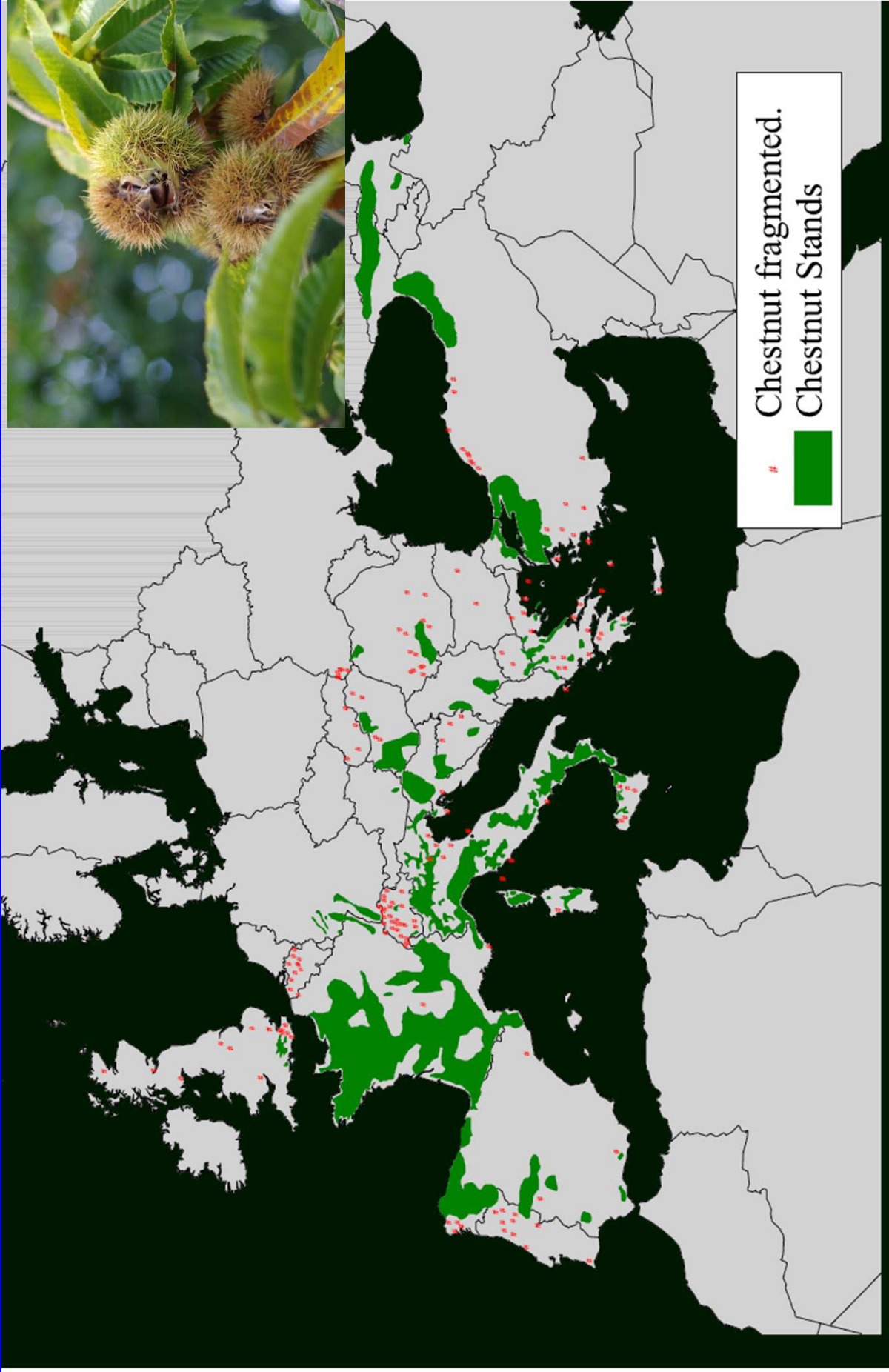


# Celtic Pig production in Chestnut extensive systems in Galicia

Rigueiro-Rodríguez A, Santiago-Freijanes JJ, Ferreiro-Domínguez N,  
González-Hernández MP, Fernández-Lorenzo JL, Mosquera-Losada  
MR\*





1110 million tons (50% Spain)

### Performing contracts

25 years (after which it returns to the owners)

3000 euros hectare establishment (half is funded by  
Gouvernement)

