catalanian private entity will coordinate dissemination and exploitation. Finally, the well-known Italian Laboratori Analisi e Ricerche in Chimica Applicata (**ARCHA**) will certify biodegradability and the Belgian Company **GroenCreatie** will bring their experience on composting and biodegradable agrifilms.

The general objective of this project is to demonstrate that sustainability and efficiency of agricultural practices can be achieved by introducing an innovative, economically viable and fully biodegradable plastic that eliminates waste completely.

As such the consortium wishes to address three specific objectives:

- **Elimination of waste management**
- **Development of new biodegradable plastics films with a very low carbon footprint impact**
- **Improvement of soil and product quality**

Execution

Expected start date: 01/09/2015	Expected end date: 31/12/2018
Budget	2,036,680 Euro
EU financial contribution	1,222,002 Euro (= 60.00% of total eligible budget)