# Conservation of Agrobiodiversity and Ecology in Greek Agriculture



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#### Greek nature



- Grate diversity of habitats
- Grate diversity of plant species (6500 species and subspecies, 1275 endemic)

# agrobiodiversity

- Indigenous wild and weedy species close relatives/ancestors of cultivated plants
   (Triticum, Aegilops, Hordeum, Haynaldia, Avena, Secale, etc)
- Forages (*Trifolium, Medicago, Festuca, Lolium, Phleum,* etc
- Pulces (*Lens, Vicia, Lupinus*, etc)
- Fruit plants (*Malus, Pirus, Prunus,* etc)
- Vegetables (*Cruciferae, Compositae, Umbelliferae, Liliaceae, Chenopodiaceae*)
- Grapevine (*Vitis ssp*)
- Olive (Olea ssp)

- Wild species directly used for human nutrition, with industrial or other uses and for ornamentation
- (Origanum ssp., Ocinum, Majorana, Capparis, Sideritis, Matricaria)
- Aromatic and medicinal plants (*Salvia, Mentha, Lavandula, Digitalis*, etc)



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# Traditional crops..











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### Landraces

Species originated or diversified in Greece:

- leguminous crops such as Cicer, Lens, Vicia, Pisum and Lupinus,
- vegetables such as Brassica, Lactuca, Cichorium, Beta,
- trees such as *Olea, Ficus,* etc. and
- grapevine

- Species introduced in Greece centuries ago which were afterwards evolved and adapted to the local conditions:
- many fruit-plants such as *Malus, Pirus, Prunus,* etc.,
- cereals such as *Triticum*, *Hordeum*, *Secale*, etc., and
- vegetables such as *Phaseolus*,
   *Lycopersicon*, *Solanum*,
   *Capsicum*, etc.).

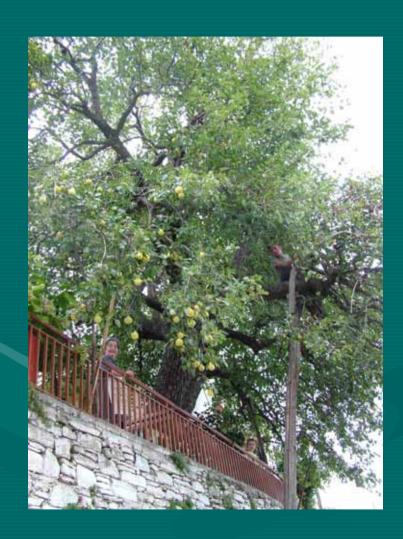






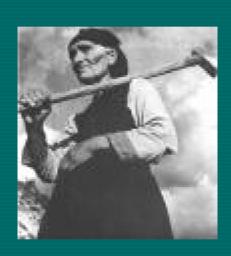


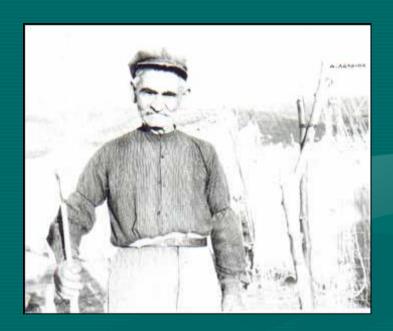






# Traditional knowledge....







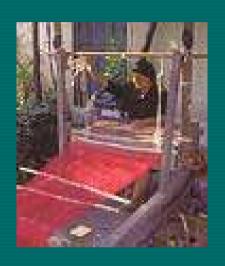
### Constructions and tools..







### ..art







# Relationship with animals





### ...and ethos





#### **Erosion**

- Dramatic losses of germplasm
- Populations and local cereals today: 1% of total acreage and
- 2-3% vegetable old varieties still being cultivated
- Traditional varieties still being used in many tree crops and in the grapevine



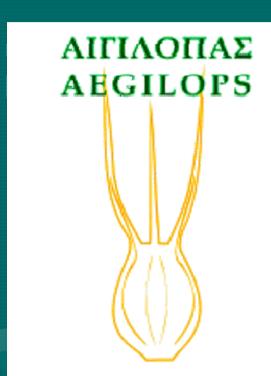
### Systematic collections

- In early 1920's started
- Early germplasm collections were soon lost
- Modern era in 1981:
   Greek Gene Bank, 11,000 accessions today: Wheat, Barley, Maize, Oats, Rice, Gabbage, Sugar Beet, Carrot, Onion, Eggplant, Grapevine, Minor fruits)