Tree density 10x10; 12\*12 and 14\*14



# Alibós



## O sequeiro da Portela

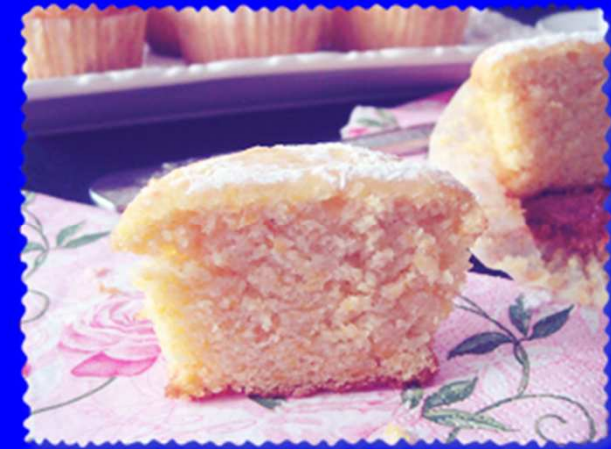




# Masa Nai



UN  
CACHIÑO  
DOCE





0.6 euros per kilogram; chestnut fruits are not harvested





High profitability  
High quality  
Special dates: weddings

Grazing happens before pork meat is delivered

Chesnut grazing //UNCOMERCIAL



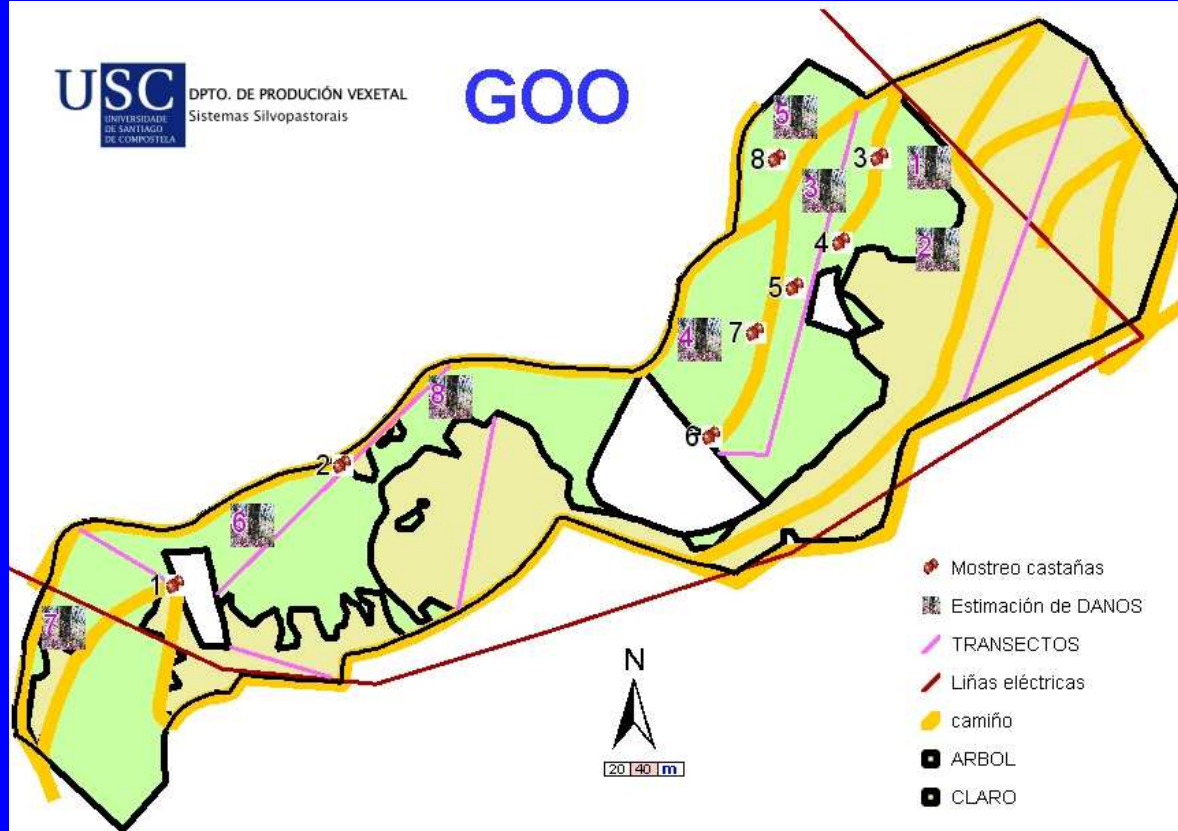
The **objective** of this experiment was to study the effect of Celtic pig grazing on

