1- ANNEX, OTHER INFORMATION.

LIFE ENV/E/000302

1- Project description.

The Project LIFE ECODIPTERA constitutes a pioneer initiative within the European Union. It has been conceived as an effective response to solve the environmental problems of pig manure through the implementation of an innovative environmental management system.

The main objective of the ECODIPTERA project is to implement a sustainable, alternative method for the management of pig manure. In order to do so, a natural decomposition process of animal organic matter will be applied to achieve industrial scale decomposition thereof.

This decomposition process will be carried out through a series of dipterans (larvae of flies) that are capable of transforming slurry and manure into a high quality organic fertilizer to be used for soil correction.

Among the specific objectives the following are highlighted:

- Introduction of a new waste management method, to minimize pig farm environmental impacts.
- Establishing an innovative model in Europe for the natural treatment of slurry and manure by taking advantage of the decomposing potential of insects.
- Transforming waste into a resource in a natural, sustainable way of 70% of the waste.
- Minimizing the main environmental impacts: smell and soil pollution.
- Carrying out dissemination and environmental awareness campaigns.

(Scheme of pilot plant for biological treatment pig manure, developed by the project Ecodiptera)

Phases of the biodegradation process

1- Homogenization process of pig manure.
2- Solid pig manure.
3- Massive egg production for biodegradation.
4- Process of biodegradation.
5- Final result, transformation pig manure in high quality compost.
Results

Operating diagram of biodegradation of pig manure project Ecodiptera.

- Only 0.8 ml fly eggs produced in the pilot plant can degrade 100 kilogram of gross pig manure.
- Larvae of fly degrade approximately 60-70% of initial weight of pig manure, turning waste into an organic compost with an excellent agronomic property.
- Pilot plant has degraded 390 tons of gross pig manure.
2- Communication plan, objectives.

The aim of the dissemination plan has been to promote the objectives, results and environmental benefits of the project Ecodiptera. A committee has been created to jointly develop the disseminating task of the project. It is constituted by the Valencian Council, Red de Municipios Valencianos hacia la sostenibilidad, Fundación Comunidad Valenciana Región Europea and Eurovias.

This plan has been designed considering important aspects that affects the project development as:

- Avoid misunderstood of using flies, promoting social acceptability of the project.
- Remark innovative characteristic on this project.
- Establishment of a corporative image.
- Natural process in an industrial scale to manage an environmental problem.
- Promote project Ecodiptera.
- Promote environmental benefits of this natural process.
- Transform the pig waste in a resource with a natural treatment.

2.1 Selection of Target

First activities carried out were to select targets and stakeholders of this project to focus the dissemination activities. From the beginning three targets have been selected as a potential public to focus the dissemination campaign.

- Target 1: Farmers, livestock associations.
- Target 2: local, national European authorities
- Target 3: General Public.

The aim of dissemination actions and messages focused in Targets 1 and 2 must obtain the collaboration of each one, across his implication and adhesion into the project.

Dissemination actions focused in the target number 3 want to stress the efforts of the consortium of the project and the European administration, developing this environmental and innovative project to protect rural areas. In theses dissemination activities we also try to remain the important environmental care.
**MAIN OBJECTIVE:** Ecodiptera as demonstrative project wants to establish a new method of pig waste management to reduce environmental impact produced by pig farms.

**DISSEMINATION PLAN OBJECTIVES:** To define a schedule of actions in the action plan to get principal goals in the dissemination campaign. Two main goals have been established in this plan: To promote the project and results in general public and to get the collaboration of governments and livestock associations.

**TARGET**

**Target 1:** Farmers, Livestock associations.

**Target 2:** Local, National European authorities

**Target 3:** General public.

**DISEMINATION ACTIVITIES AND RESOURCES.**

**Dissemination resources:**
- Technical Seminars.
- Technique magazines reports.
- Newsletters.
- Project website.
- Participation in environmental fairs
- Promotional video.
- Technical panel.
- University publications.
- Partners websites.
- Demonstrations seminars.

**Dissemination resources:**
- Meeting with local authorities.
- Info day in Brussels
- News project web page.
- Valencia provincial council webpage
- Annual assembly of partner Red de Municipios.
- Newsletters.
- Demonstrations seminars.

**Dissemination resources:**
- Brochures.
- News general press.
- Newsletters.
- Project website.
- General merchandising.
- Promotional video.
- Public presentations.

**RESULTS**

- Collaboration of the
  - Collaboration of the farmers to use the facilities for the final test.
  - Publications in professional magazines

- Public presentation of the project in the committee of the regions.
- Local authorities collaboration.

- More that 50 news published in different newspapers. (national regional and local level)
- Ecodiptera web page 2.800 visits from 58 countries.
4- Problems encountered.

Pig manure management is one of the most important problems in the future of pig sector. This situation has been a limiting factor to promote the project. Ecodiptera is a pilot project that aims to demonstrate a new model for pig manure management, it is not a global solution for the sector.

The innovative characteristics of the project and the general ignorance of the flies biology are a handicap in order to promote the project Ecodiptera.

