

## Poster presentations

**All sessions and symposia: October 6 (Thursday), 18:15-19:45h, Theatre Lobby**

### Session 1 Climate change

#### **Regulated deficit irrigation on cv. Touriga Nacional in the Douro Demarcated Region, Portugal - Physiological responses, productivity and quality effects on grapes**

Igor Gonçalves<sup>1</sup>, Ana Morais<sup>1</sup>, Bruno Teixeira<sup>1</sup>, Paulo Santos<sup>1</sup>, Rui Soares<sup>2</sup>, Cristina Carlos<sup>1</sup>, <sup>1</sup>ADVID, Vila Real, Portugal, <sup>2</sup>Companhia Geral da Agricultura das Vinhas do Alto Douro SA, Pinhão, Portugal

#### **Geo-information for strengthening mountain community in climate change adaptation**

Adish Khezri<sup>1</sup>, Arbind Man Tuladhar<sup>1</sup>, Jaap Zevenbergen<sup>1</sup>, <sup>1</sup>Twente university, Enschede, The Netherlands

#### **Climatic Change. Human Influence?**

Dionísio Gonçalves<sup>1</sup>, Solange Leite<sup>2</sup>, António Ribeiro<sup>1</sup>, Tomás Figueiredo<sup>1</sup>, <sup>1</sup>Mountain Research Centre- IPB/ESA, Bragança, Portugal, <sup>2</sup>Centre for the Research and Agro-Environmental and Biological Sciences-UTAD, Vila Real, Portugal

#### **Climate change impacts on water supply: implications for reservoir management in Alto Sabor, northeast Portugal**

Claudia Carvalho-Santos<sup>1</sup>, António T. Monteiro<sup>2</sup>, João C. Azevedo<sup>3</sup>, João Pedro Nunes<sup>1</sup>, <sup>1</sup>Depart. Environment and Planning & CESAM, University of Aveiro, Aveiro, Portugal, <sup>2</sup>CIBIO - InBio, Universidade do Porto, Porto, Portugal, <sup>3</sup>CIMO, Instituto Politécnico de Bragança, Bragança, Portugal

#### **Planning the urban green infrastructure in a complex mountain terrain - the case of Bragança (Portugal)**

Artur Gonçalves<sup>1</sup>, <sup>1</sup>CIMO - Mountain Research Centre, Instituto Politécnico de Bragança, Bragança, Portugal

#### **LIFE CLIMATREE - A novel approach for accounting & monitoring carbon sequestration of tree crops and their potential as carbon sink areas**

KOSTAS BITHAS<sup>1</sup>, ANTONIOS KOLIMENAKIS<sup>1</sup>, <sup>1</sup>INSTITUTE OF URBAN ENVIRONMENT AND HUMAN RESOURCES, PANTEION UNIVERSITY, ATHENS, Greece

## **Session 2**

### **Biodiversity conservation**

#### **The vegetation of a mountain area of the Scalve Valley (Southern Alps) twenty years after environmental restoration work**

Luca Giupponi<sup>1</sup>, Gian Battista Bischetti<sup>2</sup>, Annamaria Giorgi<sup>1,2</sup>, <sup>1</sup>*Università degli Studi di Milano, Ge.S.Di.Mont., Edolo, Italy*, <sup>2</sup>*Università degli Studi di Milano, DISAA, Milano, Italy*

#### **Human-Canids Conflict in Dhorpatan Hunting Reserve, Nepal**

Prakash Thapa<sup>1</sup>, <sup>1</sup>*Institute of Forestry, Pokhara, Nepal*

#### **Knockdown of Phytophthora cinnamomi GIP gene by RNA interference**

Altino Choupina<sup>1,2</sup>, Maria joao De sousa<sup>1</sup>, Rodrigo Costa<sup>2</sup>, Abdessalem Chahed<sup>2</sup>, <sup>1</sup>*Polytechnic institute of Braganca, Braganca, Portugal*, <sup>2</sup>*CIMO Campus de Santa. Apolónia, Braganca, Portugal*