Tree growth

Tree damage

Understory evolution

Soil parameters



Tree (200 trees ha)  
Tree-less areas

Pre sampling: 2010

Post sampling 2011

Vegetation: Transects

Soil: main cations

Damage: cualitative analyses



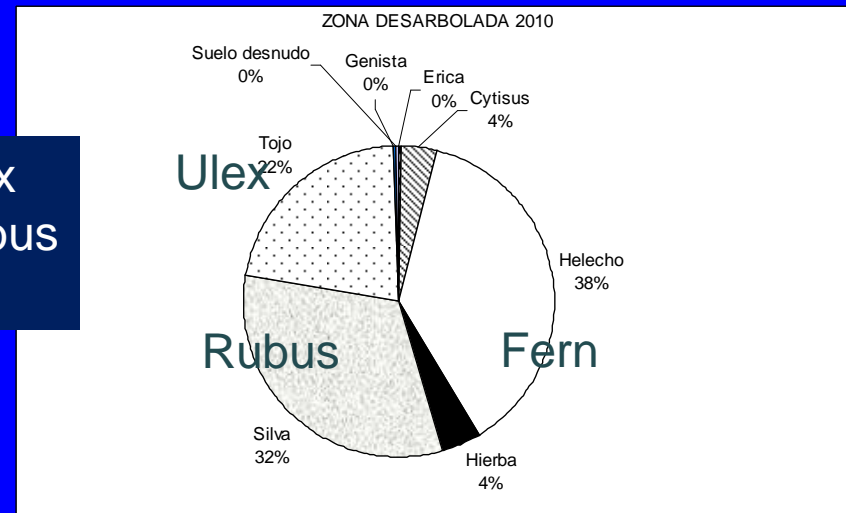
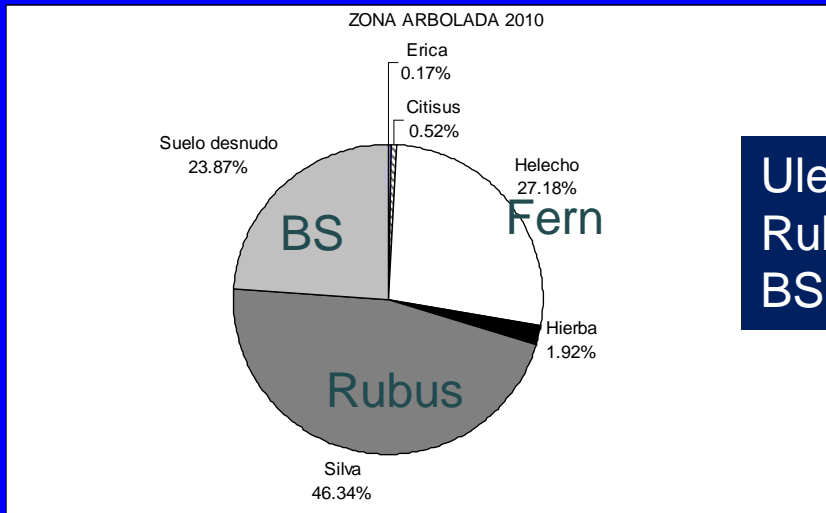


