



THE THIRD INTERNATIONAL CONFERENCE

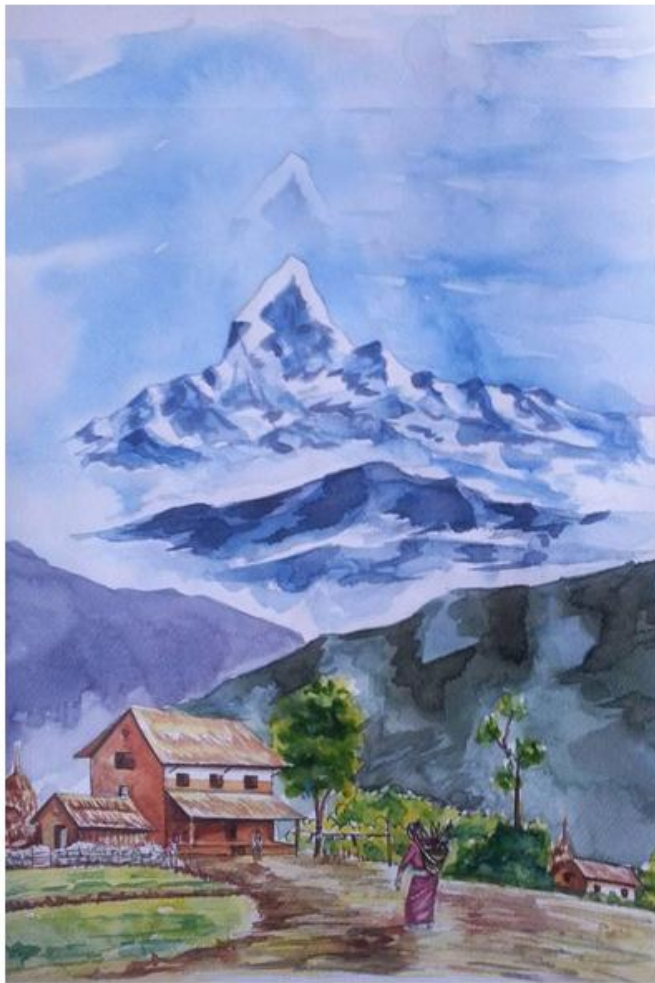
# MOUNTAINS IN THE CHANGING WORLD

CONSERVING BIODIVERSITY: CHALLENGES FOR MOUNTAINS IN THE ANTHROPOCENE

09-10 OCTOBER, 2018

RADISSON HOTEL, KATHMANDU, NEPAL

CONFERENCE  
PROGRAM & ABSTRACT



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# The 3<sup>rd</sup> International Conference on Mountains in the Changing World

October 9-10, 2018  
Radisson Hotel, Kathmandu, Nepal

## Program Schedule

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### October 09, 2018 || DAY ONE

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08:00 — 08:45

**Check -in**

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#### **Inaugural Session [Room: Nepa Duku]**

08:45 — 09:00

Welcome and Program Highlights [Room: Nepa Dhuku]

Dr. Prakash K Paudel, Convenor  
*Kathmandu Institute of Applied Sciences, Kathmandu, Nepal*

Chair

Dr. Ram P. Chaudhary, Professor Emeritus  
*Tribhuvan University, Kathmandu, Nepal*

09:00 — 09:50

**Keynote:** Climate and global change in the Himalayas: An ecological perspective (OR -KN -1 -466-KEYNOTE)

Jagdish Krishnaswamy  
*Centre for Biodiversity and Conservation, Ashoka Trust for Research in Ecology and the Environment (ATREE), Royal enclave, Jakkur Post, Srirampura, Bangalore-560064, India*

09:50 — 10:40

**Keynote:** A half century of conservation successes in Nepal: Past lessons and future possibilities (OR -KN -1 -467-KEYNOTE)

Joel T. Heinen  
*Department of Earth and Environment, Florida International University, Miami, FL, USA*

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10:40 — 11:00

Photo Session and Tea Break

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#### **Technical Sessions**

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11:00 — 12:30

**Wildlife Conservation in the Face of Challenges (OR -AEC -1) [Room: Nepa]**

Chair

Dr. Krishna Pokharel, Scientist  
*Center for Conservation Biology, Kathmandu Institute of Applied Sciences, Kathmandu, Nepal*

**Invited:** Predator-prey interdependency within mammalian niche hotspots in response to climate change in Himalayan region of Nepal (OR -AEC -1 -459 -INVITED)

Menaka Panta Neupane<sup>1</sup>, Manish Basnet<sup>1</sup>, Prabhat Raj Dahal<sup>2</sup>, Hari Basnet<sup>1</sup>, Neeshant Modak<sup>1</sup>, Maheshwar Dhakal<sup>3</sup>, Laxman Poudyal<sup>4</sup>, Dhananjaya Lamichane<sup>3</sup>  
<sup>1</sup>International Union for Conservation of Nature, Nepal; <sup>2</sup>Kathmandu Living Lab; <sup>3</sup>Ministry of Forests and Environment, Nepal; <sup>4</sup>Department of National Park and Wildlife Conservation, Nepal

Ecological assessment of Mai Pokhari wetland: A Ramsar site from eastern Nepal (OR -AEC -1 -406)

Pranil Pradhan<sup>1</sup>, Deep Narayan Shah<sup>2</sup>  
<sup>1</sup>Golden Gate International College, Ram Mandir Marga, Kathmandu, Nepal; <sup>2</sup>Central Department of Environmental Science, Tribhuvan University, Kathmandu, Nepal

Small mammals in Nepal: Spatial visualization and heat map analysis (OR -AEC -1 -460)

Hari Basnet<sup>1</sup>, Menaka Panta Neupane<sup>1</sup>, Prabhat Raj Dahal<sup>2</sup>, Neeshant Modak<sup>1</sup>, Maheshwar Dhakal<sup>3</sup>, Laxman Poudyal<sup>4</sup>, Dhananjaya Lamichane<sup>3</sup>

<sup>1</sup>International Union for Conservation of Nature, Nepal; <sup>2</sup>Kathmandu Living Lab, Kathmandu, Nepal; <sup>3</sup>Ministry of Forests and Environment, Nepal; <sup>4</sup>Department of National Park and Wildlife Conservation, Kathmandu, Nepal

Understanding the dynamics in distribution of Chinese Pangolin under predicted climate change in Nepal (OR -AEC -1 -470)

Birendra Kandel<sup>1</sup>, Sujan Khanal<sup>2</sup>, Menaka Panta Neupane<sup>3</sup>, Hari Basnet<sup>3</sup>, Nishant Modak<sup>3</sup>  
<sup>1</sup>Parsa National Park, Parsa, Nepal; <sup>2</sup>Institute of Forestry, Pokhara Campus, Pokhara, Nepal; <sup>3</sup>International Union for Conservation of Nature, Kathmandu, Nepal

