



Assessorato Affari Generali, Personale
e Riforma della Regione Autonoma della Sardegna



INTERNATIONAL WORKSHOP
Ecosystem Management and Agriculture
2-4 February 2005
Hotel Carlos V, Alghero (Italy)

PROGRAMME

2 FEBRUARY 2005

- 9:00** Participants' Registration
10:00 Workshop presentation
Graziano Cesaraccio (President of S.A.R.)
10:15 Greetings of Authorities

PLENARY SESSION

- Chairperson: Johann Baumgärtner (ICRPE, Ethiopia)
10:30 Session presentation
Dr Johann Baumgärtner
10:45 Application of an Ecosystem Theory to understand
Agricultural Systems
Sven Erik Jørgensen (University of Copenhagen)
11:30 Coffee break
12:00 The challenge of climate science
Antonio Navarra (Istituto Nazionale di Geofisica e
Vulcanologia, Roma)
12.45 Lunch break
15.00 The ecology of grazing behaviour
Peter J. Van Soest (Cornell University)
15:45 Physiologically based demographic models and GIS:
assessing weather driven regional agroecosystem
dynamics
Andrew Paul Gutierrez (University of California,
Berkeley)
16:30 Perspectives of ecosocial systems
Johann Baumgärtner (ICRPE, Ethiopia)

- 17.15** Coffee break

3 FEBRUARY 2005

**EFFECTS OF CLIMATE VARIABILITY ON
AGRICULTURAL ECOSYSTEMS**

- Chairperson: Prof. Donatella Spano (Università degli
Studi di Sassari)
9.30 Session presentation
Prof. Donatella Spano
9:45 Climate change: the implications for ecosystems
Jean Palutikof (Met Office, U.K.)
10:15 Plants and climate: interactions and tools for
agro-ecosystem management
Federica Rossi (CNR-IBIMET, Bologna)
10:45 Climate Change and agriculture: challenges for the
coming decades
Francesco Tubiello (Columbia University - IIASA,
Laxenburg)
11:15 Coffee break
11:45 Deriving climate-related risk indicators for
agricultural crops
Goetz M. Richter (Rothamsted Research,
Harpenden)
12:15 Evaluation of climatic risk for agriculture in
Mediterranean areas
Pierpaolo Duce (CNR-IBIMET, Sassari)
12:45 Lunch break

AGRO-ECOSYSTEM MANAGEMENT: PESTS AND PLANTS MONITORING AND MODELLING

Chairperson: Prof. Gavino Delrio (Università degli Studi di Sassari)

- 15.00** Session presentation
Prof. Gavino Delrio
- 15:15** Dynamics of pathogen populations in farming systems
Vittorio Rossi (Università Cattolica S. Cuore, Piacenza)
- 15:45** Agro-ecosystem structure influencing the entomofauna
Roberto Pantaleoni (Università degli Studi di Sassari)
- 16:15** The integration of agro-ecological knowledge by the SEMOLA modelling framework
Francesco Danuso, Università degli Studi di Udine
- 16:45** Modular models for agro-ecosystems simulation
Marcello Donatelli (CRA, Bologna)
- 17:15** Coffee break
- 17:45** Enhancement of ecosocial system sustainability under stressed conditions
Gianni Gilioli (Università degli Studi Mediterranea di Reggio Calabria)
- 18:15** Past, present, and future of *Lobesia botrana* (Lep., Tortricidae) attacks to the Frascati vineyards as simulated by the Delay Simulator (DS) model
Maurizio Severini (CNR-ISAC, Roma)

4 FEBRUARY 2005

RATIONAL IRRIGATION MANAGEMENT IN MEDITERRANEAN AGRO-ECOSYSTEMS

Chairperson: Prof. Giuseppe Zerbi (Università degli Studi di Udine)

- 9.30** Session presentation
Prof. Giuseppe Zerbi
- 9:45** New innovations in measuring and estimating crop evapotranspiration
Richard Snyder (University of California, Davis)
- 10.15** Sustainable irrigation of fruit trees in areas with low rainfall and high evapotranspirative demand
Cristos Xiloyannis (Università degli Studi della Basilicata, Potenza)

- 10.45** Optimization of water resource in herbaceous agro-ecosystems of mediterranean areas

Michele Perniola (Università degli Studi della Basilicata, Potenza)

11.15 Coffee break

- 11.45** Irrigation modernization: effects on water availability and the environment

Enrique Playàn (CSIC, Zaragoza)

- 12.15** Water saving criteria and related Decision Support System

Paolo Mannini (Cons. Can. Emiliano Romagnolo, Bologna)

12.45 Lunch break

METEOROLOGY APPLICATIONS IN ANIMAL HUSBANDRY

Chairperson: Prof. Giuseppe Pulina (Università degli Studi di Sassari)

- 15.0** Session presentation

Prof. Giuseppe Pulina

- 15:15** Influence of meteorological conditions on sheep farming system in Mediterranean environment

Maria Sitzia (Istituto Zootecnico e Caseario per la Sardegna)

- 15:45** Inter-annual variability in the meteorological trends and natural pasture production in Sardinia

Salvatore Caredda (Università degli Studi di Sassari)

16:15 Coffee break

- 16:45** Environmental influence on forage quality

Paolo Bani (Università Cattolica Sacro Cuore, Piacenza)

- 17:15** Effects of winter meteorological conditions on ruminant production and models for their prediction

Antonello Cannas (Università degli Studi di Sassari)

- 17:45** Effects of heat stress on animal productions

Bruno Ronchi (Università della Tuscia, Viterbo)

- 18.15** Closing

Giuseppe Bianco (Servizio Agrometeorologico Regionale per la Sardegna, Sassari)