# Results

# FOREST

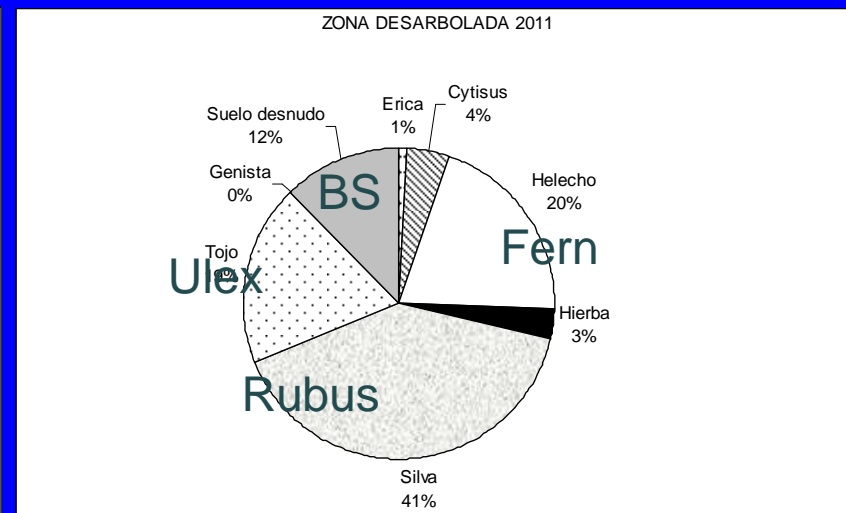
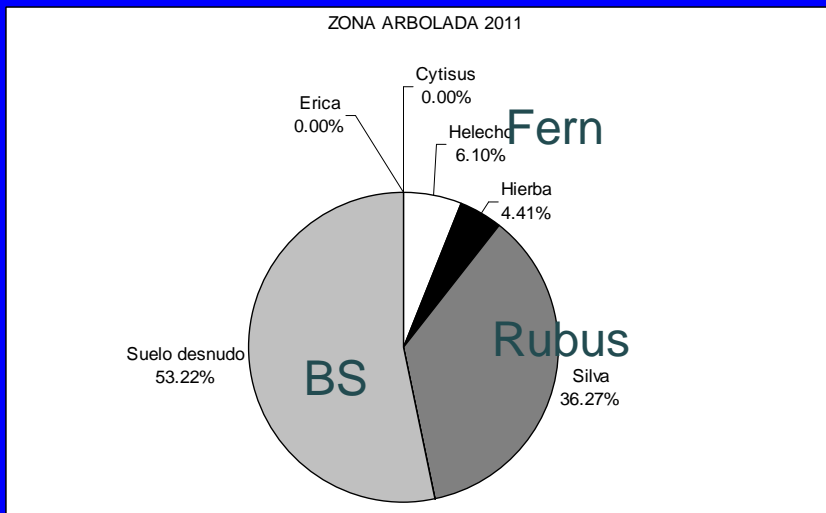
# TREE LESS AREAS

