mountains2016

3-7 october · bragança · portugal

I International Conference on Research for Sustainable Development in Mountain Regions

Book of Abstracts

INSTITUTO POLITÉCNICO DE BRAGANÇA
Centro de Investigação de Montanha
Embrapa
United Nations Educational, Scientific and Cultural Organization · UNESCO Chair in Sustainable Mountain Development
University of the Highlands and Islands Oilthigh na Gàidhealtachd agus nan Eilean
EUROMONTANA
ADVID Cluster dos Vinhos da Região do Douro Douro Region Wine Cluster

I International Conference on Research for Sustainable Development in Mountain Regions: Book of Abstracts

Title: I International Conference on Research for Sustainable Development in Mountain Regions: Book of Abstracts

Editors: Centro de Investigação de Montanha (CIMO)

Published by: Instituto Politécnico de Bragança
Campus de Santa Apolónia 5300-253 Bragança, Portugal
http://www.ipb.pt

ISBN: 978-972-745-214-9

URI: http://hdl.handle.net/10198/12135

Cover design: Atilano Suarez, Serviços de Imagem do Instituto Politécnico de Bragança

I International Conference on Research for Sustainable Development in Mountain Regions

Book of abstracts

Edited by
Centro de Investigação de Montanha (CIMO)

Instituto Politécnico de Bragança, Portugal
2016

Committees

Scientific Committee

Martin Price (Chair) – University of Highlands and Islands, Chairholder, UNESCO Chair in Sustainable Mountain Development, Scotland, UK
Artur Cristóvão – University of Trás os Montes and Alto Douro, Portugal
Bernhard Wolfslehner – European Forest Institute (EFI), Austria
Catherine May Tucker – University of Florida, USA
Celestino Santos-Buelga – Universidad de Salamanca, Spain
Connie Millar – US Forest Service, USA
David Hik – University of Alberta, Canada
David Molden – International Centre for Integrated Mountain Development, Nepal
Egidio Dansero – Universitá Degli Studi di Torino, Italy
Greg Greenwood – Mountain Research Initiative, Switzerland
Irasema Alcántara Ayala – Universidad Nacional Autonoma de Mexico, Mexico
João Honrado – University of Porto, Portugal
Rachel Prado – Embrapa, Brasil
Ruijun Long – Lanzhou University, China

Organizing Committee

Portugal

Carlos Aguiar – CIMO, Polytechnic Institute of Bragança
Cidália Lino – CIMO, Polytechnic Institute of Bragança
Isabel Ferreira – CIMO, Polytechnic Institute of Bragança
Jaime Pires – CIMO, Polytechnic Institute of Bragança
João Azevedo, CIMO, Polytechnic Institute of Bragança
Margarida Arrobas – CIMO, Polytechnic Institute of Bragança
Orlando Rodrigues – CIMO, Polytechnic Institute of Bragança
Sílvia Nobre – CIMO, Polytechnic Institute of Bragança

Scotland, UK

Martin Price – University of Highlands and Islands, Chairholder, UNESCO Chair in Sustainable Mountain Development

Brazil

Adriana Maria de Aquino – Embrapa Agrobiologia
Gilberto Carlos Cerqueira Mascarenhas – Ministério da Agricultura Pecuária e Abastecimento
Luis Felipe Cesar – Crescente Fértil
Marcos Aurelio Saquet – Universidade Estadual do Oeste do Paraná
Marcos Flavio Borba – Embrapa Pecuária Sul
Monica Alves Amorim – Universidade Federal do Ceará e Associação das Montanhas Famosas do Mundo
Rachel Rachel Bardy Prado – Embrapa Solos
Regina Cohen Barros – Universidade Federal Rural do Rio de Janeiro
Renato Linhares de Assis – Embrapa Agrobiologia

Sy06O05

Growing stevia in Northeastern of Portugal: effect of N rate and cutting regime

Sandra Afonso, Margarida Arrobas, Isabel Q. Ferreira, Manuel Ângelo Rodrigues
Polytechnic Institute of Bragança, Bragança, Portugal

Stevia rebaudiana (Bertoni) is a perennial herb native from South America. It is characterized by a high content of steviol glycosides in its leaves representing an interesting no-calorie sweetener. Since December 2011 has increased interest in this species in Europe after steviol glycosides have been authorized as food additives. In this work, the adaptation of stevia to the growing conditions of NE Portugal was assessed, as well as the potential to produce biomass when grown as an annual crop and subjected to various N rates (0 to 150 kg N ha^{-1}) and two cutting regimes (single and double cut). Most plants died during the winter (minimum temperatures peaked at -8.0 ºC at 10 cm aboveground), being necessary to replant the crop next spring. In the double cut regime and the higher N rate 1514.4 and 2390.0 kg/ha of dry leaves and 4748.5 and 5215 kg ha^{-1} of total dry matter were respectively produced in 2014 and 2015. Based on the leaf N concentrations recorded from these experiments, preliminary sufficiency ranges of 25 to 35 g kg^{-1} for mid-summer and 15 to 25 g kg^{-1} for early autumn are proposed.