



L'Union Médicale Balkanique
Balkan Medical Union



Balkanska Medicinska Unija



32nd

Balkan
Medical
Week

32^{ème}

Semaine
Médicale
Balkanique



21-23. September 2012.
University of Nis
Nis, Serbia



32nd BALKAN MEDICAL WEEK - Nis, SERBIA
32eme SEMAINE MEDICALE BALKANIQUE - Nis, SERBIA

OFFICERS OF THE BALKAN MEDICAL UNION

International Secretary General: professor Vasile Căndea , Romania

Albania: Prof. Ylli Ppa, President, Tirana
Prof. Mentor Petrela, Secretary General, Tirana

Bulgaria: Prof. Venko Alexandrov, President, Sofia
Prof. Fanny Ribarova, Secretary General, Sofia

Cyprus: Dr Vassos Lyssarides, President, Nicosie
Dr Kaya Bekiroglu, Vice-president, TRNC

Greece: Prof. Niki Agnantis, former president, Ioannina
Prof. Ioannis Karaitianos, President, Athens
Dr Anastasios Thanos, Secretary General, Athens

Republic of Moldova: Prof. Gheorghe Ciobanu, President, Chisinau
Prof. Minodora Mazur, Secretary General, Chisinau

Romania: Prof. Nicolae Angelescu, President, Bucarest
Prof. Vasile Burlui, Vice-president, Iasi
Prof. Ioan Lascăr, Vice-president, Bucarest
Prof. Mircea Grigorescu, Vice-president, Cluj
Dr Ioan Iețcu, Vice-president, Suceava
Adriana Milea, Executive Director

Serbia: Prof. Vladmila Bojanić , President, Niš
Prof. Snažana Jančić , Secretary General, Kragujevac

Turkey: Prof. Somer Ones, former president, Istanbul
Prof. Sabri Ergüney, President, Istanbul
Prof. Ali Haydar Taspınar, Vice-president, Istanbul
Prof. Ertugrul Gazioglu, Treasurer, Istanbul

ORGANISING COMMITTEE:

President: Prof. Bojanić V,
 Prof. Đinđić B
 Doc. Bojanić Z
 Prof. Šmelcerović A
 Prof. Savić T
 Prof. Najman S
 Prof. Sokolović D
 Prof. Milojković M
 Doc. Lazović M
 Adriana Milea

SCIENTIFIC COMMITTEE

CHAIRMAN OF THE SCIENTIFIC COMMITTEE - PREDSEDNIK NAUČNOG ODBORA

MEMBERS OF THE SCIENTIFIC COMMITTEE - ČLANOVI NAUČNOG ODBORA

Prof. dr Vasil Candea
 Prof.dr Yves Juillet
 Prof. Emmeritus Niki Agnantis
 Prof. Emmeritus George Chaldakov
 Prof.dr Milorad Mitković
 Prof. dr Vladislav Stefanović
 Prof. dr Dušica Pavlović
 Prof. Fanny Ribarova
 Prof.dr Marina Deljanin Ilić
 Prof.dr Snežana Jančić
 Prof.dr Slobodan Janković
 Prof.dr Stevo Najman
Prof.dr Dragan Đurić
Prof.dr Vladmila Bojanić
Prof.dr Vlada Janković
Doc.dr Zoran Bojanić
 Prof.dr Dusica Stojanovic
 Prof.dr Stojan Radić
 Prof.dr Sonja Radenković

Conclusion. The subchronic administration of *C. coggygria* infusion is non-toxic in the applied concentrations and therefore it can be used for further investigation of possible protective effects in animal models of different pathological conditions.

Key words: biochemistry, European smoke tree, pathoanatomy, phytopharmacology

P80 Antigenotoxic and antioxidant properties of the methanol extract obtained from the underground parts of *Gentiana cruciata*

Štanić S¹, Stanić S¹, Solujić S², Stanković N², Mladenović M², Katanić J², Mihailović V²

¹Department of Biology and Ecology, Faculty of Science, University of Kragujevac, Serbia

²Department of Chemistry, Faculty of Science, University of Kragujevac, Serbia

Introduction. *Gentiana cruciata* L. (*Gentianaceae*), commonly called "cross gentian", is used in the traditional medicine for loss of appetite, as a stomachic, as well as component in preparations showing beneficial effects in gall and liver diseases.

The aim of this study was to evaluate antigenotoxic and antioxidant properties of the methanol extract obtained from the underground parts of *G. cruciata* from Serbia.

Methods. The methanol extract were investigated for antigenotoxic activity against ethyl methane-sulfonate (EMS) using the *in vivo* sex-linked recessive lethal test on *Drosophila melanogaster*. Total antioxidant capacity, as well as free radical scavenging potential by applying the 2,2-diphenyl-1-picrylhydrazyl (DPPH) assay, were determined. Quantity of total phenolic compounds were determined as gallic acid equivalent using Folin-Ciocalteu's reagent, while the spectrophotometric method with aluminium chloride was used for the determination of total flavonoids as the rutin equivalent.

Results. Although EMS in concentration of 0.75 ppm (parts per million) increased the mutation frequency in all stages of spermatogenesis, post-treatments with extract in concentration of 5% significantly reduced the frequency of sex-linked recessive lethal mutations induced by EMS. Contents of total phenolics and total flavonoids were found to be 17.72 and 1.20 mg/g dry weight of extract, respectively. Total antioxidant capacity was 194.78 mg ascorbic acid/g dry extract, while antiradical activity of the extract ($IC_{50}=2.60$ mg/ml) were comparable to the activities of referent antioxidant compounds, such as gallic acid.

Conclusion. Phenolics and flavonoids were reported to have the capacity to scavenge mutagens or free radicals, therefore, they may be responsible for the beneficial effect exhibited by this plant.

Key words: antigenotoxicity; antioxidant; methanol extract, *Gentiana cruciata* L

Acknowledgments: This study was financially supported by the Serbian Ministry of Education and Science of the Republic of Serbia, Grants No. III43004 and III41010.

Hepatoprotective activity of methanolic extract of root of *Gentiana asclepiadea* L. in carbon tetrachloride induced hepatic damage in rats

Mihailović V¹, Katanić J¹, Mihailović M², Šipovac K¹, Stanković V³, Solujić S¹, Mladenović M¹, Stanić S¹, Matić S⁴

¹Department of Chemistry, Faculty of Science, University of Kragujevac, Serbia

²Institute for Biological Research "Siniša Stanković", University of Belgrade, Serbia

³Institute of Pathology, Faculty of Medicine, University of Kragujevac, Serbia

⁴Department of Biology and Ecology, Faculty of Science, University of Kragujevac, Serbia

Introduction. This study using *in vivo* model investigates hepatoprotective activity of the methanol extract of *Gentiana asclepiadea* L. roots (GAR) against carbon tetrachloride-induced liver injury in rats. *G. asclepiadea* (*Gentianaceae*) is traditionally used as a medicine for hepatitis infections and the Serbian local name of this plant is a "grass of jaundice". Herb and roots of this plant are also used in the traditional medicine as a bitter tonic and gastric stimulant.

The aim was to examine hepatoprotective activity of methanolic extract of root of *Gentiana asclepiadea* L. in carbon tetrachloride induced hepatic damage in rats.