2010



Ulex  
Rubus  
BS

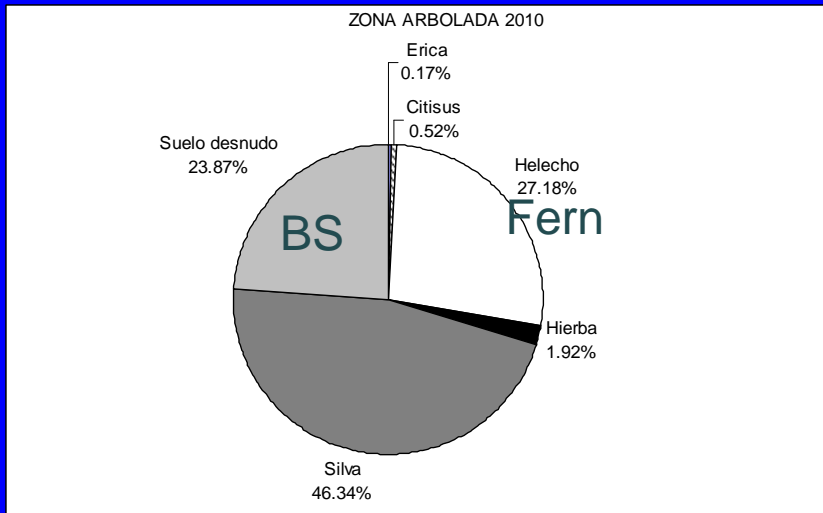
2011



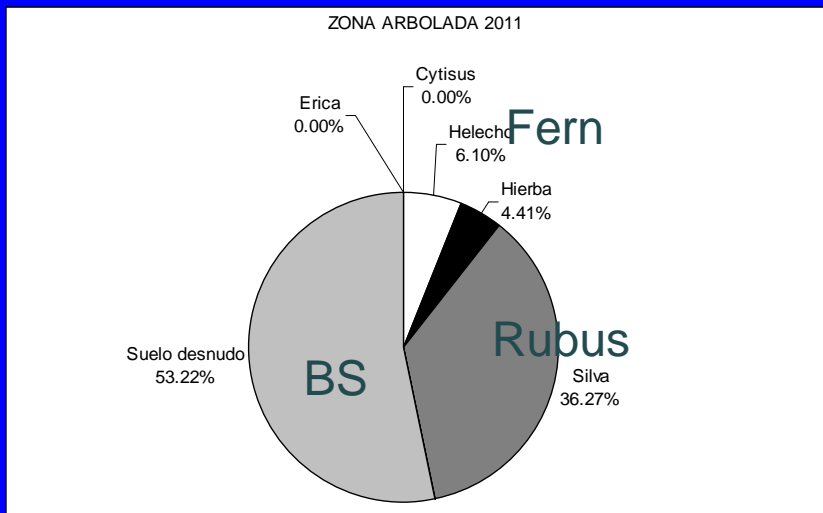
# FOREST

# TREE LESS AREAS

2010



2011



BS is increased  
Fern is reduced  
Rubus is reduced

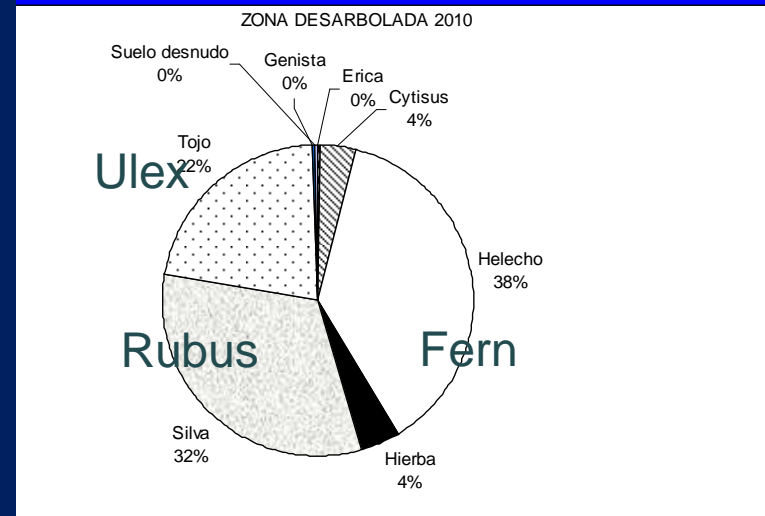


# FOREST

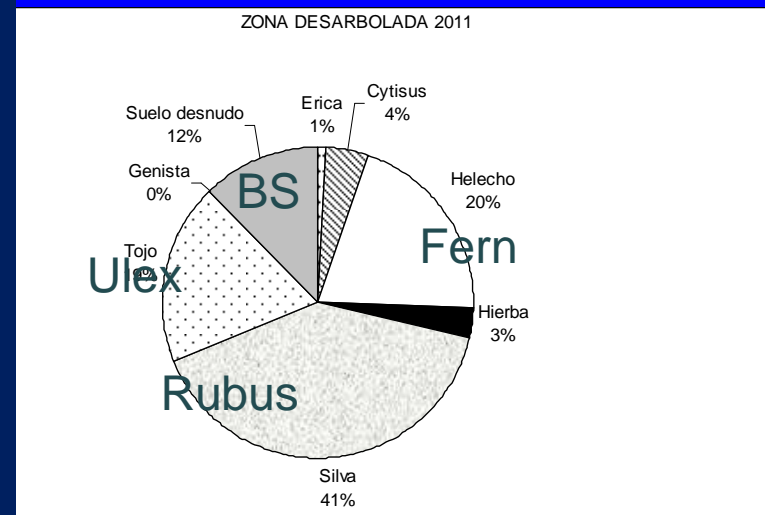