#### **Determination of the subcellular localisation of GIP and NPP1 proteins in Phytophthora cinnamomi tagged with green fluorescent protein**

Altino Choupina<sup>1,2</sup>, Maria joao De sousa<sup>1</sup>, Rodrigo Costa<sup>2</sup>, Abdessalem Chahed<sup>2</sup>, <sup>1</sup>*Polytechnic institute of Braganca, Braganca, Portugal*, <sup>2</sup>*CIMO Campus de Santa. Apolónia, Braganca, Portugal*

#### **Land cover in karst terrains - review of impacts on karst aquifer ecosystems from temperate and Mediterranean ecoregions**

Sanda Iepure<sup>1,2</sup>, Tiziana Di Lorenzo<sup>3</sup>, Andrea Castaño<sup>1</sup>, Francisco Carreño<sup>4</sup>, Javier Lillo<sup>4</sup>, <sup>1</sup>*IMDEA Water Institute, Alcalá de Henares, Spain*, <sup>2</sup>*Institute of Speleology 'Emil Racoviță', Cluj Napoca, Romania*, <sup>3</sup>*Instituto per lo Studio degli Ecosistemi ISE-CNR, Florence, Italy*, <sup>4</sup>*Rey Juan Carlos University, Madrid, Spain*

## **Session 3**

### **Mountain systems**

#### **Development of tools and guidelines to support Water Programs of Payments for Environmental Services in rural areas in Brazil**

Rachel Prado<sup>1</sup>, Elaine Fidalgo<sup>1</sup>, Ana Tureta<sup>1</sup>, Azeneth Schuler<sup>1</sup>, Carla Macário<sup>2</sup>, Bernadete Pedreira<sup>1</sup>, Joyce Monteiro<sup>1</sup>, Alba Martins<sup>1</sup>, Eliane Clemente<sup>1</sup>, Aline Oliveira<sup>1</sup>, Maria Fernanda Moura<sup>2</sup>, Ricardo Lima<sup>1</sup>, <sup>1</sup>*Embrapa Solos, Rio de Janeiro, Brazil*, <sup>2</sup>*Embrapa Informática Agropecuária, Campinas, Brazil*

#### **How precipitation variation influences reservoir limnology? The case of Azibo Reservoir**

Ana Maria Gerales<sup>1</sup>, <sup>1</sup>*CIMO, Escola Superior Agrária do Instituto Politécnico de Bragança, Campus de Santa Apolónia, 5300-253 Bragança, Portugal, Bragança, Portugal*

#### **Mining wastes spill into a mountain stream (Douro basin, NE Portugal): Impact on water quality and macroinvertebrate assemblages**

Ana Maria Galdes<sup>1</sup>, Maria João Parada<sup>1</sup>, Elsa Ramalhosa<sup>1</sup>, Conceição Fernandes<sup>1</sup>, Miguel Caetano<sup>2</sup>, Amílcar Teixeira<sup>1</sup>, <sup>1</sup>*Mountain Research Centre (CIMO), ESA-Polytechnic Institute of Bragança, Campus de St<sup>a</sup> Apolónia 5300-253 Bragança, Bragança, Portugal*, <sup>2</sup>*IPMA, Instituto Português do Mar e da Atmosfera, Avenida Brasília, 1449-006 Lisboa, Lisboa, Portugal*

**Can zooplankton biodiversity be used to evaluate trophic state and water quality of a mountain reservoir?**

Ana Maria Galdes<sup>1</sup>, Rajeev Pasupuleti<sup>2</sup>, Miguel Alonso<sup>3</sup>, <sup>1</sup>*Mountain Research Centre (CIMO), ESA-Polytechnic Institute of Bragança, Campus de Santa Apolónia 5300-253 Bragança, Bragança, Portugal*, <sup>2</sup>*ESA-Polytechnic Institute of Bragança, Campus de Santa Apolónia 5300-253 Bragança, Bragança, Portugal*, <sup>3</sup>*Departament d'Ecologia Facultat de Biologia Universitat de Barcelona Avda. Diagonal 643. 08028 Barcelona, Barcelona, Spain*