Beekeeping for poverty reduction and biodiversity conservation in Bangladesh (OR -AEC -1 -333)

Md Ruhul Amin  
Department of Entomology, Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur, Bangladesh

11:00 — 12:30

**Symposium: Citizen Science for a sustainable Mountain Future (OR -CSS -1) [Room: Dhuku]**

Chair

Dr. Deep Narayan Shah  
Himalayan Biodiversity and Climate Center (HimBioCliC), Kathmandu, Nepal

**Invited:** Engaging youth for integrated water resources management in Nepal (OR -CCS -1 -376-INVITED)

Anjana Shakya<sup>1</sup>, Madhav Rijal<sup>2</sup>, Bhawani Dongol<sup>1</sup>  
<sup>1</sup>Program for aquatic natural resource improvement (Paani) project, USAID Nepal's water project, Kathmandu, Nepal; <sup>2</sup>Mid Western University, Surkhet, Nepal

Extreme precipitation events and importance of community based rainfall measurement in Nepal (OR-CSS-1-465)

Binod Pokharel<sup>1</sup>, Jonathan Meyer<sup>1</sup>, Simon Wang<sup>1</sup>, Suresh Marahatta<sup>2</sup>, Basant Giri<sup>3</sup>  
<sup>1</sup>Utah Climate Center, Utah State University, Logan, Utah, USA; <sup>2</sup>Central Department of Hydrology and Meteorology, Tribhuvan University, Kathmandu, Nepal; <sup>3</sup>Center for Analytical Sciences, Kathmandu Institute of Applied Sciences, Kathmandu, Nepal

Exploring the relations between groundwater level, rainfall, and land-use in the Kathmandu Valley (OR -CCS -1 -312)

Rajaram Prajapati<sup>1</sup>, Jeffrey C. Davids<sup>2,3</sup>, Nischal Devkota<sup>1</sup>, Anusha Pandey<sup>1</sup>  
<sup>1</sup>SmartPhones4Water-Nepal, Lalitpur, Nepal; <sup>2</sup>Delft University of Technology, Delft, Netherlands; <sup>3</sup>SmartPhones4Water-US, CA, USA

Groundwater quality assessment of Bhaktapur Municipality based on quality-indices and statistical-modeling (OR -CCS -1 -319)

Aalok Sharma Kafle<sup>1</sup>, Rajaram Prajapati<sup>2</sup>, Kushum KC<sup>3</sup>, Anusha Danegulu<sup>4</sup>  
<sup>1</sup>Kathmandu Engineering College, Kathmandu, Nepal; <sup>2</sup>Institute of Engineering, Pulchowk Campus, Lalitpur, Nepal; <sup>3</sup>Manakamana Training and Skill Development Institute Pvt. Ltd., Kathmandu, Nepal; <sup>4</sup>Khwopa College of Engineering, Bhaktapur, Nepal

Streams, sewage, and shallow groundwater: water quantity and quality interactions in the Kathmandu Valley (OR -CCS -1 -297)

Nischal Devkota<sup>1</sup>, Jeffrey Cook Davids<sup>2</sup>, Neelam Maharjan<sup>3</sup>, Torgen Soderlund<sup>2</sup>, Rajaram Prajapati<sup>1</sup>  
<sup>1</sup>SmartPhones4Water-Nepal, Lalitpur, Nepal; <sup>2</sup>SmartPhones4Water-USA, Chico, California, USA; <sup>3</sup>Central Department of Geology, Tribhuvan University, Kathmandu, Nepal

11:00 — 12:30	<b>Symposium: International Mountain Hack: Schools &amp; Mountains for Sustainable Development (OR -MHS -1) [Room: Begnas]</b>
12:30 — 13:30	Lunch Break
13:30 — 15:00	<b>Wildlife conservation in the face of challenges (OR -AEC -2) [Room: Nepa]</b>
Chair	<p>Dr. Menaka Panta Neupane <i>International Union for Conservation of Nature, Kathmandu, Nepal</i></p> <p>Status of Pangolin trade in Nepal (OR -AEC -2 -353)</p> <p><u>Bishal Sharma</u>, Prakash Chandra Aryal, Sandesh Neupane <i>GoldenGate International College, Tribhuvan University, Kathmandu, Nepal</i></p> <p>Distribution, habitat utilization and threats to Chinese Pangolin (<i>Manis Pentadactyla</i> Linnaeus, 1758) in Eastern Chure, Nepal (OR -AEC -2 -279)</p> <p><u>Nabin Bhandari</u><sup>1</sup>, Tej Bahadur Thapa<sup>2</sup> <sup>1</sup><i>Central Department of Environmental Science, Tribhuvan University, Kathmandu, Nepal;</i> <sup>2</sup><i>Central Department of Zoology, Tribhuvan University, Kathmandu, Nepal</i></p> <p>Habitat analysis of the Chinese Pangolin (<i>Manis pentadactyla</i>) Suryabinayak Community forest, Bhaktapur, Nepal (OR -AEC -2 -329)</p> <p><u>Kiran Gosai</u> <i>Khwopa College, Tribhuvan University, Bhaktapur, Nepal</i></p> <p>Habitat analysis of the Chinese Pangolin (<i>Manis pentadactyla</i>) at Manthali Community forest, Bhaktapur, Nepal (OR -AEC -2 -340)</p> <p><u>Mahendra Prasad Uprety</u> <i>Tribhuvan University, Kathmandu, Nepal</i></p> <p>Perception, distribution &amp; readiness to protect Pangolin in Rani Community forest, Makwanpur, Central Nepal (OR -AEC -2 -409)</p> <p><u>Gauri Javawal</u>, Kamal Raj Gosai <i>Department of Environmental Science, Tri-Chandra Multiple Campus, Tribhuvan University, Kathmandu, Nepal</i></p> <p>Role of women in biodiversity conservation: Lesson learnt from HIMAWANTI Nepal (OR -AEC -2 -456)</p> <p><u>Anita Shrestha</u>, Gopi Paudel <i>HIMAWANT, Nepal</i></p> <p>Habitat use by snow leopard and perceived impacts of climate change (OR- AEC-2-470)</p> <p><u>Binaya Adhikari</u> <i>Kathmandu Forestry College, Kathmandu, Nepal</i></p>
13:30 — 15:00	<b>Symposium: Citizen Science for a Sustainable Mountain Future (OR -CCS -2) [Room: Dhuku]</b>
Chair	<p>Dr. Bhesh Raj Thapa <i>SmartPhones for Water Nepal and International Water Management Institute (IWMI) – Nepal Office</i></p> <p><b>Invited:</b> Building Citizen science Asia: Community, partnerships &amp; SDGs (OR -CCS -2 -415-INVITED)</p> <p><u>Mendel Wong</u>, Scott Edmunds <i>CitizenScience.Asia</i></p> <p>Mapping the springs of the Kathmandu Valley: Can citizens accurately measure spring discharge? (OR -CCS -2 -316)</p>