All the dissemination activities have been designed to explain in simple terms biodegradation using larvae of flies.

Theses points are always remarkable in the dissemination activities.

- This is a pilot project not a global solution.
- All process is done in a close facility.
- Adults of flies are not used for the bio-degradation process
- This is a natural process in an industrial scale.

Desig to explain bio-degradation proces.

5- Dissemination resources.

All disseminations resources have been designed according with one corporative image and focusing in the different targets.

- Brochures.
- Newsletters
- Project website.
- Technical reports
- General merchandising.
- Promotional video
- Electronic panel.
- Technical panel
- Thematic Stand.
- Methacrylate boxes.
- **Merchandising**: Note books, pencils, pens, calendars, agendas, bags, USB memory pen.

**Focus in**: All targets.

- **Mailing**: Different mailing campaign was done to promote development of the project and different seminars were organized to present results, such as the pilot plant presentation. Some administrations and organization have collaborated in their contacts (Chamber of Commerce of Valencia, Regional Minister of Agriculture,)

**Focus**: 1 and 2 targets.

- **Newsletters**: Different newsletters have been developed in both Spanish and English to promote the project's development in seminars, trade fairs, meetings. (Spanish and European level)

**Focus in**: 1 and 2 targets

- **Publications in specialist technical magazines**: the results of the project Ecodiptera were published in different magazines related to the environment or waste management. (Info-enviro, Retema (Revista tecnica para el medio ambiente, Reutil)

**Focus in**: 1 and 2 targets

- **Promotional video**: Two promotional videos were developed in the frame of the project. The First one was short and without sound and was focused to be used in places like fairs or seminars. The longer one is a bilingual video that explains the project and the results from the beginning to now.

**Focus in**: All targets.

- **Design and maintenance of the project website**: This is one of the most important resources to promote the project Ecodiptera. Website is used as an important dissemination tool in Internet, with a private section for framers where relevant information can be found. Through this website, it is possible to access all the information related to the project, including detailed description, promotional videos, results obtained, Layman report, etc. The information will be available in English and Spanish.

This website has revived (relied?) more than 2.800 visits from 58 different countries.

[www.ecodiptera.info](http://www.ecodiptera.info)
- **Brochures**: 4,000 Brochures have been developed in English and Spanish to promote the project and to explain the bio-degradation process developed in the pilot plant. Brochures have also been distributed in fairs (Ecofira, International Fair for Water, Soil, Air, Waste and Allied Technology in Valencia, CONAMA 07 Spanish National Environment Congress, Madrid, Atégrus, Valencia, Green week, Brussels)

*Focus in: All targets.*

- **Press office of Valencia Provincial Council**: Regular information has been sent to the press cabinet of the Valencia provincial council. (More than 50 articles of Ecodiptera have been published in local, national and European press media).

*Focus in target: All targets.*

- **Poster**: Five different promotional posters have been edited to promote the development and results of project Ecodiptera. These poster have been used to disseminate the project (in Spanish National Environment Congress. 2007 y 2009) (Europe Innova fair Valencia)

*Focus in: 1 and 2. targets.*

### 6- Activities carried out.

Dissemination activities carried out from 2005 to 2008 have been designed considering the initial aspects of the project and with the aim to solve the dissemination difficulties. The initial targets selected at the beginning of the dissemination plan have been used to design all the disseminations activities carried out.

#### 6.1 Spain

- **Promoting the project in sector fairs and congresses.**

Project Ecodiptera has been presented in different fairs with its own stand:
- Spanish National Environment Congress. CONAMA In Madrid 2007

- **Technical seminars.**

These activities have been focused to the principal stakeholders in this project, farmers and local authorities and regional government.

We have organized public presentation in the cities of:
- Valencia
- Alpuente
- Tuejar
- Castellón
- Results presentation of project:

  - Technical results of project were presented CONAMA 2009. Spanish National Environment Congress.
  - XII Iberian Congress of Entomology, Alicante, Spain, September 2006

Focus in : 1 and 2. Targets.

- Electrical panel.

One panel has been designed and produced to disseminate the project in seminars and fairs.

Focus in : 1 and 2. Targets.

- Demonstrations seminars.

  - Public presentation of pilot plant: As a conclusion of project Ecodiptera in the facilities of Valencia institute of Agrarian Researches, the bio-degradation process and the results as a organic compost were showed.
  - Several companies have visited the facilities of Ecodiptera to know directly this innovative project.

Focus in : 1 and 2. Targets.

6.2 Europe.

Fundación Comunidad Valenciana Región Europea. This non profit-making organization specializes in multi-sectorial interests in the Valencian Community and in the European Community organizations in Brussels. This is one of the biggest regional offices in Brussels, which has a direct connection with very important institutions like Committee of the Regions. Well work done and carried out by FCVARE from the office placed in Brussels has obtained good results like:

Promoting the project in sector fairs and congresses. Information and results of the project have been presented at different International Fairs,

Project Ecodiptera was promoted in :

  - 34th, International Agricultural and Foodstuffs Fair Agrokomplex 2007. (Slovakia)
  - Green week (2007, 2008)
- Technical seminars.

