

"INKING" in peaches. Causes and solutions

Summary

"Inking" is the internationally used name for a physiopathy that is common in stone fruit, and peaches in particular.

It consists of the appearance of dark spots on the surface of the fruit, affecting only the epidermis, due to bumps and friction during the harvesting and transportation process. It is an aesthetic defect, which reduces the fruit's sale value in the fresh market.

Its prevalence varies depending on the year, variety, plot and producer, but in some cases it can be very high (80%), which can entail a very important financial loss for the producer, and significantly reduce the profitability of their operation as a result.

This has fostered a desire for more in-depth knowledge of this pathophysiology, and an interest in determining its causes, in order to apply the necessary, efficient and effective resources or strategies to prevent or reduce its appearance on the fruit.

Objectives

Under the conditions found in peach production areas in Catalonia, the aim is to identify the causes that lead to the appearance of "inking" in peaches, and provide strategies to eliminate or reduce its occurrence.

Description of the measures planned in the project

Determine the influence of various factors on the prevalence of "inking" during two campaigns. These factors will be studied based on the existing literature, and the experience of the various participants in this project:

1. Determination of varietal sensitivity.
2. Determination of the effect of the harvesting method.
3. Determination of the effect of the ripeness of the fruit.
4. Determination of the effect of irrigation and fertilisation.
5. Determination of the effect of plant health and nutritional products applied to the leaves.
6. Determination of the effect of the time of day when the fruit is harvested.

Pilot plots will be established to demonstrate techniques to prevent "inking" in the third campaign.

Expected results and practical recommendations

With the results obtained from the various measures, the project anticipates being able to produce a practical guide containing measures to eliminate or reduce the prevalence of "inking".

Leader of the Operational Group

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

ORGANISATION: IRTA

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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)
LLEIDA, TARRAGONA	EL SEGRITÀ, EL PLA D'URGELL, LES GARRIGUES, LA NOGUERA, LA RIBERA D'EBRE

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

Plans for the dissemination of the project involve:

1. Writing a technical article for a specialist journal.
2. Dissemination of the project through the Cooperativa de Soses website (www.coopsooses.cat) and the IRTA website (www.irta.cat).
3. Participation in the dissemination of results at the Annual Technology Transfer Plan and Plant Protection Associations seminars and similar events.
4. Communication to the members of the Cooperativa de Soses.

Project website

There is no specific project website. Its dissemination will take place through the websites of the Cooperativa de Soses (www.coopsoles.cat) and IRTA (www.irta.cat).

More information on the project

PROJECT DATES	TOTAL BUDGET
Start date (month-year): July 2019	Total budget: €123,100.00
Completion date (month-year):	DARP funding: €49,116.90
Current status: Underway	EU funding: €37,053.10
	Own funding: €36,930.00

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**Departament d'Agricultura,
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