Anusha Pandey<sup>1,2</sup>, Jeffrey Colin Davids<sup>3,4</sup>  
<sup>1</sup>NAMI College, Jorpati, Nepal; <sup>2</sup>SmartPhones4Water, Nepal; <sup>3</sup>Delft University of Technology, Delft, Netherlands; <sup>4</sup>SmartPhones4Water-USA, Chico, California, USA

Round Table Discussion

13.30 — 15:00 **Symposium: International Mountain Hack: Schools & Mountains for Sustainable Development (OR -MHS -2) [Room: Begnas]**

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15:00 — 15:20 **Tea Break**

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15:20 — 16:50 **Plant Ecology and Conservation (OR - PEC -1) [Room: Nepa]**

Chair

Dr. Susma Giri

Floristic composition of eastern mid-hills of Nepal (OR -PEC -1 -453)

Mohan Sangroula<sup>1</sup>, Mohan Siwakoti<sup>2</sup>, Chitra Bahadur Baniya<sup>2</sup>  
<sup>1</sup>Damak Multiple Campus Damak, Jhapa, Nepal; <sup>2</sup>Central Department of Botany, Tribhuvan University, Kathmandu, Nepal

Regeneration and dynamics of Himalayan Fir at a central Himalayan treeline ecotone (OR - PEC -1 -269)

Niels Schwab<sup>1</sup>, Ryszard J. Kaczka<sup>2</sup>, Aleksandra Lewandowska-Duzy<sup>1</sup>, Jürgen Böhner<sup>1</sup>, Ram P. Chaudhary<sup>3</sup>, Thomas Scholten<sup>4</sup>, Udo Schickhoff<sup>1</sup>  
<sup>1</sup>Physical Geography, Center for Earth System Research and Sustainability (CEN), University of Hamburg, Hamburg, Germany; <sup>2</sup>Faculty of Earth Sciences, University of Silesia in Katowice, Poland; <sup>3</sup>Centre for Applied Science and Technology (ReCAST), Tribhuvan University, Kathmandu, Nepal; <sup>4</sup>Department of Geosciences, Chair of Soil Science and Geomorphology, University of Tübingen, Germany

Identification of high priority sites for Rhododendron conservation in China (OR -PEC -1 -290)

Nawal Shrestha  
Peking University, Beijing, China

Green algae as potential sorbent for trace elements (OR-PEC-1-350)

Yaman Kumar Sahu<sup>1</sup>, Khageshwar Singh Patel<sup>1</sup>, Erick Kibet Towett<sup>2</sup>  
<sup>1</sup>Pt. Ravishankar Shukla University, Raipur, India; <sup>2</sup>World Agroforestry Centre, Nairobi, Kenya

Vascular plant colonization pattern along the spatio-temporal gradient around the Gangapurna Glacier foreland, Manang, central Nepal (OR -PEC -1 -398)

Ilina Bajracharya, Chitra Bahadur Baniya  
Central Department of Botany, Tribhuvan University, Kathmandu, Nepal

Altitudinal vascular species richness pattern in west Nepal (OR -PEC -1 -451)

Babu Ram Nepal<sup>1,2</sup>, John Skartveit<sup>3</sup>, Chitra Bahadur Baniya<sup>1</sup>  
<sup>1</sup>Central Department of Botany, Tribhuvan University, Nepal; <sup>2</sup>Butwal Multiple Campus, Tribhuvan University, Nepal; <sup>3</sup>University College, NLA, Bergen, Norway

Carbon emissions trading and clean development mechanism: Overview and expectations for Nepal (OR -PEC -1 -322)

Kushum KC<sup>1</sup>, Aalok Sharma Kafle<sup>2</sup>  
<sup>1</sup>Manakamana Training and Skill Development Institute Pvt. Ltd.; <sup>2</sup>Kathmandu Engineering College, Kalimati, Kathmandu

15:20 — 16:50 **Mountain Livelihood and Sustainability (OR -SAM -1) [Room: Dhuku]**

Chair

Dr. Kedar Rijal, Professor  
Central Department of Environmental Science, Tribhuvan University, Kathmandu, Nepal

**Invited:** Risk management and assessment on the environmental projects (OR -MLS -1 -469-INVITED)

Tom Wielicki  
*California State University, Fresno, CA, USA*

Comparative efficacy of *Trichoderma viridae*, *Pseudomonas fluorescens* and mixture of bio fertilizers against club root of Broccoli caused by *Plasmodiophora brassicae* (OR -MLS -1 -262)

Sarkal Jvakhwo  
*HICAST, Nepal*

Analysis of watersheds in Gandaki Province, Nepal using QGIS (OR -MLS -1 -330)

Ram Chandra Paudel, Keshav Basnet  
*Infrastructure Engineering and Management Program, Pashchimanchal Campus, Institute of Engineering, Tribhuvan University, Kaski, Nepal*

A participatory research experience on crop establishment in the char lands of northern Bangladesh (OR -MLS -1 -367)

Abdul Karim  
*Department of Agronomy, Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur, Bangladesh*

Nutritional composition of biomass

Pravin Kumar Sahu<sup>1</sup>, Suryakant Chakradhari<sup>1</sup>, Yaman Kumar Sahu<sup>1</sup>, Khageshwar Singh Patel<sup>1</sup>, Erick Kibet Towett<sup>2</sup> (OR -MLS -1 -351)  
<sup>1</sup>*School of Studies in Environmental Science/Chemistry, Pt. Ravishankar Shukla University, Raipur, CG, India;* <sup>2</sup>*World Agroforestry Centre, Nairobi, Kenya*

15:20 — 16:50

**Symposium: International Mountain Hack: Schools & Mountains for Sustainable Development (OR -MHS -3) [Room: Begnas]**

16:50 — 17:00

**Tea/coffee break**

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**October 10, 2018 || DAY TWO**

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8:30 — 10:00

**Symposium: Biological Invasion in the Changing World (OR -BIC -1) [Room: Nepa]**

Chair

Dr. Suresh Ghimire, Professor  
*Central Department of Botany, Tribhuvan University, Kritipur, Kathmandu, Nepal*

**Invited:** Biological invasion in Nepal: Agendas for research and management (OR -BIC -1 -468)

Bharat Babu Shrestha  
*Central Department of Botany, Tribhuvan University, Kritipur, Kathmandu, Nepal*

Determinants of coverage of invasive *Chromolaena odorata* in Sal forest of Chure (OR -BIC -1 -424)

LN Sharma, M Watson, B Adhikari, B Karna, E Poudel, BB Shrestha  
*Forest Action Nepal, Kathmandu, Npal*

