



FORESTERRA

Enhancing Forest REsearch in the MediTERRanean
through improved coordination and integration



ICAAM

Instituto de Ciências Agrárias e Ambientais Mediterrânicas

www.icaam.uevora.pt



Instituto de Ciências Agrárias e Ambientais Mediterrânicas

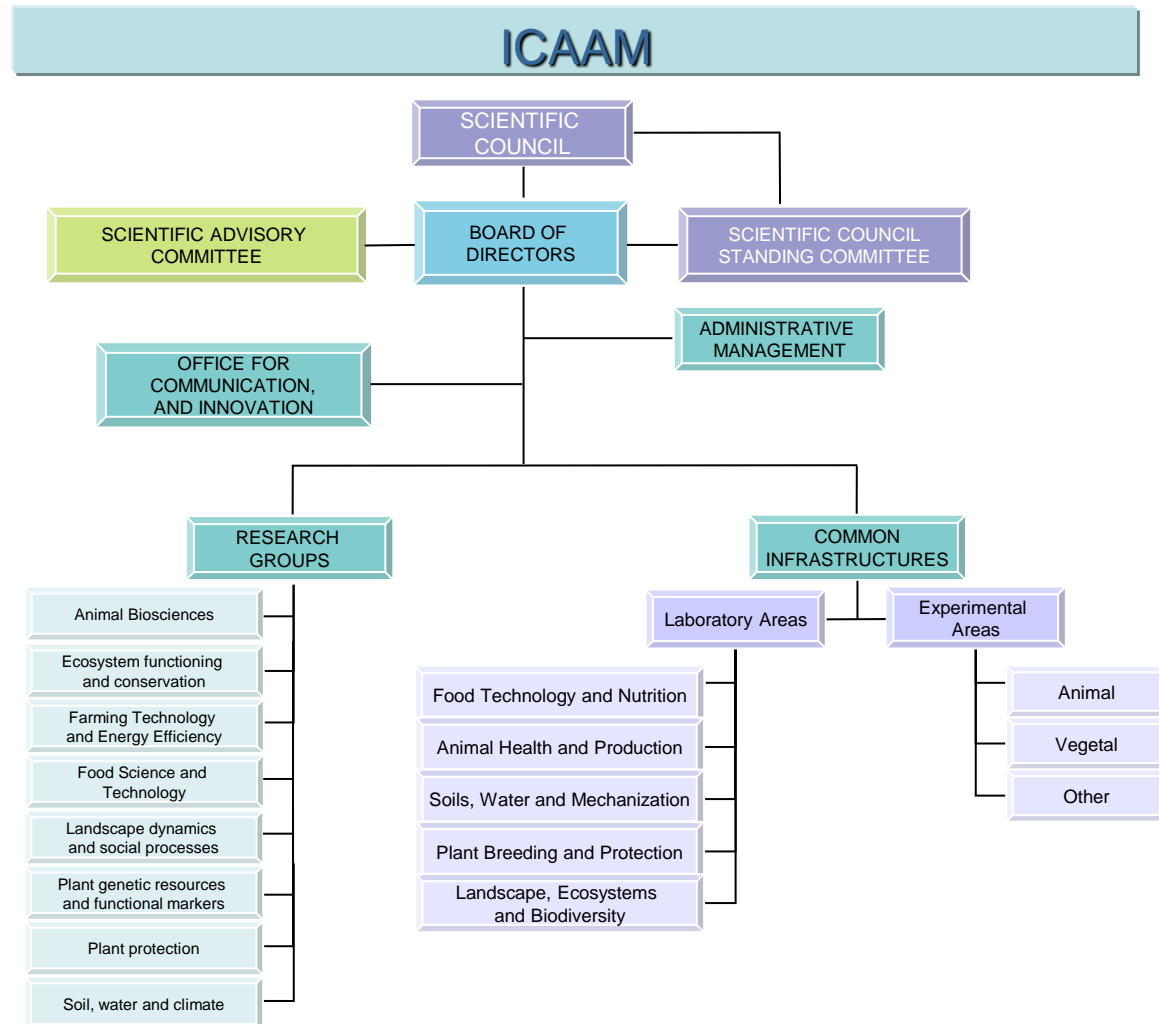
Knowledge connecting land, food and people

Teresa Pinto Correia (Director)
Nuno de Almeida Ribeiro (Researcher)

mtpc@uevora.pt, nribeiro@uevora.pt

Some facts about ICAAM:

Organization chart





FORESTERRA

Enhancing Forest REsearch in the MediTERRanean
through improved coordination and integration



Some facts about ICAAM:

Staff and scientific production:

	2008	2009	2010	2011	2012
Total number of members	182	200	201	221	246
PhD	115	140	146	159	171
Integrated Members*	83	97	91	107	116
Publications (ISI/Scopus)	50	96	103	95	144
Patents	1	0	2	0	5
Publication rates per member	0,60	0,99	1,13	0,89	1,24

* Accordin with the portuguese Foundation for Science and Technology criteria



FORESTERRA

Enhancing FOREst RESearch in the MediTERRanean
through improved coordination and integration



Priority research areas:

- Plant genetic resources and functional markers
- Plant protection
- Soil, water and climate
- Farming technology and energy efficiency
- Animal biosciences
- Food science and technology
- Ecosystem functioning and conservation
- Landscape dynamics and social processes
 - **modelling of forest stands integrating multiple components of forest and agro-forest systems**



FORESTERRA

Enhancing Forest REsearch in the MediTERRanean
through improved coordination and integration



