

ElectroBioSafe – Development of a new, more efficient system for cleaning and disinfecting livestock transport trucks using reclaimed water and new sustainable products

Summary

Cleaning and disinfecting vehicles used for animal transport is an essential and effective measure for disease prevention that also improves the quality and safety of meat. Certain pathogens, mainly those of intestinal origin such as *Salmonella*, also increase the risk of carcass contamination, thus compromising compliance with microbiological criteria for process hygiene in the slaughterhouse and even food safety for the resulting meat.

This project will develop alternative cleaning and disinfection products to conventional ones to minimise chemical waste in effluents, using reclaimed water from the slaughterhouse for cleaning and disinfection operations to reduce the consumption of drinking water.

Objectives

The overall objective of this project is to develop a new cleaning and disinfection system for livestock transport trucks that permits more efficient cleaning and disinfection than current systems while also being more sustainable.

Description of the actions planned in the project

- Activity 1. Obtaining reclaimed water
- Activity 2. Obtaining new cleaning and disinfection products
- Activity 3. Establishing protocols for truck cleaning and disinfection and assessing the developed systems
- Activity 4. Sustainability assessment of the livestock trucks cleaning and disinfection processes developed
- Activity 5. Monitoring legislative framework
- Activity 6. Dissemination of the results

Expected results and practical recommendations

1. Obtaining reclaimed water from the slaughterhouse suitable for cleaning livestock transport trucks.
2. Obtaining new efficient and more sustainable detergent and disinfectant products for cleaning and disinfecting livestock transport trucks.
3. Quantifying the effectiveness of the systems developed for cleaning and disinfecting livestock transport trucks in slaughterhouse facilities.
4. Assessing the sustainability of cleaning and disinfection processes for livestock transport trucks.
5. Monitoring the national and European legislative framework for implementing the livestock transport truck cleaning and disinfection system using reclaimed water in slaughterhouses.

Leader of the Operational Group

ORGANISATION: FRIGORÍFICS COSTA BRAVA, SAU

Coordinator of the Operational Group

ORGANISATION: IRTA - Institute of Agrifood Research and Technology

Other members of the Operational Group (grant recipients)

ORGANISATION: ESCORXADOR FRIGORIFIC D'OSONA, SA

ORGANISATION: FRIGORÍFICOS DEL NORDESTE, SA

ORGANISATION: PATEL, SAU

ORGANISATION: LE PORC GOURMET, SA

Other members of the Operational Group (not recipients of the grant)

ORGANISATION: EURECAT

Subject area(s) of application

- Agricultural production system
- Agricultural practice
- Agricultural equipment and machinery
- Livestock farming and animal welfare
- Vegetable production and horticulture
- Landscape / Territorial management
- Pest and disease control
- Fertilisation and nutrient management
- Soil management
- Genetic resources
- Forestry
- Water management
- Climate and Climate Change
- Energy management
- Waste and by-product management
- Biodiversity and environmental management
- Food quality/processing and nutrition
- Supply chain, marketing and consumption
- Competitiveness and agricultural and forestry diversification
- General

Geographical area(s) of application

PROVINCE(S)

Barcelona, Girona

REGION(S)

Osona, Selva

Dissemination of the project (publications, conferences, multimedia, etc.)

Different dissemination actions are planned to effectively explain the project and report the results, and reach the whole target public included in the scope of the project (agri-food sector from primary production,

processing and distribution through to consumers): associations, sector conference, explanatory article, infographics and publishable report and social media.

Project website

More information on the project

PROJECT DATES	TOTAL BUDGET
Starting date: July 2021	Total budget: €246,450.00
	DACC funding: €113,971.50
Current status: Under way	EU funding: €85,978.50
	Own funding: €46,500.00

With funding from:

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Order ARP/113/2021 of 20 May, approving the regulatory bases for grants for cooperation for innovation by promoting the creation of European Association for Innovation operational groups in the areas of agricultural productivity and sustainability and the execution of innovative pilot projects by those groups, and Resolution ACC/1660/2021, of 27 May, announcing the call for the grant.