Inventory of invasive alien plant species in Godavari Landscape, Nepal (OR -BIC -2 -448)

Srijana Joshi<sup>1</sup>, Anil Shrestha<sup>2</sup>, Neha Bisht<sup>3</sup>, Sunil Thapa<sup>1</sup>  
<sup>1</sup>*International Centre for Integrated Mountain Development;* <sup>2</sup>*Department of Plant Science, California State University, Fresno, CA, USA;* <sup>3</sup>*National University of Singapore, Singapore*

Contribution of native and naturalized plant species to the biomass production in grasslands of Siwalik region, Nepal (OR -BIC -1 -428)

Deviram Bhattaraj, Bharat Babu Shrestha  
*Central department of Botany, Tribhuvan University, Kathmandu, Nepal*

Diversity of naturalized plants species across land-use types in Kailali district, west Nepal (OR -BIC -1 -445)

Ganesh Datt Joshi, Mohan Siwakoti, Bharat Babu Shrestha  
*Tribhuvan University, Kathmandu, Nepal*

8:30 — 10:00

**Symposium: Challenges of food safety monitoring in least developed countries (OR -CFS -1) [Room: Dhuku]**

Chair

Dr. Bhanu Bhakta Neupane, Professor  
*Central Department of Chemistry, Tribhuvan University, Kathmandu, Nepal*

**Invited:** Food quality system and the current status and role of laboratory in food quality control in Nepal (OR-CFS-1-690-INVITED)

Lekhanath Kandel  
*Nepal Bureau of Standards and Metrology, Kathmandu, Nepal*

Determination of nutritional value of different rock salt samples obtained in Nepalese market (OR-CFS-1-381)

Saraswati Pandeya, Bhanu Bhakta Neupane  
*Central Department of Chemistry, Tribhuvan University, Kathmandu, Nepal*

Study on the effect of cooking and storage conditions in the loss of iodine from iodized salt samples (OR-CFS-1-397)

Megh Raj Yonjan<sup>1</sup>, Bhanu Bhakta Neupane<sup>2,3</sup>  
<sup>1</sup>*Amrit Campus, Tribhuvan University, Kathmandu, Nepal;* <sup>2</sup>*Central Department of Chemistry, Tribhuvan University, Kathmandu, Nepal;* <sup>3</sup>*Kathmandu Institute of Applied Sciences, Kathmandu, Nepal*

Optimization of pesticide PADs (OR-CFS-1-365)

Pravin Pokhrel, Basant Giri  
*Center for Analytical Sciences, Kathmandu Institute of Applied Sciences, Kathmandu, Nepal*

Smartphone based microscopic assay for detecting (oo)cyst of *Giardia* and *Cryptosporidium* (OR-CFS-1-384)

Rojina Duwal<sup>1</sup>, Sajeev Wagle<sup>1</sup>, Bhanu Neupane<sup>2</sup>, Basant Giri<sup>1</sup>  
<sup>1</sup>*Center for Analytical Sciences, Kathmandu Institute of Applied Sciences, Kathmandu, Nepal;* <sup>2</sup>*Central Department of Chemistry, Tribhuvan University, Kathmandu, Nepal*

8:30 — 10:00

**Symposium: International Mountain Hack: Schools & Mountains for Sustainable Development (OR -MHS -4) [Room: Begnas]**

10:00 — 10:20

**Tea/coffee**

10:20 — 11:50

**Symposium: Biological Invasion in the Changing World (OR -BIC -2) [Room: Nepal]**

Chair

Dr. Suresh Ghimire, Professor  
*Central Department of Botany, Tribhuvan University, Kathmandu, Nepal*

Plant functional traits of an invasive weed *Ageratina adenophora* (*Asteraceae*) along elevation gradients in Chitwan-Annapurna Landscape, Nepal (OR -BIC -2 -434)

Anju Sharma Poudel, Bharat Babu Shrestha, Pramod Kumar Jha  
*Central Department of Botany, Tribhuvan University, Kathmandu, Nepal*

Variation in plant functional traits of an invasive weed *Parthenium hysterophorus* along elevation gradients in central Nepal (OR -BIC -2 -437)

Seerjana Maharjan<sup>1,2</sup>, Bharat Babu Shrestha<sup>1</sup>, Anjana Devkota<sup>1</sup>, Pramod Kumar Jha<sup>1</sup>  
<sup>1</sup>Central Department of Botany, Tribhuvan University, Kirtipur; <sup>2</sup>Ministry of Forests and Environment, Singhadurbar, Kathmandu, Nepal

Diversity of naturalized species across land use types in Nawalparasi, central Nepal (OR -BIC -2 -439)

Rashmi Paudel, Mohan Siwakoti, Bharat Babu Shrestha  
Central Department of Botany, Tribhuvan University, Kathmandu, Nepal

Diversity of invasive alien plant species across land use types in Makwanpur district, central Nepal (OR -BIC -2 -440)

Bhawani Nvaupane, Bharat Babu Shrestha, Mohan Siwakoti  
Central Department of Botany, Tribhuvan University, Kathmandu, Nepal

Assessing a low-technology intervention to control *Mikania micrantha* in the community forests of Chitwan, Nepal (OR -BIC -2 -443)

Rija Manandhar<sup>1</sup>, Michele Clark<sup>2</sup>, Sharon J. Hall<sup>2</sup>, Scott Yabiku<sup>3</sup>, Sean Murphy<sup>4</sup>, Dirgha Jibi Ghimire<sup>1</sup>  
<sup>1</sup>Institute for Social and Environmental Research-Nepal (ISERN); <sup>2</sup>School of Life Sciences, Arizona State University; <sup>3</sup>Department of Sociology and Criminology, Pennsylvania State University; <sup>4</sup>CAB International Centre for Agriculture and Bioscience International (CABI)

Responses of *Triticum aestivum*, *Brassica campestris* and some weeds to the compost of invasive species *Ageratina adenophora* and *Parthenium hysterophorus* (OR -BIC -2 -452)

Baby Babita Das “Mallik”<sup>1</sup>, Bipana Devi Acharya<sup>2</sup>, Mohammad Saqib<sup>3</sup>, M.K.Chettri<sup>2</sup>  
<sup>1</sup>Tribhuvan University, Kathmandu, Nepal; <sup>2</sup>Department of Botany, Amrit Campus, Kathmandu, Kathmandu; <sup>3</sup>Department of Biological Sciences, Faculty of Science, Adamawa State University Mubi, Adamawa, Nigeria

10:20 — 11:50

**Symposium: Challenges of food safety monitoring in least developed countries (OR -CFS -2) [Room: Dhuku]**

Chair

Dr. Bhanu Bhakta Neupane, Professor  
Central Department of Chemistry, Tribhuvan University, Kathmandu, Nepal