Different seminars have been done in a European level to promote project Ecodiptera.

- Project Ecodiptera was selected by the Committee of the Regions as an innovative project in Europe to participate in a promotion video of Lisbon Monitoring Platform. [www.youtube.com/watch?v=qjpGu3ef3Ys](http://www.youtube.com/watch?v=qjpGu3ef3Ys)
- Ecodiptera was presented in La semaine de l’Europe en région Centre, France Orléans 2008

**Focus in : 1 and 2. Targets.**

**Dissemination map activities carried out in Europe.**

For the dissemination map activities carried out in Europe, a map shows the locations and details of the events:

- **8- Future continuous dissemination plans.**

Ecodiptera’s Project dissemination committee has established a future plan to promote this innovative project from 30th November. This plan uses the dissemination material, the results and the conclusions of the promotional campaign carried out from the beginning of the project in the European Union and Spain.

The Responsible of project Ecodiptera will present the project in different seminars related to the environment or European initiatives to disseminate final results and environmental benefits of this new method to manage pig manure.
Participation in international fairs

Final results of project Ecodiptera will be present in:

**Spain:**
- Alicante Exhibition Centre, in the frame of Alicante Natura 7º Salón del Agua y Medio Ambiente 2009
- General assembly on the network of Valencian municipalities towards sustainability.
- CONAMA: Spanish National Environment Congress. CONAMA

**European level**
- The Green Week, the biggest annual conference devoted to European environment policy.
- OPEN DAYS, organised by the Committee of the Regions (CoR) and the European Commission’s Regional Policy Directorate General.
- Europa Innova is a European exhibition of the best practices on innovative projects.
- Infodays organized by the Fundación Comunidad Valenciana Región Europea. OPEN DAYS, organised by the Committee of the Regions (CoR) and the European Commission’s Regional Policy Directorate General, is centred in Brussels in October.
- The FCVRE will take part during this year disseminating the Ecodiptera project in conferences and seminars related with the main aim of the project.

**Futures activities.**
- Partner Red de Mucipios Valenciananos hacia la sostenibilidad, organize every year a general assemble to inform about the activities carried out. In June 2009 more that 260 local authorities are invited to this meeting. During this assemble the final results of Ecodiptera and the promotional video will be presented.
- Partner Fundación Comunidad Valenciana Región Europea from the central office in Brussels will present the project Ecodiptera in all the seminars during 2009, 2010 as a good practice in waste management.
- Last results of Ecodiptera have been published in different newsletter to disseminate the project in European level.
- All partners of Ecodiptera project will present last result in the official webpage.

**Internet dissemination activities.**

**Project website.**

The official website of the project Ecodiptera has been established as an effective tool to promote this European project around the world. This website is used as an important dissemination tool to promote all news related in the project around the world. One of the most useful tools to disseminate the project in a future is the project website.
Following activities has been established to promote the project in the future using the online media plan includes:

- Monthly update of webpage.
- Review daily request and answers of the project.
- Update news of project Ecodiptera.
- Promote the website from the official pages of all the consortium of the project.
- Look for cooperation to promote Ecodiptera webpage with European projects with similar objectives.
- Perform an annual mailing campaign with news of the project.
- Be Able to provide all materials for dissemination on the web, such as promotional videos, brochures, reports of progress.
- Promotion project in on line media: Ecodiptera results have been edited in Wikipedia, international free, multilingual encyclopedia.

European Networking.

Project Ecodiptera with the collaboration Fundación Comunidad Valenciana Región Europea will disseminate the project and results using the European networking.

Dissemination of the project during the interregional conferences and meeting that will be organized, and also through the working groups that shapes the networks.

1.- AER - Assembly of the Regions of Europe. The AER in order to fully participate in a regional and European democracy policy makers and officers need to be well informed of the working of the European Union. Therefore the AER Standing Committee on Institutional Affairs initiated the AER Training Academy. This Academy provides tailor-made basic training in European affairs to officers and politicians from AER member regions. The training consists on a 2-day module held usually in Brussels (BE), in which the FCVRE takes part as a lector disseminating the European projects as best practices.

2.- CRPM- The Conference of Peripheral Maritime Regions, founded in 1973, unites 149 regions, some of which are not members of the EU. The Region of Valencia is the leader of the Working Group on Innovation and Research.

3.- EURADA is the European Association of Regional Development Agencies and the Valencia Institute of Small and Medium Enterprises (IMPIVA) is part of it. The association organizes meetings and conferences in order to inform the agencies on “the economy based on the knowledge” and in order to offer services to the SME’s of the EU. Impiva participates in these initiatives, representing the sector of the Region of Valencia from the regional office in Brussels.

4.- Lisbon Regions. The Region of Valencia is part of the Lisbon Regions Network, formed by seven regions: Emilia-Romagna (Italy), Region of Brussels (Belgium), West Midlands (England), Region Randstad (the Netherlands), Region Stuttgart (Germany), Stockholm Region and Region Île de France. This lobby pursues the direct implication of the regions in achieving the objectives of the Lisbon Strategy and in particular the competitiveness and full employment. All the participating regions are Objective 2.