Other institutes, universities, NGOs

# www.aegilops.gr



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NETWORK FOR BIODIVERSITY AND
ECOLOGY IN AGRICULTURE

#### **Seed activities**

- On farm conservation under organic farming
- Participatory evaluation and selection of adapted varieties
- Reproduction of seed and distribution
- Strengthening the local seed supply systems













#### Movement activities

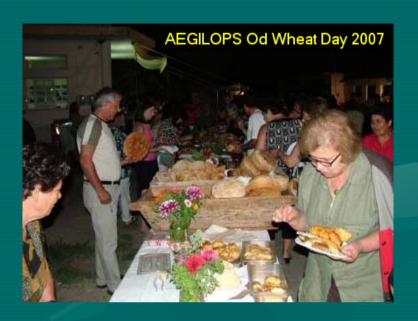




- Networking, information exchange, collaboration
- Struggling for farmers' rights and raising public awareness

 Supporting local diverse, high quality food production and creation of niche markets

- Old Wheat Day,
- Heritage Varieties and Organic Garden Festival





# www.archipelagos.gr Aegean Seed Bank









# www.peliti.gr Seed exchange festivals



# Obstacles conserving agrobiodiversity

- Legal framework for farm-saved seed and
- commercial use of landraces and registration
- Deficit on research and traditional knowledge
- GMO crops
- Environmental degradation



# Greek agriculture

- Adverse affects of globalization
- Genetic erosion
- Presses to adopt policy friendly to patents and biotechnical products



### Community needs and actions

• the Farmers' rights on seed and genetic resources (conserve, use, exchange, and sell propagating material - benefit sharing of agrobiodiversity)

Consumers' free choice on food

## Farmers' rights

Third European Seminar

#### **Let's Liberate Diversity**

Preserving bio-diversity of cultivated plants – in our gardens, on our farms

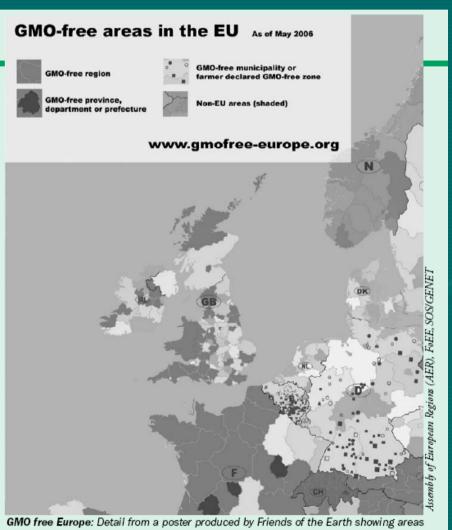
May 18th -20th, 2007, Halle, Germany

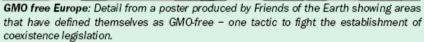






# Consumers' rights







# economic / climate change crisis and agrobiodiversity

- Food security and sovereignty
- Community independence
- Self sufficiency
- Locality versus globalization

# Organic agriculture movement and biodiversity

- Local adapted varieties
- Low input practices
- Local, quality, famous products

- Certified organic agriculture accused causing genetic erosion
- Co-existence with GMO's



# Low input - ecological agriculture





# **Quality local food**









# ..and products









# ... primarily locally consumed

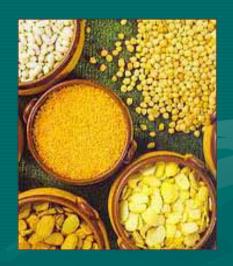




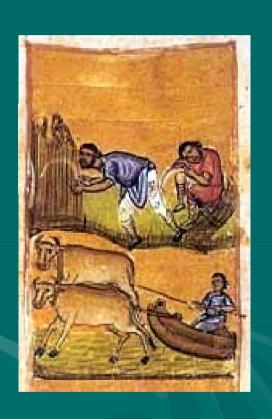
### The lost taste...

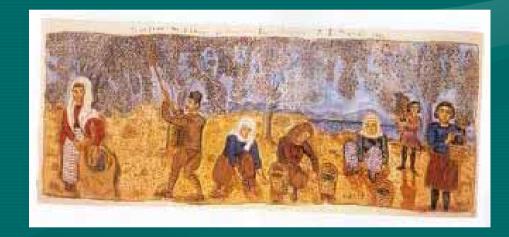












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