**Environmental drivers of productivity and isotopic ratios ( $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$ ) in high-mountain wetlands in the Eastern Pamir**

Malgorzata Suska-Malawska<sup>1</sup>, Marcin Sulwinski<sup>1</sup>, Piotr Chibowski<sup>1</sup>, Pawel Pawlikowski<sup>1</sup>, Monika Metrak<sup>1</sup>, <sup>1</sup>*University of Warsaw, Warsaw, Poland*

**Mountain's farmers and their perception of wildlife, values and relationships.**

Rosario Fanlo<sup>1</sup>, Montserrat Bou<sup>1</sup>, Daniel Paton<sup>2</sup>, <sup>1</sup>*University of Lleida-Agrotecnio,, Lleida, Spain*, <sup>2</sup>*University of Extremadura, Badajoz, Spain*

**Classifying beef carcasses according to meat quality using animal/carcass characteristics and pH/temperature decline descriptors early post-mortem**

Cristina Xavier<sup>1,2</sup>, Ursula Gonzales-Barron<sup>2</sup>, Alexandra Müller<sup>1</sup>, Vasco Cadavez<sup>2</sup>, <sup>1</sup>*Instituto de Ciências Biomédicas de Abel Salazar, ICBAS, Porto, Portugal*, <sup>2</sup>*Instituto Politécnico de Bragança, IPB, Bragança, Portugal*

**Meta-analysis of the incidence of *Salmonella* spp., *Listeria monocytogenes* and *Staphylococcus aureus* in Portuguese traditional meat products**

Vasco Cadavez<sup>1</sup>, Cristina Xavier<sup>1</sup>, Ursula Gonzales-Barron<sup>1</sup>, <sup>1</sup>*Polytechnic Institute of Braganza, Braganza, Portugal*

## Session 4

### Governance, heritage and identity

**Arenas of power in mountain environments in Brazil and Argentina**

Amazile López Netto<sup>1</sup>, Renato Assis<sup>2</sup>, Adriana Aquino<sup>3</sup>, <sup>1</sup>*Universidade do Estado da Bahia, Juazeiro, Bahia, Brazil*, <sup>2</sup>*Embrapa Agrobiologia - NPTA, Nova Friburgo, Rio de Janeiro, Brazil*, <sup>3</sup>*Embrapa Agrobiologia - NPTA, Nova Friburgo, Rio de Janeiro, Brazil*

**Public policies to stimulate the labor inducers of innovation - INDILABS**

LEONARDO FAVER<sup>1</sup>, <sup>1</sup>*UNIVERSIDADE CATÓLICA DE PETRÓPOLIS, PETRÓPOLIS, RIO DE JANEIRO, Brazil*

### **Terras de Coura Landscape Plan**

Isabel Matias<sup>1,2</sup>, <sup>1</sup>*Leiras do Carvalhal, Lda, Paredes de Coura, Portugal*, <sup>2</sup>*Centro de Estudos Arnaldo Araújo/ESAP, Porto, Portugal*, <sup>3</sup>*Valminho Florestal, Valença, Portugal*

### **Planning agritourism like a factor of the environmental conservation in a city located in a river basin bordered by a mountainous region in RJ, Brazil.**

Bernadete Pedreira<sup>1</sup>, Elaine Fidalgo<sup>1</sup>, Rachel Prado<sup>1</sup>, <sup>1</sup>*EMBRAPA, Rio de Janeiro, RJ, Brazil*

## **Symposium 2**

### **Land use change, value and sustainable development in mountain landscapes**

#### **Historical evolution of forest landscape in areas populated by autochthonous broadleaf forests of northwestern peninsular: how historical data can be used in conservation strategies?**

Ignacio J. Diaz-Maroto<sup>1</sup>, Olga Vizoso-Arribe<sup>2</sup>, Maria C. Diaz-Maroto<sup>3</sup>, <sup>1</sup>*University of Santiago de Compostela, Lugo, Spain*, <sup>2</sup>*University of Santiago de Compostela, Lugo, Spain*, <sup>3</sup>*University of Castilla-La Mancha, Lugo, Spain*

