BOOK OF ABSTRACTS

II. EUROPEAN CONGRESS ON CHESTNUT
09–12. October, 2013.

DEBRECEN – BAIA MARE – MODRY KAMEN

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Institute of Plant Protection, University of Debrecen (Hungary)
University of Craiova (Romania)
Institute of Forest Ecology, Nitra (Slovakia)
National Food Chain Safety Office, Plant Health and Molecular Biology National Reference Laboratory (Hungary)

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Dr. László Radócz Institute of Plant Protection, University of Debrecen (Hungary) 4032 Debrecen, Böszörményi Str. 138, Hungary ¤ Email: radocz@agr.unideb.hu
Dr. Mihai Botu University of Craiova (Romania)
Dr. Milan Bolvansky Institute of Forest Ecology, Nitra (Slovakia)

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Please be advised, the text (electronic format together with a printed copy) should be sent to the 2nd European Congress on Chestnut secretariat (**radocz@agr.unideb.hu**. László Radócz Institute of Plant Protection, University of Debrecen (Hungary) 4032 Debrecen, Böszörményi Str. 138, Hungary)

before **1st of November 2013.**

Plenary Session (Lecture Hall: Afrika)

- 8.00-8.10: **László Radócz**: WELCOME SPEECH

-8.10-8.40: **Giancarlo Bounous**: PERSPECTIVES AND FUTURE OF CHESTNUT IN EUROPE AND ALL OVER THE WORLD

- 8.40-9.10: **Mark L. Double**: SUMMARY OF THE V. INTERNATIONAL CONGRESS ON CHESTNUT 2012 (SHEPHERDSTOWN, WEST VIRGINIA USA)

-9.10-9.40: **George Melika:** THE PEST CHESTNUT GALLWASP (*DRYOCOSMUS KURIPHILUS*): HISTORICAL OVERVIEW OF THE PROBLEM AND OPTIONS FOR CONTROLLING

9.40-10.00. Coffee break

-10.00-10.25: **Daniel Rigling:** CHESTNUT BLIGHT FUNGUS AND ITS HYPOVIRUS IN EUROPE

-10.25-10.50: **Stephanos Diamandis:** APPLICATION OF BIOLOGICAL CONTROL OF CHESTNUT BLIGHT ON NATIONWIDE SCALE IN GREECE: RESULTS AND PROSPECTS

10.50-11.00: **Damiano Avanzato:** PRESENT ACTIVITY OF ISHS

11.00-12.00 Lunch

12.00- Start to Baia Mare (Romania) chestnut plots (FIELD VISIT Nr.1.)

23.00 arrival to Debrecen

Evaluating Soil Organic Carbon and Nutrient Storage in a Sustainable Forest Chestnut Management Context.

Maria S. Patrício[1], Luís Nunes[1], Ermelinda L. Pereira[1]

[1]Mountain Research Centre (CIMO), ESA – Polytechnic Institute of Bragança Campus de Stª Apolónia, Apartado 1172, 5301-855 Bragança, Portugal. sampat@ipb.pt

Abstract

Forests fix carbon dioxide from the atmosphere and sequester it in biomass, timber products and soils (stock effect). Soil organic carbon (SOC) is the major stock of the terrestrial biosphere with great importance for the balance of carbon at the global scale. Nowadays, a reliable estimate of the stored C, in the mineral soil pool of forest ecosystems, is of great importance in helping Governments to make decisions in carrying out the Kyoto Protocol. In this study the quantification of C and nutrients stocks in the mineral-soil compartment for old high-forest Chestnut (*Castanea sativa*) stands was done. The study was developed in Northern Portugal in the mountains of Bornes and Marão (Regional level), from a more-Atlantic-to-less-maritime influence, where the species occupy a considerable area. In Portugal, the species is located essentially in the North from 400-1100 m above sea level. In the mountain areas, the coppices and high forest are particularly relevant, especially in deep forest soils. These chestnut ecosystems constitute discontinuities between conifer forests and are important for forest fire prevention, biodiversity, environmental protection as well as for timber production. Inventory information on SOC stocks is very scattered, because large spatial variability and enormous sampling efforts. Therefore, traditional broadleaves species, less representative in the global context and with fragment distributions, are poorly sampled. Thus, this study was carried out to estimate the soil organic carbon (SOC) stock in traditional forests of sweet chestnut, based on *in situ* observations, to know the real contribution of these types of forests to the SOC stocks. This research was developed on old chestnut high forests for quality timber production submitted to a silviculture management close-to-nature. At this stage the stands are close to self-thinning. Samples from soil profile at depths 0-10 cm, 10-30 cm and 30-60 cm were collected in 2002 and 2012 for the determination of the following parameters: pH, C, and N total extractable, P and K. The evolution of the storage of these parameters will be study to analyse the general capacity of the site concerning its sustainability and soil carbon pool.