# TREE LESS AREAS

2010

BS is increased  
Fern is reduced  
Rubus is reduced



2011



Tree damage// 0 is not damage



Damage 1



Damage 2



Damage 3



Damage 4

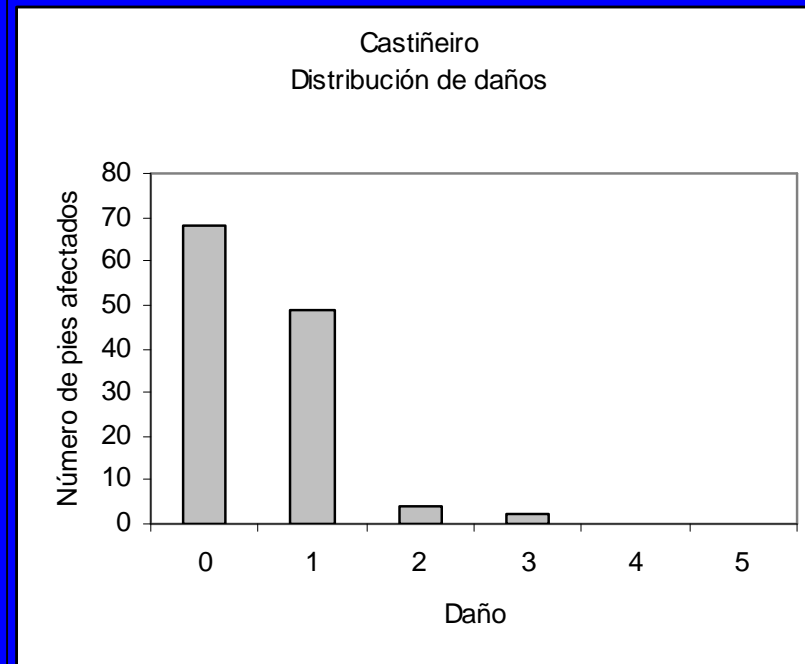


Damage 5

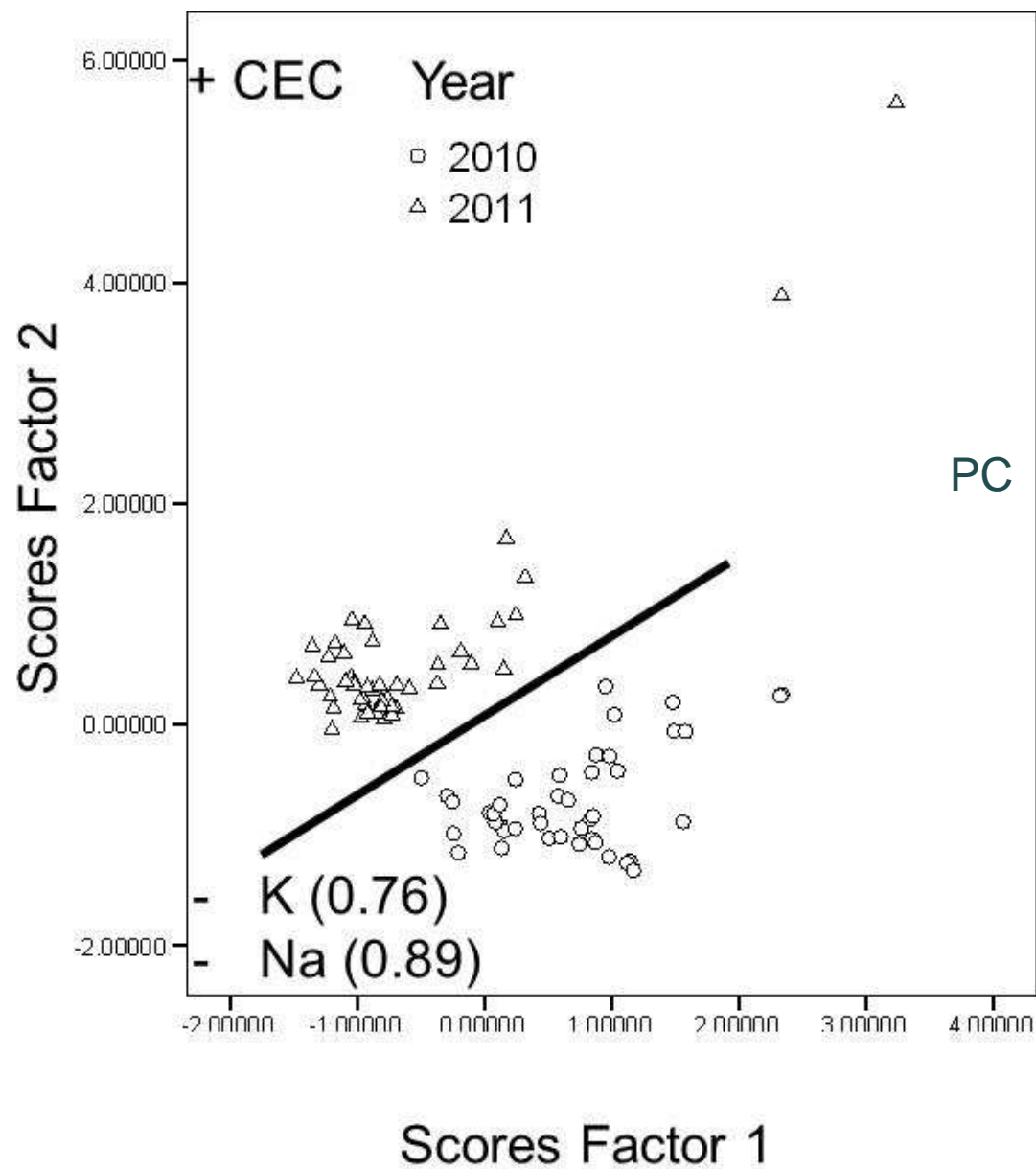


Root damage