Panel discussion

10:20 — 11:50

**Symposium: International Mountain Hack: Schools & Mountains for Sustainable Development (OR -MHS -5) [Room: Begnas]**

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11:50 — 12:20

**Poster Session**

Chair

Dr. Keshab Basnet, Professor  
Western Regional Campus, Institute of Engineering, Kaski, Nepal

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12:20 — 13:20

**Lunch**

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13:20 — 14:50

**Mountain Hydrology and Meteorology (OR -MHM -1) [Room: Nepa]**

Chair

Dr. Dibas Shrestha, Professor  
Central Department of Hydrology and Meteorology, Tribhuvan University, Kathmandu, Nepal

River analysis using HEC-RAS (A case study in Seti River at Ramghat, Pokhara, Nepal)

Deepak Acharya  
Infrastructure Engineering and Management, Paschimanchal Campus, Pokhara, Nepal



Spatial analysis and statistical modelling of snow cover dynamics in the central Himalayas, Nepal (OR -MHM -1 -295)

Johannes Weidinger<sup>1</sup>, Lars Gerlitz<sup>2</sup>, Benjamin Bechtel<sup>1</sup>, Jürgen Böhner<sup>2</sup>

<sup>1</sup>Center for Earth System Research and Sustainability University of Hamburg - Institute of Geography;

<sup>2</sup>German Research Centre for Geosciences

Estimation of surface runoff using NRCS-CN for rapid response catchment in Pokhara, Nepal (OR -MHM -1 -298)

Manoj Neupane<sup>1</sup>, Keshav Basnet<sup>2</sup>

<sup>1</sup>Infrastructure Engineering and Management Program, Pashchimanchal Campus; <sup>2</sup>Institute of Engineering, Tribhuvan University, Nepal

Monitoring spatial changes in Gara Glacier in Tirungkhad Basin in Himachal Pradesh (India) between 1965 and 2016 (OR-MHM-1-283)

Sandip Tanu Mandal, Milap Chand Sharma

Centre for the Study of Regional Development Jawaharlal Nehru University, New Delhi, India

Delineation of sustainable groundwater potential zones with multivariate analysis using integrated GIS and remote sensing approach (OR -MHM -1 -300)

Aalok Sharma Kafle<sup>1</sup>, Kushum KC<sup>2</sup>

<sup>1</sup>Kathmandu Engineering College, Kathmandu, Nepal; <sup>2</sup>Manakamana Training and Skill Development Institute Pvt. Ltd., Kathmandu, Nepal

Groundwater quality assessment along Bagmati river corridor (OR -MHM -1 -317)

Neelam Maharjan

Tribhuvan University, Kathmandu, Nepal

A study of risk perception of people using streets occupied with unreinforced brick masonry buildings under shoring and their risk assessment (OR -MHM -1 -318)

Bishesh Dhakal

Khwopa College of Engineering, Bhaktapur, Nepal

13:20 — 14:50

Chair

**Disaster, Adaptation and Resilience (OR -DAR -1) [Room: Dhuku]**

Dr. Rashila Deshar, Professor

Central Department of Environmental Science, Tribhuvan University, Kathmandu, Nepal

**Invited:** Remote sensing applications to geological mapping and disaster monitoring (OR -DAR -1 -338-INVITED)

Yasushi Yamaguchi

Nagoya University, Nagoya, Japan

Jomda flood: Possible factors for the increased natural disasters in Tibet (OR -DAR -1 -267)

Tempa Gvaltsen Zamlha

Tibet Policy Institute, Dharamshala, Himachal Pradesh, India

The response of downstream flood control process to upstream interventions: Experiences from Bakra River Basin, Nepal (OR -DAR -1 -354)

Saroj Karki<sup>1</sup>, Suchana Acharya<sup>1</sup>, Ashok Gautam<sup>2</sup>

<sup>1</sup>Department of Irrigation, Nepal; <sup>2</sup>Department of Water Induced Disaster Management, Nepal

Resilience to natural hazards in the face of uncertainty: Introducing an alternative approach (OR -DAR -1 -423)

Eva Louise Posch<sup>1</sup>, Karl-Michael Höferl<sup>1</sup>, Rainer Bell<sup>1</sup>, Robert Steiger<sup>2</sup>

<sup>1</sup>University of Innsbruck, Institute of Geography; <sup>2</sup>University of Innsbruck, Institute of Public Finance

Low strength masonry debris as a construction material: A concept of green reconstruction (OR -DAR -1 -261)

Naresh Nidal, Gokarna Bahadur Motra  
*Institute of Engineering (IOE), Pulchowk Campus, Tribhuvan University, Lalitpur, Nepal*

13:20 — 14:50 **Symposium: International Mountain Hack: Schools & Mountains for Sustainable Development (OR -MHS -6) [Room: Begnas]**

15:00 — 16:30 **Symposium: Air Pollution and Monitoring (OR -EPM -1) [Room: Nepa]**

Chair

Dr. Rejina Maskey, Professor  
*Central Department of Environmental Science, Tribhuvan University, Kathmandu, Nepal*

Simultaneous measurements of mixing layer height and aerosol optical properties in the urbanized mountain valley of Chiang Mai (OR -EPM -1 -442)

Raman Solanki<sup>1</sup>, Ronald Macatangay<sup>1,2</sup>, Vanisa Surapipith<sup>1</sup>, Thiranan Sonkaew<sup>3</sup>, Serm Janjai<sup>4</sup>, Sumaman Buntoung<sup>4</sup>, Sherin Hassan Bran<sup>1</sup>, Vichawan Sakulsupich<sup>1</sup>  
<sup>1</sup>*Atmospheric Research Unit, National Astronomical Research Institute of Thailand, Chiang Mai, Thailand;* <sup>2</sup>*Institute of Environmental Science and Meteorology, University of the Philippines;* <sup>3</sup>*Astronomy and Atmospheric Research Unit, Faculty of Science, Lampang Rajabhat University, Lampang, Thailand;* <sup>4</sup>*Department of Physics, Silpakorn University, Nakhon Pathom, Thailand*

Combating air pollution in Nepal: Challenges, lessons learned and way forward

Hemu Kafle<sup>1</sup>, Basant Giri<sup>2</sup>, Prakash Sharma<sup>1</sup>  
<sup>1</sup>*Center of Water and Atmospheric Research, Kathmandu Institute of Applied Sciences, Kathmandu, Nepal;* <sup>2</sup>*Center for Analytical Sciences, Kathmandu Institute of Applied Sciences, Kathmandu, Nepal*

Features of organo chlorine pesticides and polychlorinated biphenyls in urban environment of Nepal: spatial variation, sources, temporal trends, air-soil exchange and long range transport potential