Main past and current projects

REPHRAME - Development of improved methods for detection, control and eradication of pine wood nematode in support of EU Plant Health policy - FP7

Partners: Forest Research Wales (UK); The Natural Resources Institute of the University of Greenwich (UK); Federal Research + Training Centre for Forests, Natural Hazards + Landscape (AUSTRIA); Institut National de la Recherche Agronomique (INRA - FR); Julius Kühn Institute (Germany); National Institute of Biological Resources (PT); University of Evora (PT); Agencia Estatal Consejo Superior de Investigaciones Cientificas (Spain); University of Valladolid, Autonomous Community of Castile + Leon (Spain); Institute of Zoology, Chinese Academy of Sciences (China); Norwegian Institute for Agricultural and Environmental Research – BIOFORSK (Norway)

<http://www.rephrame.eu/>

FarmPath - Farming Transitions: Pathways Towards Regional Sustainability of Agriculture in Europe - FP7

Partners: Univ Evora (PT), BOKU Austria, Agricult. Univ Athens, Univ National and World Economy, Ifls Germany, CZU Praga, Univ Plymouth UK, ISSA France

<http://www.farmpath.eu/>

BIOREGENT - Biocontrol and Bioremediation agents and their role in Agriculture and Forest health - FP7

Partners : Univ. Évora (PT); Univ. Piemonte Orientale (IT); Sveriges Lantbruksuniv; Univ. Waterloo, Canada



FORESTERRA

Enhancing Forest REsearch in the MediTERRanean
through improved coordination and integration



Some facts about ICAAM:

Future perspectives in the forest research domain:

1. Demonstrate the success of knowledge based natural/artificial regeneration systems for Mediterranean forests. Here concern (i) the use of reduced mobilization; (ii) the modalities for the management of shrub layer; and (iii) the optimization of grazing systems according with dimensions of the young trees and minimization of impacts on soil, biodiversity and landscape;
- 2 . Identify the debilitating interactions that lead to tree decline in stands of cork and holm oak, taking into account the detailed description of the factors involved in each spatial unit, particularly its consequences in rates of plant and animal biodiversity ;
- 3 . Evaluate the impact of different of forest management methods in total biomass production, considering its economic valuation by optimizing its future use (specially for energy) and minimize both the risk of erosion or fire risk while ensuring the maintenance of sustainable levels of biodiversity and landscape aesthetics;
- 4 . Create an index of relative abundance of plants , reptiles and birds, while descriptors of biodiversity and interrelationships with management alternatives under study , in the medium/long term;
- 5 . Further develop the decision support tools, integrating tree growth models and ecology models. The ecological based decision support system ECOORK already uses tree growth model CORKFITS to optimize regeneration intensity in time for sustainability of tree component according with soil conservation and biodiversity objectives in cork oak woodlands (Montados);
- 6 . Develop simulation studies for the negotiation groups of adaptive management processes, both at regional and local level, supporting the definition and implementation of integrated sectorial policies.



FORESTERRA

Enhancing Forest REsearch in the MediTERRanean
through improved coordination and integration



About forest research infrastructures:

List of available infrastructures.

Laboratory: Biotechnology, Soil, Pest and Diseases, Genetics

Experimental sites: Since 1995 a set of 126 permanent plots (covering approximately 75 ha) were installed in Chamusca, Coruche and Alcácer-do-Sal with the assistance of Forest Producers Associations. Permanent plots have been installed with the purpose of monitoring cork oak (*Quercus suber*) tree growth and cork production (Ribeiro et al. 2003). Pertinent information was gathered on: (1) soil and meteorology; (2) topography; (3) stand structure and density; (4) multifunctional management; (5) shrub control techniques –with and without soil mobilization; with and without grazing. The monitoring of the permanent plots includes: (a) periodic growth and yield measurements; (b) climatic data; (c) periodic soil sample collection; (c) management plan information (cattle type and density, time plan of shrub control measures, etc.)



FORESTERRA

Enhancing Forest RESearch in the MediTERRanean
through improved coordination and integration



About forest research infrastructures:

Does your institute have a specific policy of access to these infrastructures by other national/international institutes?

Yes

Do you have any experience in mutual opening and transnational access of infrastructures?

Yes



FORESTERRA

Enhancing Forest RESearch in the MediTERRanean
through improved coordination and integration



Transnational collaborations (European and international)

NETWORKS:

- COST Action FP1203 - *European non-wood forest products (NWFPs) network*
- COST Action FA1103 - Endophytes in Biotechnology and Agriculture
- COST Action FP1001 - *Improving Data and Information on the Potential Supply of Wood Resources: A European Approach from Multisource National Forest Inventories (USEWOOD)*



FORESTERRA

Enhancing Forest REsearch in the MediTERRanean
through improved coordination and integration



Transnational collaborations (European and international)

National / European / international institutes with which ICAAM have active collaborations:

University of Lisbon, University of Trás-os-Montes e Alto Douro, University of Coimbra, University of Extremadura, University of Gottingen, University of Copenhagen, University of East Anglia, University of Waterloo, INRA, CIHEAM, ...



FORESTERRA

Enhancing FOrest RESearch in the MediTERRanean
through improved coordination and integration



Transnational collaboration

Which is your interest in creating Transnational Joint Research Units?

Yes

Which are the positive outputs you expect from this type of collaboration?

Knowledge transfer; Data completion; Mobility; Formation

Do you identify any drawback?

Lack of integrated policies for science and technology at a transnational level