#### **Recent land use changes in Inner Areas of Italy**

Marco Marchetti<sup>1</sup>, Lorenzo Sallustio<sup>1</sup>, Andrea De Toni<sup>1</sup>, Caterina Palombo<sup>1</sup>, Giovanni Santopuoli<sup>1</sup>, Carmen Giancola<sup>1</sup>, Marco Ottaviano<sup>1</sup>, Daniela Tonti<sup>1</sup>, Bruno Lasserre<sup>1</sup>, Paolo Di Martino<sup>1</sup>, Vittorio Garfi<sup>1</sup>, Rossano Pazzagli<sup>1</sup>, Matteo Vizzarri<sup>1</sup>, Roberto Tognetti<sup>1,2</sup>, <sup>1</sup>*Centro di Ricerca per le Aree Interne e gli Appennini (ARIA), Università degli Studi del Molise, Molise, Italy*, <sup>2</sup>*The EFI Project Centre on Mountain Forests (MOUNTFOR), San Michele all'Adige (TN), Italy*

#### **Forest certification: is it recognized by social, research and enterprise elements?**

Pablo Vila-Lameiro<sup>1</sup>, Adriana Conde-Fernandez<sup>0</sup>, <sup>1</sup>*University of Santiago de Compostela, Lugo, Spain*

#### **Endogenous territorial development in mountain environments: the case of the territory of the Alto Camaquã – Brazil**

Viviane Cristina Silva Lima<sup>1</sup>, Renato Linhares de Assis<sup>2</sup>, Adriana Maria de Aquino<sup>2</sup>, <sup>1</sup>*Universidade Federal Rural do Rio de Janeiro, Rio de Janeiro, Brazil*, <sup>2</sup>*Embrapa Agrobiologia, Rio de Janeiro, Brazil*

#### **Statistical model to predict land-use change in mountains**

Xabier Baches<sup>1</sup>, Ricardo Blanco<sup>1</sup>, Rosario Fanlo<sup>1</sup>, <sup>1</sup>*University of Lleida, Lleida, Spain*

## **Symposium 4**

### **Mountains, traditional ecological knowledge and conservation of biocultural heritage**

#### **Agrifood product family in mountain environment in Rio de Janeiro State , Brazil - case of local sociocultural practice strengthening**

Alessandro Melo Rifan<sup>1</sup>, Adriana Maria de Aquino<sup>1</sup>, Renato Linhares de Assis<sup>1</sup>, Maria Clara Estoducto Pinto<sup>1</sup>, <sup>1</sup>*Embrapa Agrobiologia - Núcleo de Pesquisa e Treinamento para Agricultores (NPTA), Nova Friburgo, Brazil*

## **Symposium 6**

### **Mountain agriculture and agroecology**

#### **Nutritional value and chemical composition of *Cichorium spinosum* L. under saline conditions.**

Spyridon Petropoulos<sup>1</sup>, Antoniadis Vasilios<sup>1</sup>, Levizou Efi<sup>1</sup>, Ângela Fernandes<sup>2</sup>, Lillian Barros<sup>2</sup>, Isabel Ferreira<sup>2</sup>, <sup>1</sup>*University of Thessaly, Magnissia, Greece,* <sup>2</sup>*Polytechnic Institute of Bragança, Braganca, Portugal*

#### **Saffron quality (*Crocus sativus* L.) of the Alpine areas**

Anna Giorgi<sup>1</sup>, Daniela Pentimalli<sup>1</sup>, Luca Giupponi<sup>1</sup>, Sara Panseri<sup>2</sup>, <sup>1</sup>*Centre for Applied Studies in the Sustainable Management and Protection of the Mountain Environment-Ge.S.Di.Mont, University of Milan, Edolo (BS), Italy,* <sup>2</sup>*Department of Veterinary Science and Public Health, University of Milan, Milan (MI), Italy*

