CLASCUIT-Development of a technological, quality-based classification system for fresh ham to improve the yield from the production process and the quality of cooked ham.

Summary

The overall objective of the CLASCUIT project is to develop a technological, quality-based classification system for fresh ham to improve yield from the production process and the quality of cooked ham. The classification system under development is based on information provided by multifrequency magnetic induction (MFMI) technology in combination, if necessary, with measurements of other meat quality variables (pH, electrical conductivity and appearance at 24 h post-mortem). Studies have shown that using information only on meat quality variables is insufficient for good online classification of the raw material.

Objectives

1. Assess the distribution of variability in technological quality characteristics and multifrequency magnetic induction parameters of fresh hams in companies.
2. Define five categories of technological quality for classifying fresh ham based on the measured parameters.
3. Validate the fresh ham technological quality categories by evaluating the quality of the end product.
4. Adapt the fresh ham technological quality classification system to the reality of each cook ham manufacturing companies.

Description of the measures planned in the project

1. In-company assessment of the technological quality characteristics and MFMI parameters of fresh hams and definition of the technological quality categories based on the measured parameters.
2. Validation of the technological quality categories for fresh ham by evaluating of the quality of the end product (cooked ham) at the Institute of Agrifood Research and Technology (IRTA) pilot plant.
3. Validation of the classification system for the technological quality of fresh ham in cooked ham manufacturing companies.
4. Dissemination of project results.

Expected results and practical recommendations

The **results expected from the project** for each company and/or type of fresh ham evaluated are the following:

- Distribution of the variability of the technological quality characteristics for each type of raw material in accordance with the different quality variables analysed.
- Improving knowledge of the relationships between the quality characteristics in the end product (cooked ham) and the raw material technological quality characteristics.
- Definition of five technological quality categories for the classification of fresh ham based on the measured parameters.
- Validation of the fresh ham technological quality categories by assessing the quality of the end product (cooked ham) produced at a pilot plant.
- Developing a system for classifying the technological quality of fresh ham for each type of raw material, validated and adapted to the reality of each company, for the production of quality cooked ham.
- Obtaining more homogeneous batches in terms raw material technological quality (by applying the classification system) and, as a direct consequence, improving production performance and quality in the end product (cooked ham).

Leader of the Operational Group

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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)	REGION(S)
Girona	Garrotxa

More information on the project

PROJECT DATES	TOTAL BUDGET
Start date (month-year): July 2020	Total budget: €188,998.00
Completion date (month-year):	DARP funding: €77,239.6
Current status: Underway	EU funding: €58,268.4
	Own funding: €53,490.00

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Departament d'Agricultura, Ramaderia, Pesca i Alimentació

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