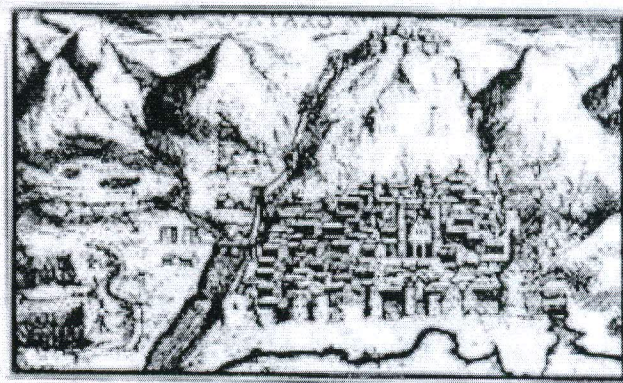


II International Symposium of Ecologists of Montenegro - The Book of Abstracts and Programme

**II INTERNATIONAL SYMPOSIUM OF ECOLOGISTS OF THE
REPUBLIC OF MONTENEGRO**

ISEM2

**THE BOOK OF ABSTRACTS
AND PROGRAMME**



Hotel Fjord, Kotor, 20-24. 09. 2006

evolution carps developed a well defined metabolic regulation and antioxidant defense system for the protection from acute hypoxia.

LIPID PEROXIDATION AND GLUTATHIONE CONTENT IN TISSUES OF HAKE (*Merluccius merluccius* L.) AND SEA BREAM (*Pagellus erythrinus* L.) FROM THE ADRIATIC SEA

Branka I. Ognjanović¹, Jasmina Ž. Filipović¹, Dubravka Nikolić¹, Snežana D. Marković¹, Sadjan Z. Pavlović², Radoslav V. Žikić¹, Andraš Š. Štajn¹ & Zorica S. Saičić²

¹Institute of Biology and Ecology, Faculty of Science, University of Kragujevac, Kragujevac, Serbia; ²Institute for Biological Research "Siniša Stanković", Department of Physiology, Belgrade, Serbia

Fish are the most important organisms used in biomonitoring of aquatic ecosystems. Parameters of oxidative stress in fish tissues represent significant biomarkers in the assessment of the status of environment. Specimens of hake (*Merluccius merluccius* L.) and sea bream (*Pagellus erythrinus* L.) were collected at the end of May 2005 from the locality in front of sea-port Bar (South Adriatic Sea). Parameters of oxidative stress (concentration of lipid peroxidase – LP and reduced glutathione – GSH) were determined in the liver and white muscle of hake and sea bream. Physical-chemical parameters (salinity, concentration of dissolved oxygen and temperature) were determined in water of the investigated locality. Obtained results showed that the concentration of LP was higher in liver of hake and sea bream in comparison to white muscle. However, significantly higher concentration of GSH was found in white muscle of hake and sea bream in comparison to liver. These changes of oxidative stress parameters point to tissue specificity, which is the consequence of different metabolic and antioxidative activity. Inter-specific differences were also established. Higher concentrations of LP and GSH in liver of hake and in white muscle of sea bream were recorded, due to changes of physical-chemical parameters of environment. The intensity of oxidative stress in liver of hake and sea bream was higher in comparison to muscle.

INFLUENCE OF ECOLOGICAL FACTORS ON ECLOSION OF EGGS OF EUROPEAN RED MITE (*PANONYCHUS ULMI* KOCH)

Aleksandra Petrović, Dragana Rajković, Aleksandar Jurišić

University of Novi Sad, Faculty of Agriculture, Department of Environmental and Plant Protection, Laboratory for Medical and Veterinary Entomology, Trg Dositeja Obradovica 8, 21000 Novi Sad, Serbia

The European Red Mite (*Panonychus ulmi* Koch) is a common pest in orchards in Vojvodina. This species is well-known and very important foliar pest of apple trees. It feeds on the leaves tissues, causing a lightening in the normal green color of the foliage and reduction of photosynthetic rate. Severe infestation can cause foliage bronzing, premature leaf fall, reduced fruit quality and lower fruit yields. Due to significance of this pest in the apple orchards, the objective of our research was to determine influence of ecological factors: temperature, relative air humidity, exposition to sunlight depending on cardinal points and different apple varieties on eclosion of eggs.

Panonychus ulmi over-winters as a "winter" egg in diapause laid on the bark of the trees or smaller branches. These eggs are laid from mid August till late October. During