Balram Pokhrel<sup>1</sup>, Ping Gong<sup>2,3</sup>, Xiaoping Wang<sup>2,3,4</sup>, Chuanfei Wang<sup>2,3</sup>, Shaopeng Gao<sup>2</sup>, Tandong Yao<sup>2,3</sup>  
<sup>1</sup>*Kathmandu University, Department of Chemical Sciences and Engineering, Dhulikhel, Nepal;* <sup>2</sup>*Key Laboratory of Tibetan Environment Changes and Land Surface Processes, Institute of Tibetan Plateau Research, Chinese Academy of Sciences, Beijing, China;* <sup>3</sup>*CAS Center for Excellence in Tibetan Plateau Earth Sciences, Beijing, China;* <sup>4</sup>*University of Chinese Academy of Sciences, Beijing, China*

Panel discussion

15:00 — 16:30 **Sustainable Agriculture of Mountain (OR -SAM -2) [Room: Dhuku]**

Chair

Dr. Bharat Babu Shrestha, Professor  
*Central Department of Botany, Tribhuvan University, Kathmandu, Nepal*

Chemical characteristics of seed coats (OR -SAM -2 -346)

Survakant Chakradhari<sup>1</sup>, Pravin Kumar Sahu<sup>1</sup>, Khageshwar Singh Patel<sup>1</sup>, Erick Kibet Towett<sup>2</sup>  
<sup>1</sup>*Pt. Ravishankar Shukla University, Raipur Chhattisgarh;* <sup>2</sup>*World Agroforestry Centre, Nairobi, Kenya*

Nutritional composition of biomass (OR -SAM -2 -351)

Ravin Kumar Sahu<sup>1</sup>, Suryakant Chakradhari<sup>1</sup>, Yaman Kumar Sahu<sup>1</sup>, Khageshwar Singh Patel<sup>1</sup>, Erick Kibet Towett<sup>2</sup>  
<sup>1</sup>*Pt. Ravishankar Shukla University, Raipur, CG, India;* <sup>2</sup>*World Agroforestry Centre, Nairobi, Kenya*

Influence of integrated use of urea with cow dung, poultry manure and urban wastes in a rice-rice cropping pattern (OR -SAM -2 -361)

Md. Mamun UR Rashid<sup>1</sup>, A.R.M. Solaiman<sup>2</sup>  
<sup>1</sup>*Agriculture Training Institute, shemoltoli, Gazipur, Bangladesh;* <sup>2</sup>*Department of Soil Science, Bangabandhu Sheikh Mujibur Rahman Agricultural University, Gazipur, Bangladesh*

Effect of different sources of nitrogen on growth and yield of Okra [*Abelmoschus esculentus* (L.) Moench] in Dhading, Nepal (OR -SAM -2 -371)

Ritikshya Poudel  
*Agriculture and Forestry University, Chitwan, Nepal*

Application of GIS in agricultural sector of Nepal (OR -SLM -2 -418)

Suraj Shah  
*Khwopa College of Engineering, Tribhuvan University, Bhaktapur, Nepal*

15:00 — 16:30

**Symposium: Management of Plant Diversity for Food and Nutrition (PO -PEC -1)**  
**[Room: Begnas]**

Chair

Dr. Chitra Bahadur Baniya, Professor  
*Central Department of Botany, Tribhuvan University, Kathmandu, Nepal*

Plant community, ecology and CSR functional strategy of *Linaria tonzigii* Lona, a steno-endemic species of the Italian pre-Alps (PO -PEC -1 -276)

Annamaria Giorgi<sup>1,2</sup>, Luca Giupponi<sup>1</sup>  
<sup>1</sup>*Centre of Applied Studies for the Sustainable Management and Protection of Mountain Areas (Ge.S.Di.Mont.), University of Milan, via Morino 8, 25048 Edolo (BS), Italy;* <sup>2</sup>*Department of Agricultural and Environmental Sciences-Production, Landscape, Agroen, Italy*

Study and valorisation of an ancient maize from Northern Italy rich in phlobaphenes (PO -SAM -1 -277)

Annamaria Giorgi<sup>1,2</sup>, Roberto Salvatore Pilu<sup>3</sup>, Luca Giupponi<sup>1</sup>  
<sup>1</sup>*Centre of Applied Studies for the Sustainable Management and Protection of Mountain Areas (Ge.S.Di.Mont.), University of Milan, via Morino 8, 25048 Edolo (BS), Italy;* <sup>2</sup>*Department of Agricultural and Environmental Sciences-Production;* <sup>3</sup>*Department of Agricultural and Environmental Sciences-Production, Landscape, Agroenergy, University of Milan, via Celoria 2, 20133 Milan, Italy*

Phlobaphenes in maize kernel modify pericarp thickness and fumonisins accumulation (PO -SAM -1 -419)

Roberto Pilu<sup>1,2</sup>, Michela Landoni<sup>3</sup>, Giulia Borlini<sup>4</sup>, Elena Cassani<sup>4</sup>, Luca Giupponi<sup>5</sup>, Anna Giorgi<sup>5</sup>  
<sup>1</sup>*University of Milan - Department of Agricultural and Environmental Sciences: Production, Landscape, Agroenergy;* <sup>2</sup>*Centre for Applied Studies in the Sustainable Management and Protection of the Moun;* <sup>3</sup>*Department of Biosciences, University of Milano, via Celoria, Milano, Italy;* <sup>4</sup>*Department of Agricultural and Environmental Sciences - Production, Landscape, Agroenergy, University of Milano, Via Celoria, Milano, Italy;* <sup>5</sup>*Centre for Applied Studies in the Sustainable Management and Protection of the Mountain Environment Ge.S.Di.Mont., Universita` degli Studi di Milano, Via Morino, Edolo*

Genetics and cultural aspects regarding the world wide white maize cultivation (PO -SAM -1 -422)

Roberto Pilu<sup>1,2</sup>, Elia Cammarata<sup>3</sup>, Margherita Brambilla<sup>3</sup>, Federica Galizia<sup>3</sup>, Gloria Brunoldi<sup>3</sup>, Camilla Comaschi<sup>3</sup>, Giulia Borlini<sup>3</sup>, Filippo Tarengi<sup>3</sup>, Elena Cassani<sup>3</sup>, Michela landoni<sup>4</sup>, Luca Giupponi<sup>5</sup>, Annamaria Giorgi<sup>5</sup>  
<sup>1</sup>*University of Milan - Department of Agricultural and Environmental Sciences: Production, Landscape, Agroenergy;* <sup>2</sup>*Centre for Applied Studies in the Sustainable Management and Protection of the Mountain Environment Ge.S.Di.Mont., Univers;* <sup>3</sup>*Department of Agricultural and Environmental Sciences - Production, Landscape, Agroenergy, University of Milano, Via Celoria, Milano, Italy;* <sup>4</sup>*Department of Biosciences, University of Milano, via Celoria, Milano, Italy;* <sup>5</sup>*Centre for Applied Studies in the Sustainable Management and Protection of the Mountain Environment Ge.S.Di.Mont., Universita` degli Studi di Milano, Via Morino, Edolo, BS, Italy*

