



MINISTERIO
DE CIENCIA
E INNOVACIÓN



Instituto Nacional de Investigación
y Tecnología Agraria y Alimentaria

Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria -INIA-

National Institute for Agricultural and Food Research and Technology

- **Research Public Institute**
- **Autonomous**
- **But in the structure of the Ministry of Science and Innovation**
- **Objectives: Research, Development, Innovation in the fields of Agriculture, Livestock, Forestry, Food and their environmental implications.**



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Double function:

Management

Fulfilment



of R+D+I in Agriculture

- INIA programs, coordinates and assigns budget to projects related with agricultural R+D+i, follows and assess the activities related with the execution of the projects.

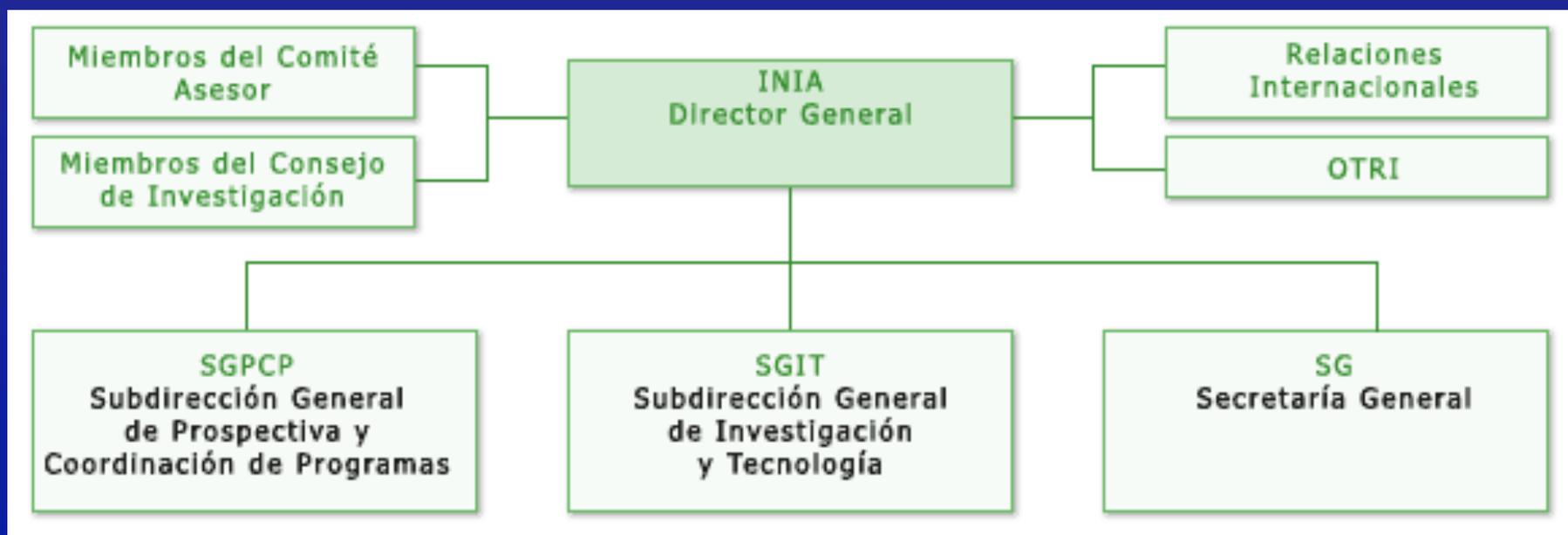
- INIA carries out agricultural R+D+i



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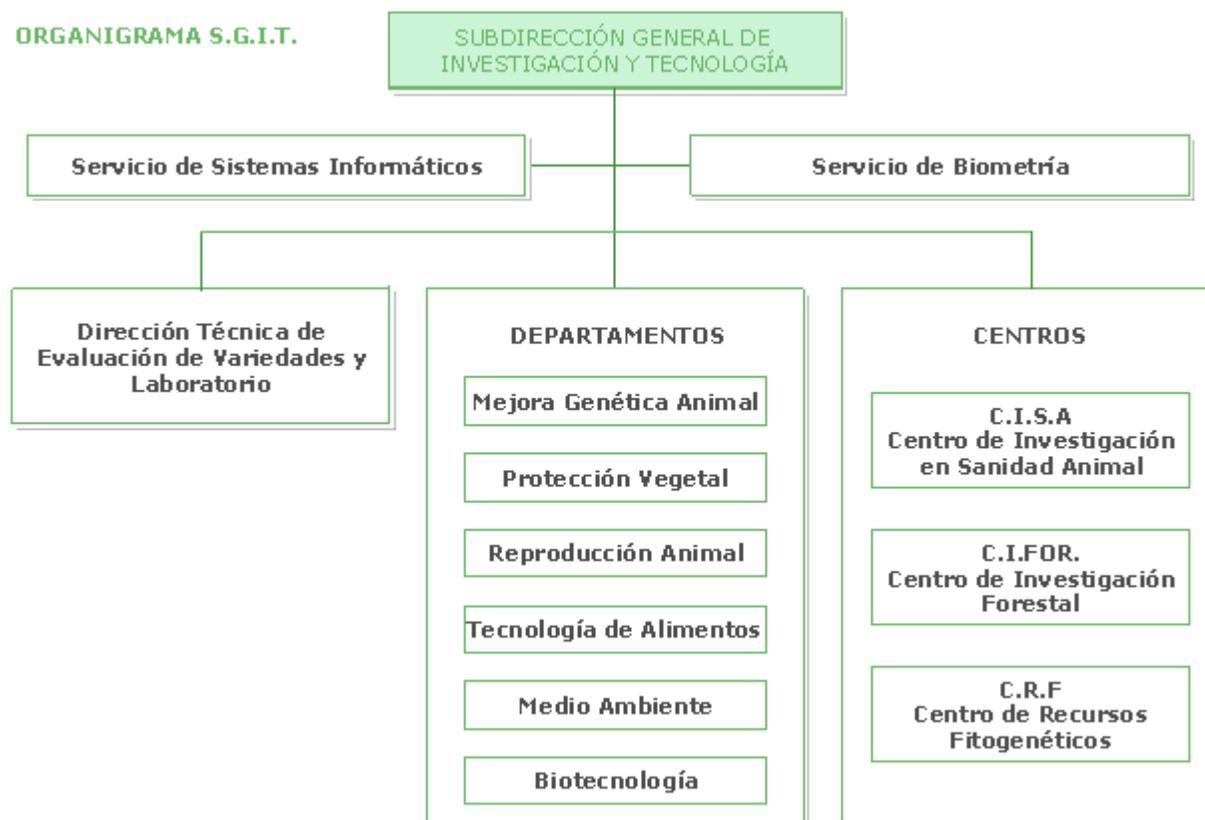


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ORGANIGRAMA S.G.I.T.



Department of Environment



Any agricultural activity is going to have an effect on the environment

INIA. Department of Environment

≈ 90 people (23 Research Scientists) organised in several Research Groups

Agricultural Reuse of Livestock and Urban Residues

Aromatic and Medicinal Plants

Conservation and Management of Soils – Plant Production

Environmental Chemistry

Ecotoxicology

DETC (Disrupción Endocrina y Toxicidad de Contaminantes; Endocrine Disruption and Toxicity of Contaminants)

INIA - DETC Group

General Objectives

To inquire into the mechanisms of toxicity of contaminants, paying special attention to the interaction with cellular receptors and the cross-talk among activated receptors (Endocrine Disruption is an important field of research for the group)

To apply the knowledge obtained to the management of livestock and aquaculture facilities, and to the environmental risk assessment of chemicals (in particular those with implication in agriculture: plant protection products, biocides)

INIA - DETC Group

Main Activities

- Study of long-term effects of low concentrations of contaminants
- Study of effects of livestock and aquaculture residues on water resources
- POPs information recopilation and dissemination (Stockholm convention)
- Biocides assessment and registration at the European level
- OECD: development of test guidelines, nanomaterials sponsorship program

INIA - DETC Group

Facilities, Work

Regular (monthly) sampling in aquaculture facilities...

(Study of long-term effects of low concentrations of contaminants)



INIA - DETC Group

Facilities, Work

Sampling in fields and water courses...