#### **Saffron (*Crocus sativus* L.) production as strategies in a mountain contest**

Anna Giorgi<sup>1</sup>, Daniela Pentimalli<sup>1</sup>, Luca Giupponi<sup>1</sup>, Sara Panseri<sup>2</sup>, Gigliola Borgonovo<sup>3</sup>, Angela Bassoli<sup>3</sup>, <sup>1</sup>*Centre for Applied Studies in the Sustainable Management and Protection of the Mountain Environment-Ge.S.Di.Mont.- University of Milan, Edolo (BS), Italy,* <sup>2</sup>*Department of Veterinary Science and Public Health, University of Milan, Milan (MI), Italy,* <sup>3</sup>*DeFENS – Department of Food, Environmental and Nutritional Sciences, University of Milan, Milan (MI), Italy*

#### **An ancient pointed maize rich in phlobaphenes: the "Nero Spinoso" from Valcamonica(Brescia, Italy)**

Puglisi D.<sup>1</sup>, Cantaluppi E.<sup>1</sup>, Landoni L.<sup>2</sup>, Giupponi L.<sup>3</sup>, Giorgi A.<sup>3,1</sup>, Pilu R.<sup>1</sup>, <sup>1</sup>*Università degli Studi di Milano, DiSAA, Milano, Italy,* <sup>2</sup>*Università degli Studi di Milano, DBS, Milano, Italy,* <sup>3</sup>*Università degli Studi di Milano, Ge.S.Di.Mont., Edolo, Italy*

#### **Experience of agroecologic transition using cover crop in family production systems at the hills environment of Rio de Janeiro State - Brazil**

Gerson Antonio<sup>1</sup>, Renato Assis<sup>2</sup>, Adriana Aquino<sup>3</sup>, <sup>1</sup>*EMATER-RIO, Nova Friburgo, Rio de Janeiro, Brazil,* <sup>2</sup>*EMBRAPA, Nova Friburgo, Rio de Janeiro, Brazil,* <sup>3</sup>*EMBRAPA, Nova Friburgo, Rio de Janeiro, Brazil*

**Soil carbon stocks in no-tillage vegetables areas in the mountain region of the Rio de Janeiro state, Brazil**

Aline Oliveira<sup>1</sup>, Joyce Monteiro<sup>1</sup>, Ademir Fontana<sup>1</sup>, Nuno Madeira<sup>2</sup>, Carlos Eduardo Lima<sup>2</sup>, Rachel Prado<sup>1</sup>, <sup>1</sup>*Embrapa Solos, Rio de Janeiro, Brazil*, <sup>2</sup>*Embrapa Hortaliças, Brasília, Brazil*

**Production and use of inputs allowed in organic agriculture supporting agroecological transition in mountain region of the State of Rio de Janeiro - Brazil**

Luiz Antonio Oliveira<sup>1</sup>, Osmir Saiter<sup>2</sup>, Maria do Carmo Fernandes<sup>1</sup>, Maria Fernanda Fonseca<sup>1</sup>, Ana Paula Pegorer<sup>3</sup>, <sup>1</sup>*PESAGRO, Niterói, Rio de Janeiro, Brazil*, <sup>2</sup>*UFRRJ/PPGAO, Seropédica, Rio de Janeiro, Brazil*, <sup>3</sup>*UFRRJ/PPGCTIA, Seropédica, Rio de Janeiro, Brazil*

**Evaluation of sustainability at agroecological production systems in mountain environments at Nova Friburgo - Brazil**

Marcelo da Silva Pereira<sup>1</sup>, Isis Rodrigues<sup>4</sup>, Geraldo Stachetti Rodrigues<sup>4</sup>, Renato Linhares de Assis<sup>2</sup>, José Antonio Azevedo Espindola<sup>3</sup>, <sup>1</sup>*Secretaria Municipal de Agricultura e Desenvolvimento Rural de Nova Friburgo, Nova Friburgo - RJ, Brazil*, <sup>2</sup>*Embrapa Agrobiologia - Núcleo de Pesquisa e Treinamento para Agricultores (NPTA), Nova Friburgo - RJ, Brazil*, <sup>3</sup>*Embrapa Agrobiologia, Seropédica - RJ, Brazil*, <sup>4</sup>*Embrapa Meio Ambiente, Jaguariúna - SP, Brazil*