Cultivating biodiversity in the Italian Alps: who are the farmers and what challenges do they face? (PO -SLM -1 -450)

Sarah Whitaker<sup>1,2</sup>, Annamaria Giorgi<sup>1,3</sup>  
<sup>1</sup>*Centre of Applied Studies for the Sustainable Management and Protection of Mountain Areas (Ge.S.Di.Mont.), University of Milan, via Morino, Edolo (BS), Italy* <sup>2</sup>*Emory University, Dowman Drive, Atlanta, Ga.;* <sup>3</sup>*Department of Agricultural and Environmental Sciences-Production, Landscape, Agro, Italy*

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16:30 — 16:50

**Tea Break**

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16:50 — 17:30

**Closing session [Room: Nepa Dhuku]**

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**Poster Session, Location: Open Air Hall**

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**Date: 10, October, 2018, Time: 11:50 — 12:20**

Chair

Dr. Keshav Basnet, Professor  
*Western Regional Campus, Institute of Engineering, Tribhuvan University, Kaski, Nepal*

Seed germination ecology of *Ageratum houstonianum*: A major invasive weed in Nepal  
(PO -BIC -1 -449)

Anju Lamsal<sup>1</sup>, Mohan Prasad Devkota<sup>1</sup>, Deepa Singh Shrestha<sup>1</sup>, Srijana Joshi<sup>1</sup>, Anil Shrestha<sup>2</sup>  
<sup>1</sup>*Tribhuvan University, Kathmandu, Nepal*; <sup>2</sup>*California State Universities, Fresno, CA, USA*

Contribution, service quality and sustainability of homestay tourism in Annapurna  
Conservation Area (A case study from Lwang village of Kaski district) (PO -BIC -1-363)

Sudipti Parajuli, Bikash Adhikari, Shree Kanta Khatriwada  
*Institute of Forestry, Pokhara, Nepal*

Wildlife research in Nepal (PO -AEC -1 -421)

Shishila Baniya, Prakash K. Paudel  
*Center for Conservation Biology, Kathmandu Institute of Applied Sciences, Kathmandu, Nepal*

Invasive land snail *Achatina fulica* and its impact in Ghorahi, Dang, Nepal (PO -BIC -1 -436)

Shobha Rawat<sup>1</sup>, Prem Bahadur Budha<sup>2</sup> and Bharat Babu Shrestha<sup>1</sup>  
<sup>1</sup>*Central Department of Botany, Tribhuvan University, Kritipur, Kathmandu*; <sup>2</sup>*Central Department of Zoology, Tribhuvan University, Kritipur, Kathmandu*

Blue intensity shows more stable dendroclimatic signal than tree-ring width at a Himalayan  
treeline (PO -CCD -1 -270)

Niels Schwab<sup>1</sup>, Karolina Janecka<sup>2</sup>, Ryszard J. Kaczka<sup>3</sup>, Jürgen Böhner<sup>1</sup>, Ram P. Chaudhary<sup>4</sup>, Thomas  
Scholten<sup>5</sup>, Udo Schickhoff<sup>1</sup>  
<sup>1</sup>*Physical Geography, Center for Earth System Research and Sustainability (CEN), University of Hamburg,  
Hamburg, Germany*; <sup>2</sup>*Institute of Botany and Landscape Ecology, University of Greifswald*; <sup>3</sup>*Germany,  
Faculty of Earth Sciences, University of Silesia in Katowice, Poland*; <sup>4</sup>*Centre for Applied Science and  
Technology (ReCAST), Tribhuvan University, Kathmandu, Nepal*; <sup>5</sup>*Department of Geosciences, Chair of  
Soil Science and Geomorphology, University of Tübingen, Germany*

The brink of extinction: Quantifying the stories of stone spouts in the Kathmandu Valley (PO  
-CCS -1 -307)

Saroj Moka<sup>1</sup>, Pratik Shrestha<sup>2</sup>, Anusha Pandey<sup>2,3</sup>, Jeffrey C. Davids<sup>4,5</sup>  
<sup>1</sup>*Department of Civil Engineering, Kathmandu, Nepal*; <sup>2</sup>*NAMI College, Jorpati, Nepal*; <sup>3</sup>*S4W-Nepal,  
Lalitpur, Nepal*; <sup>4</sup>*Delft University of Technology, Delft, Netherlands*; <sup>5</sup>*SmartPhones4Water-USA,  
Chico, California, USA*

Patterns of rainfall in the Kathmandu Valley, Nepal: A citizen science based approach (PO -  
CCS -1 -308)

Amber Bahadur Thapa<sup>1</sup>, Nischal Devkota<sup>1</sup>, Jeffrey Cook Davids<sup>1,2,3</sup>  
<sup>1</sup>*S4W-Nepal, Lalitpur, Nepal*; <sup>2</sup>*Delft University of Technology, Delft, Netherlands*;  
<sup>3</sup>*SmartPhones4Water-USA, Chico, California, USA*

Perception vs. reality: A story of motivating citizen scientists in the Kathmandu Valley (PO - CCS -1 -310)

Anurag Gyawali<sup>1</sup>, Eliyah Moktan<sup>1</sup>, Anusha Pandey<sup>1</sup>, Jeffrey Colin Davids<sup>2,3</sup>

<sup>1</sup>SmartPhones4Water-Nepal (S4W-Nepal), Thasikhel, Lalitpur; <sup>2</sup>Delft University of Technology, Delft, Netherlands; <sup>3</sup>SmartPhones4Water-USA, Chico, California, USA

Developing ground truth data to enhance land use classification: A case study of the Kathmandu Valley (PO -CCS -1 -311)

Surabhi Upadhyay<sup>1,2</sup>, Anusha Pandey<sup>1</sup>, Jeffrey C. Davids<sup>3,4</sup>

<sup>1</sup>Naya Ayam Multi-disciplinary Institute; <sup>2</sup>Jorpati SmartPhones4Water, Lalitpur, Nepal; <sup>3</sup>Delft University of Technology, Delft, Netherlands; <sup>4</sup>SmartPhones4Water-USA, Chico, California, USA

Citizen science in hydrology: A case study of Kathmandu Valley, Nepal (PO -CCS -1 -301)

Rocky Talchabhadel<sup>1,2</sup>, Rajaram Prajapati<sup>3</sup>, Nischal Devkota<sup>3</sup>, Jeffrey C. Davids<sup>4,5</sup>, Anil Aryal<sup>6</sup>, Manisha Maharjan<sup>7</sup>, Amber Bahadur Thapa<sup>3</sup>