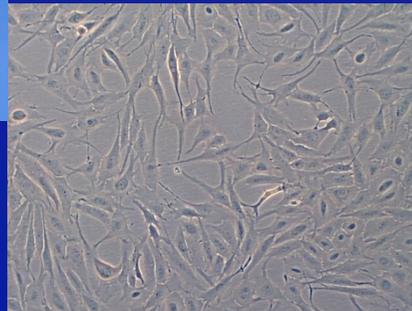
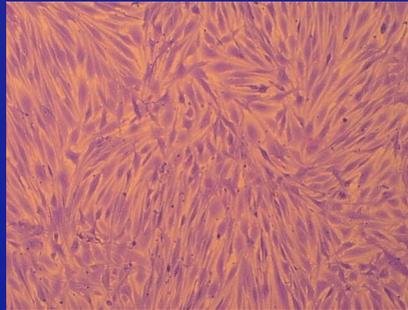
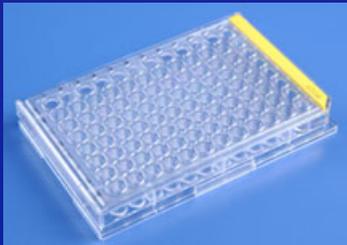
(Study of effects of livestock and aquaculture residues...)



INIA - DETC Group

Facilities, Work

Citotoxicity, biochemistry, molecular biology



- 8 different citotoxicity measurements
- Induction of AhR and ER
- Real time RT-PCR

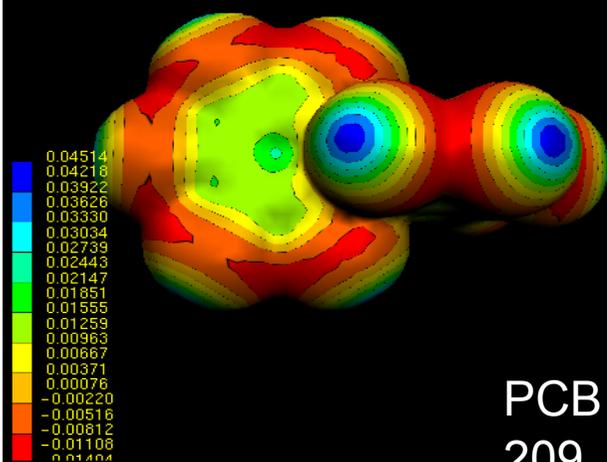
(6 different cell lines)

INIA - DETC Group

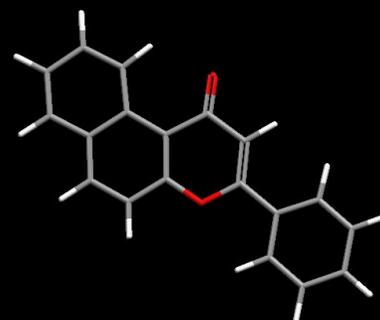
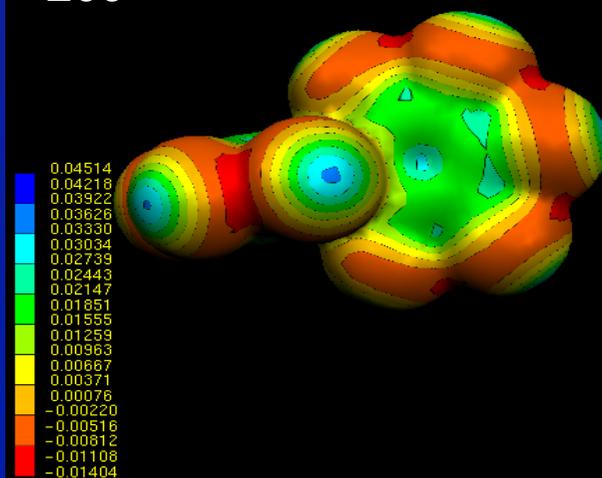
Facilities, Work

Computational studies

PBB
209



PCB
209



- Molecular conformation

- *Ab Initio* studies (MSEP)

INIA - DETC Group

TRAGUA

RTA 2009 00074

**ATEG07-060: Risk assessment of Biocides;
Nanomaterials; EDs.**

ATEG09- 036: POPs

INIA - DETC Group



2 Research Scientists

Dr. José M. Navas

Dr. María Luisa Fernández

2 Postdocs

1 Technician

8 BSc performing Risk Assessment

Computational Studies

Dr. Bernardo Herradón



POPs, Nanomaterials

Dr. Eloy García

Dr. Juan José Vaquero



MUCHAS GRACIAS