**Agroecological strategies and production diversification for food security and sovereignty in family based production systems in a mountain environment in Teresópolis - Brazil**

Hugo de Souza Cerqueira<sup>1</sup>, Adriana Maria de Aquino<sup>2</sup>, Lucia Helena Almeida<sup>3</sup>, José Guilherme Marinho Guerra<sup>3</sup>, Renato Linhares de Assis<sup>2</sup>, <sup>1</sup>*Associação Agroecológica de Teresópolis, Teresópolis, RJ, Brazil*, <sup>2</sup>*Embrapa Agrobiologia - Núcleo de Pesquisa e Treinamento para Agricultores (NPTA), Nova Friburgo, RJ, Brazil*, <sup>3</sup>*Embrapa Agrobiologia, Seropédica, RJ, Brazil*

**Participatory evaluation of soil quality and brassicas crops in the mountain region of Rio de Janeiro, Brazil.**

Eduardo Spitz de Carvalho<sup>1,2</sup>, Adriana Maria de Aquino<sup>1</sup>, Renato Linhares de Assis<sup>1</sup>, <sup>1</sup>*Colégio Rei Alberto I, Nova Friburgo, Brazil*, <sup>2</sup>*Embrapa Agrobiologia, Nova Friburgo, Brazil*

**Growing hops in Bragança (NE Portugal): past, present and future**

Manuel Ângelo Rodrigues<sup>1</sup>, Jorge Sá Morais<sup>1</sup>, João Paulo Castro<sup>1</sup>, <sup>1</sup>*Polytechnic Institute of Bragança, Bragança, Portugal*

**Effect of liming and N, P, K or B application as fertilizer on chestnut tree crop nutritional status and growth**

Margarida Arrobas<sup>1</sup>, Isabel Q. Ferreira<sup>1</sup>, Sandra Afonso<sup>1</sup>, Manuel Ângelo Rodrigues<sup>1</sup>, <sup>1</sup>*Polytechnic Institute of Bragança, Bragança, Portugal*

**Fertilizing value of a five years pasture ley in comparison with maize monoculture**

Margarida Arrobas<sup>1</sup>, Peltier Aguiar<sup>2</sup>, Manuel Ângelo Rodrigues<sup>1</sup>, <sup>1</sup>*Polytechnic Institute of Bragança, Bragança, Portugal*, <sup>2</sup>*Instituto Superior Politécnico do Kuanza Sul, Sumbe, Angola*

**Results from a long-term study on groundcover management in rainfed olive orchards**

Manuel Ângelo Rodrigues<sup>1</sup>, Sandra Afonso<sup>1</sup>, Isabel Q. Ferreira<sup>1</sup>, Margarida Arrobas<sup>1</sup>, <sup>1</sup>*Polytechnic Institute of Bragança, B, Portugal*

**An insight into the Portuguese sector of aromatic and medicinal plants**

Manuel Ângelo Rodrigues<sup>1</sup>, Sandra Afonso<sup>1</sup>, Isabel Q. Ferreira<sup>1</sup>, Margarida Arrobas<sup>1</sup>, <sup>1</sup>*Polytechnic Institute of Bragança, Bragança, Portugal*

**Protagonism and Rural Rio Programme: an analysis of the participation of farmers in mountains of Atlantic Forest in Nova Friburgo - Brazil**

Ian Luiz Galliez<sup>3</sup>, Cezar Guedes<sup>1</sup>, Renato Linhares<sup>2</sup>, <sup>1</sup>*Universidade Federal Rural do Rio de Janeiro, Seropédica, Rio de Janeiro-RJ, Brazil*, <sup>2</sup>*EMBRAPA AGROBIOLOGIA, Seropédica, Rio de Janeiro-RJ, Brazil*, <sup>3</sup>*EMBRAPA SOLOS, Rio de Janeiro, Rio de Janeiro, Brazil*