Most of trees did not  
show severe damage

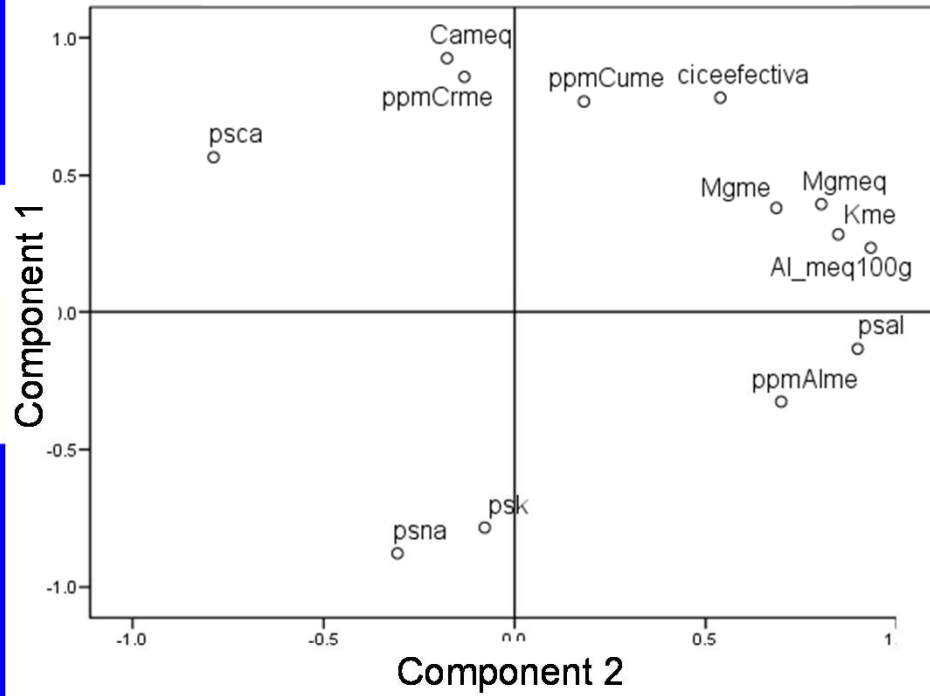






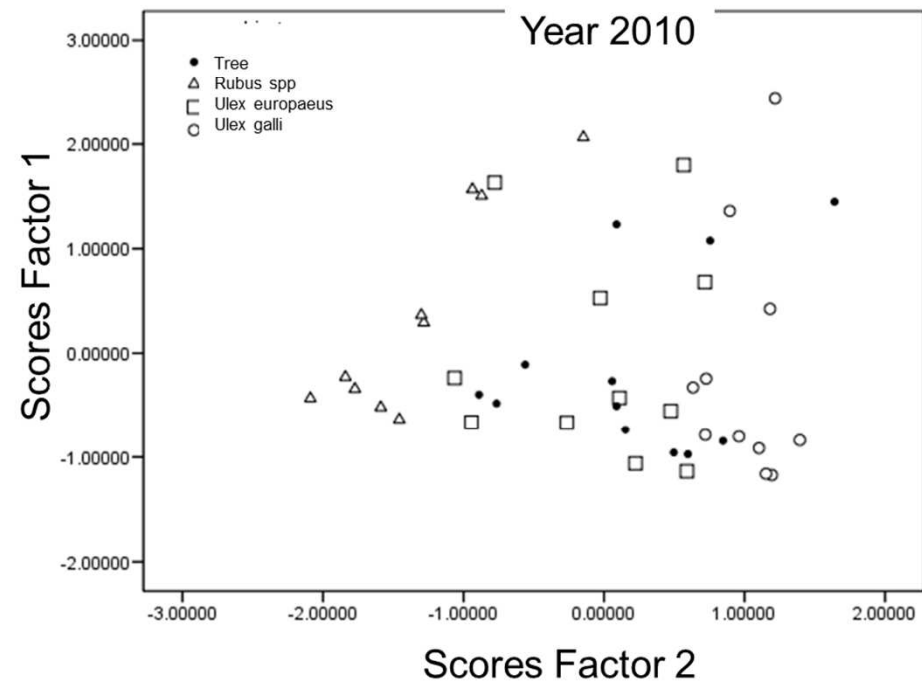
80% Explained variance

### CPA. Year 2010

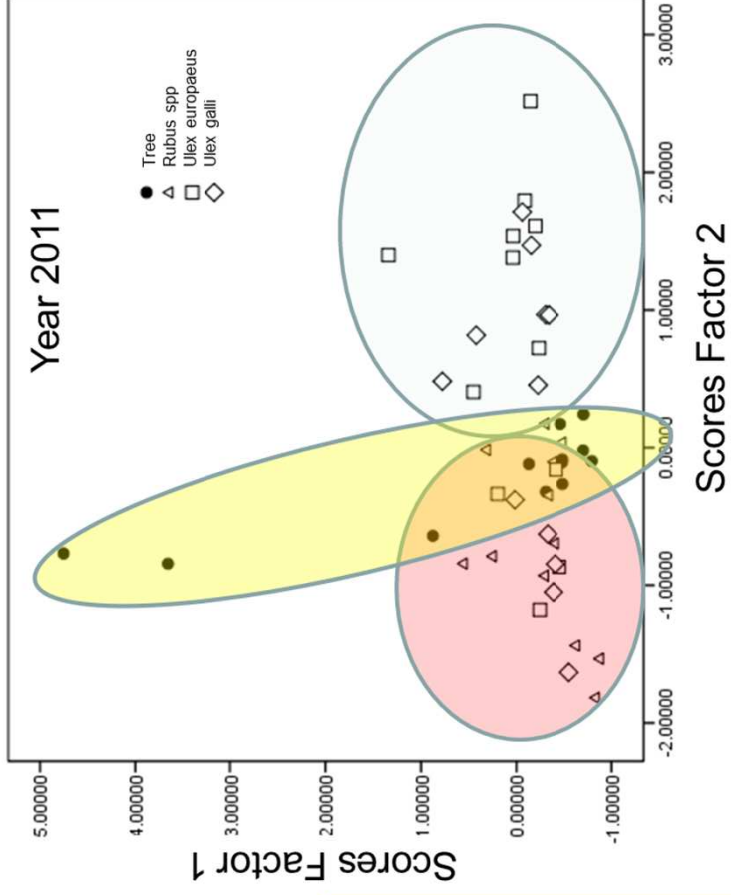
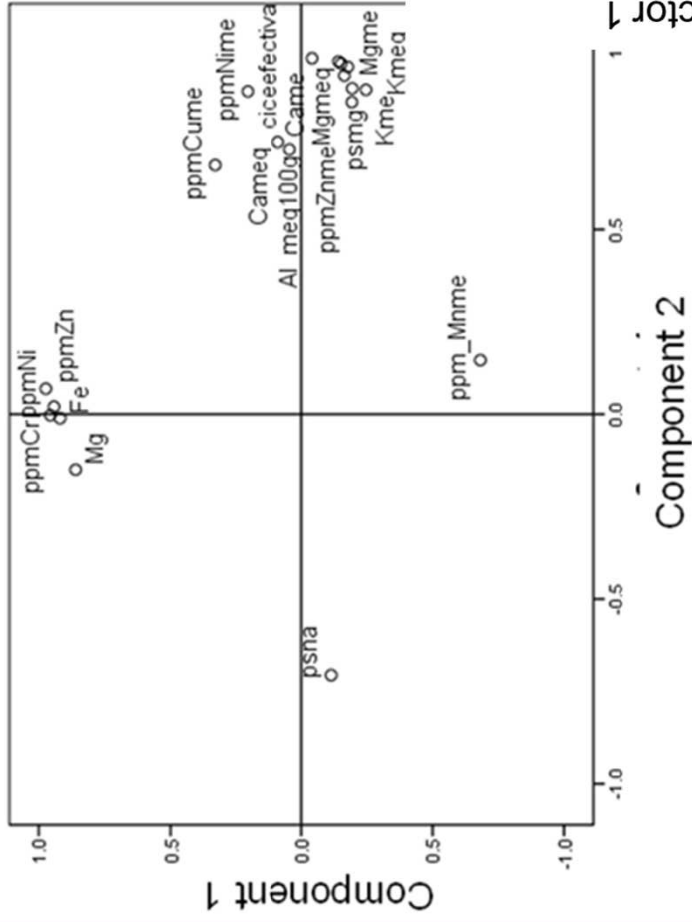


PC

### Year 2010



### CPA. Year 2011



Rubus spp  
Na

Ulex spp  
CEC, Cations

High stocking rates in chesnut forest

increased vegetation proportion

caused minor tree damage

affected soil chemical parameters

increased mineralization rate in soil

probably due to the

increase of bare soil and  
faeces depostion



Thanks