<sup>1</sup>Department of Hydrology and Meteorology, Government of Nepal, Nepal; <sup>2</sup>Disaster Prevention Research Institute, Kyoto University, Japan; <sup>3</sup>Smartphones for Water Nepal (S4W-Nepal), Nepal; <sup>4</sup>Delft University of Technology, Netherland; <sup>5</sup>Smartphones for Water USA (S4W-USA), USA; <sup>6</sup>Department of Civil and Environmental Engineering, University of Yamanashi, Japan; <sup>7</sup>Department of Environmental Engineering, Kyoto University, Japan

Post-monsoon stream, aquifer and spout interactions in the Kathmandu Valley (PO - CCS -1 -425)

Nick Overkamp<sup>1</sup>, Kate Happee<sup>1</sup>, Rick van Bentem<sup>1</sup>, Niek Moesker<sup>1</sup>, Jeffrey C. Davids<sup>1,2</sup>

<sup>1</sup>Delft University of Technology, Delft, Netherlands; <sup>2</sup>SmartPhones4Water-USA, Chico, California, USA

Regeneration of Ban Oak (*Quercus leucotrichophora* A. Camus) in different oak associations (PO -PEC -1 -265)

Anuradha Thakur

Chandigarh University, India

Plant community, ecology and CSR functional strategy of *Linaria tonzigii* Lona, a steno-endemic species of the Italian pre-Alps (PO -PEC -1 -276)

Annamaria Giorgi<sup>1,2</sup>, Luca Giupponi<sup>1</sup>

<sup>1</sup>Centre of Applied Studies for the Sustainable Management and Protection of Mountain Areas (Ge.S.Di.Mont.), University of Milan, via Morino 8, 25048 Edolo (BS), Italy; <sup>2</sup>Department of Agricultural and Environmental Sciences-Production, Landscape, Agroen, Italy

Study and valorisation of an ancient maize from Northern Italy rich in phlobaphenes (PO - SAM -1 -277)

Annamaria Giorgi<sup>1,2</sup>, Roberto Salvatore Pilu<sup>3</sup>, Luca Giupponi<sup>1</sup>

<sup>1</sup>Centre of Applied Studies for the Sustainable Management and Protection of Mountain Areas (Ge.S.Di.Mont.), University of Milan, via Morino, Edolo (BS), Italy; <sup>2</sup>Department of Agricultural and Environmental Sciences-Production; <sup>3</sup>Department of Agricultural and Environmental Sciences-Production, Landscape, Agroenergy, University of Milan, via Celoria, Milan, Italy

Screening of arsenic resistant Bacillus species for possible bioremediation and plant growth promotion (PO -SAM -1 -364)

Ashish Nepal, Rashmi Roka Magar, Pratibha Rauniyar, Sushmita Dura, Pramod Poudel, Santosh Khanal, Om Prakash Panta, Bishnu Marasini  
Tribhuvan University, Kathmandu, Nepal

Status and economics of cabbage production in Chhathar-Jorpati Rural Municipality, Dhankuta, Nepal (PO -SAM -1 -375)

Sachin Gahatraj

Agriculture and Forestry University, Chitwan, Nepal

Exploring *Bacillus* spp. for inhibiting the growth of toxigenic *Aspergillus flavus* (PO -SAM -1 -391)

Privanka Thakur, Pratima Khanal, Salina Dhakal, Sushmita Dura  
*National College, Tribhuvan University, Kathmandu, Nepal*

Soil development and soil microbial colonization pattern along the Gangapurna glacier foreland, Manang, Nepal (PO -SAM -1 -401)

Mamita Shakya  
*Central Department of Botany, Tribhuvan University, Kirtipur, Nepal*

Phlobaphenes in maize kernel modify pericarp thickness and fumonisins accumulation (PO -SAM -1 -419)

Roberto Pilu<sup>1,2</sup>, Michela Landoni<sup>3</sup>, Giulia Borlini<sup>4</sup>, Elena Cassani<sup>4</sup>, Luca Giupponi<sup>5</sup>, Annamaria Giorgi<sup>5</sup>

<sup>1</sup>University of Milan - Department of Agricultural and Environmental Sciences: Production, Landscape, Agroenergy; <sup>2</sup>Centre for Applied Studies in the Sustainable Management and Protection of the Moun; <sup>3</sup>Department of Biosciences, University of Milano, via Celoria, Milano, Italy; <sup>4</sup>Department of Agricultural and Environmental Sciences - Production, Landscape, Agroenergy, University of Milano, Via Celoria, Milano, Italy; <sup>5</sup>Centre for Applied Studies in the Sustainable Management and Protection of the Mountain Environment Ge.S.Di.Mont., Universita` degli Studi di Milano, Via Morino, Edolo, Italy

Genetics and cultural aspects regarding the world wide white maize cultivation (PO -SAM -1 -422)

Roberto Pilu<sup>1,2</sup>, Elia Cammarata<sup>3</sup>, Margherita Brambilla<sup>3</sup>, Federica Galizia<sup>3</sup>, Gloria Brunoldi<sup>3</sup>, Camilla Comaschi<sup>3</sup>, Giulia Borlini<sup>3</sup>, Filippo Tarengi<sup>3</sup>, Elena Cassani<sup>3</sup>, Michela landoni<sup>4</sup>, Luca Giupponi<sup>5</sup>, Anna Giorgi<sup>5</sup>

<sup>1</sup>University of Milan - Department of Agricultural and Environmental Sciences: Production, Landscape, Agroenergy; <sup>2</sup>Centre for Applied Studies in the Sustainable Management and Protection of the Mountain Environment Ge.S.Di.Mont., Univers; <sup>3</sup>Department of Agricultural and Environmental Sciences - Production, Landscape, Agroenergy, University of Milano, Via Celoria, Milano, Italy; <sup>4</sup>Department of Biosciences, University of Milano, via Celoria, Milano, Italy; <sup>5</sup>Centre for Applied Studies in the Sustainable Management and Protection of the Mountain Environment Ge.S.Di.Mont., Universita` degli Studi di Milano, Via Morino, Edolo, BS, Italy

Cultivating biodiversity in the Italian Alps: who are the farmers and what challenges do they face? (PO -SLM -1 -450)

Sarah Whitaker<sup>1,2</sup>, Annamaria Giorgi<sup>1,3</sup>

<sup>1</sup>Centre of Applied Studies for the Sustainable Management and Protection of Mountain Areas (Ge.S.Di.Mont.), University of Milan, via Morino, Edolo (BS), Italy <sup>2</sup>Emory University, Dowman Drive, Atlanta, Ga.; <sup>3</sup>Department of Agricultural and Environmental Sciences-Production, Landscape, Agro

Colorimetric detection of alkaline phosphatase in milk using paper-based analytical stripe (PO-CFS-1-359)

Smriti Shrestha, Basant Giri  
*Center for Analytical Sciences, Kathmandu Institute of Applied Sciences, Kathmandu, Nepal*