**Symposium 10**

**Resources, risks and values: challenges for sustainable management in mountain viticulture**

**Erosional response of steep slope vineyards to wind driven rainfalls: a case study in the Douro Region, Portugal**

Tomás Figueiredo<sup>1</sup>, Jean Poesen<sup>2</sup>, Felícia Fonseca<sup>1</sup>, Zulimar Hernandez<sup>3</sup>, <sup>1</sup>*Instituto Politécnico de Bragança, Bragança, Portugal*, <sup>2</sup>*Catholic University of Leuven, Leuven, Belgium*, <sup>3</sup>*Universidad Autónoma de Madrid, Madrid, Spain*

**New terraces, geometry optimization for sustainable viticulture: an assay using GIS tools.**

Carlos Bateira<sup>1,2</sup>, António Costa<sup>2</sup>, Joana Fernandes<sup>2</sup>, Bruno Fonseca<sup>2</sup>, Fernando Alves<sup>3</sup>, Laura Soares<sup>2</sup>, <sup>1</sup>*Riskam/CEG/UL, Lisboa, Portugal*, <sup>2</sup>*FLUP/UP, Porto, Portugal*, <sup>3</sup>*Symington Family Estates, Vila Nova de Gaia, Portugal*

**Erosion control in sloping vineyards and grape production effects**

Maria Jose Marques<sup>1</sup>, Marta Ruiz-Colmenero<sup>2</sup>, Ramón Bienes<sup>2</sup>, Zulimar Hernández<sup>1</sup>, <sup>1</sup>*Autonomous University of Madrid, Madrid, Spain*, <sup>2</sup>*Madrid Institute for Research and Rural Development in Food and Agriculture (IMIDRA), Madrid, Spain*

**Symposium 11**

**Tropical mountains: challenges in climate, soil and water resources management for sustainable development**

**Human ecology in mountain environments: analysis of the perception of residents and leaders of the Serra dos Morgados, Jaguarari - Bahia, Brazil.**

Amazile López Netto<sup>1</sup>, Juracy Marques<sup>2</sup>, Adriana Aquino<sup>3</sup>, Renato Assis<sup>4</sup>, <sup>1</sup>*Universidade do Estado da Bahia, Juazeiro, Bahia, Brazil*, <sup>2</sup>*Universidade do Estado da Bahia, Juazeiro, Bahia, Brazil*, <sup>3</sup>*Embrapa Agrobiologia - NPTA, Nova Friburgo, Rio de Janeiro, Brazil*, <sup>4</sup>*Embrapa Agrobiologia - NPTA, Nova Friburgo, Rio de Janeiro, Brazil*

**Contamination potential by water erosion under different managements in bullside areas in Southern Brazil**

Douglas Henrique Bandeira<sup>1,2</sup>, Júlio Cesar Ramos<sup>2,3</sup>, Ildegardis Bertol<sup>2</sup>, Antonio Paz González<sup>1</sup>,



Hugo Castelani<sup>2</sup>, <sup>1</sup>*Universidad da Coruña, La Coruña, Spain*, <sup>2</sup>*Universidade do Estado de Santa Catarina, Lages, Brazil*, <sup>3</sup>*Empresa de Pesquisa Agropecuária e Extensão Rural de Santa Catarina, Chapecó, Brazil*

**Effect of grazing on plant species diversity of wetlands from High Tropical Mountain (Venezuela Andean)**

ZULIMAR HERNANDEZ<sup>1</sup>, MAXIMINA MONSATERIO<sup>2</sup>, <sup>1</sup>*Autonomous University of Madrid, Madrid, Spain*, <sup>2</sup>*University of los Andes, Mérida, Venezuela*

**Spatial variability of soil attributes and the occurrence of landslides in the mountain region of the state of Rio de Janeiro, Brazil.**

Fabio Rizzo<sup>1,2</sup>, Adriana Maria de Aquino<sup>1</sup>, Ednaldo da Silva Araújo<sup>1</sup>, Marcos Baccis<sup>2</sup>, <sup>1</sup>*Embrapa Agrobiology, Nova Friburgo, RJ, Brazil*, <sup>2</sup>*Rural Federal Universidad of Rio de Janeiro, Seropédica, Brazil*

**Environmental perception of farmer's families after tragedy In Nova Friburgo - Rio De Janeiro, Brazil.**

Maria Clara Estoducto<sup>1</sup>, Renato Linhares de Assis<sup>1</sup>, Adriana Maria de Aquino<sup>1</sup>, Alessandro Rifan<sup>1</sup>, <sup>1</sup>*Embrapa Agrobiology, Nova Friburgo, Brazil*

**Hill-slope water erosion rates assessed from sediment trapped in check-dams: a case study in Fogo Island, Cape Verde**

Tomás Figueiredo<sup>1</sup>, Zulimar Hernandez<sup>2</sup>, Juan Perez-Trujillo<sup>3</sup>, Ângela Moreno<sup>1</sup>, <sup>1</sup>*CIMO/ESA/IPB, Bragança, Portugal*, <sup>2</sup>*Universidad Autonoma de Madrid, Madrid, Spain*, <sup>3</sup>*Universidad de La Laguna, La Laguna, Spain*, <sup>4</sup>*Instituto Nacional de Investigação e Desenvolvimento Agrário, Cidade da Praia, Cape Verde*

## **Symposium 13**

### **Natural and human induced hazards in mountain areas under global change: trends and challenges**

**Geomorphic consequences of catastrophic flash flood in low mountains of the Western Caucasus (Gelendzhik District of the Krasnodarskiy Region, European Russia)**

Ekaterina V. Garankina<sup>1</sup>, Vladimir R. Belyaev<sup>1</sup>, Elena D. Sheremetskaya<sup>1</sup>, <sup>1</sup>*Lomonosov Moscow State University, Moscow, Russia*

**Evaluating sediment and metals transport during storm events in a small headwater catchment (Galicia, NW Spain)**

F. Soto-Varela<sup>1</sup>, ML. Rodríguez-Blanco<sup>1</sup>, MM. Taboada-Castro<sup>1</sup>, A. Diéguez<sup>1</sup>, L. Santos<sup>1</sup>, M. Insua<sup>1</sup>, MT. Taboada-Castro<sup>1</sup>, <sup>1</sup>*University of A Coruña, A Coruña, Spain*



## **Symposium 17**

### **Past environments in mid-latitude mountain regions**

#### **Late Pleistocene glacial phases in the upper Garonne valley**

Marcelo Fernandes<sup>1</sup>, Luís Lopes<sup>1</sup>, Marc Oliva<sup>1</sup>, Jesus Fernández<sup>2</sup>, <sup>1</sup>*IGOT, Lisbon, Portugal*,  
<sup>2</sup>*Departamento de Geografia, Oviedo, Spain*

#### **Morphometry of glacial cirques in the Central Pyrenees (Boí and Aran valleys)**

Luís Lopes<sup>1</sup>, Marcelo Fernandes<sup>1</sup>, Marc Oliva<sup>1</sup>, Jesus Fernández<sup>2</sup>, <sup>1</sup>*Instituto de Geografia e Ordenamento do Território, Lisbon, Portugal*, <sup>2</sup>*Departamento de Geografia, Oviedo, Spain*

## **Symposium 19**

### **Erosion threats in mountain environments: processes, impacts and mitigation**

#### **Land use and cover impacts on the water sediments in a mountainous basin of the atlantic forest biome, Rio de Janeiro, Brazil**

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#### **Characterization and Cartographic representation of the geometric parameters of the agriculture terraces in the Douro Wine Region.**

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#### **Spatial resolutions of digital elevation models for hydrological processes modeling: a case study in Quinta de São Luíz, Alto Douro wine region**

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#### **Assessment the vulnerability of water resources in the Upper Mero Basin (NW Spain) to climate change**

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#### **Displacement of Nim and Moringa seeds as a function of slope and mulching: laboratory experiments**

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