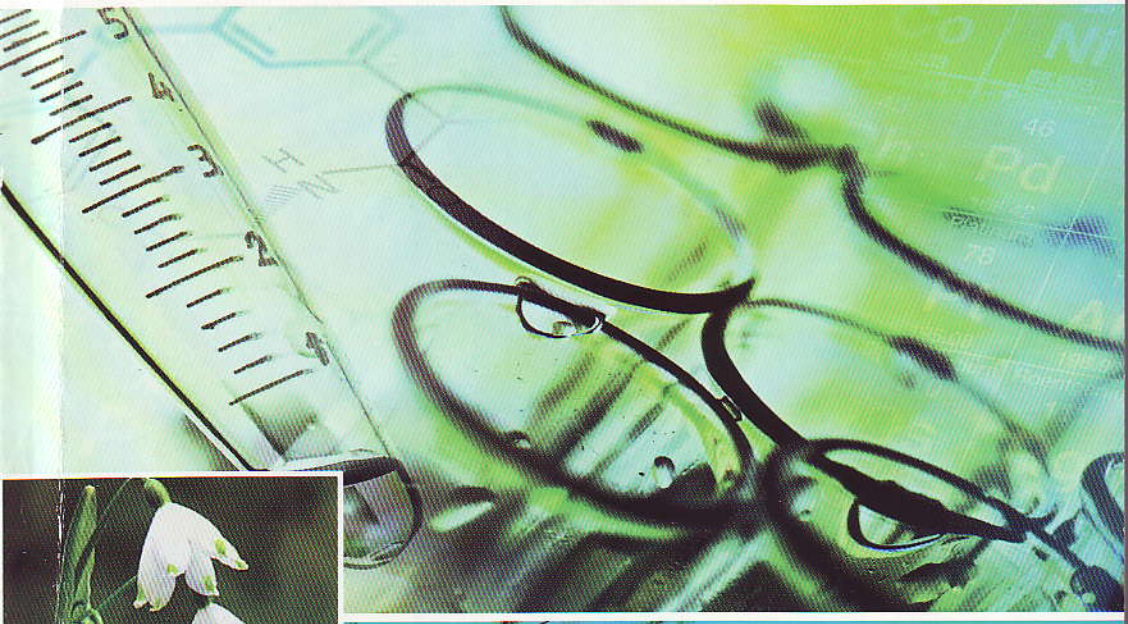
3rd Balkan Scientific Conference on Biology

May 30th - June 1st, 2014

Plovdiv, BULGARIA



Topics of the conference

- BIODIVERSITY AND ECOLOGY
- CELL AND MOLECULAR BIOLOGY
- MICROBIOLOGY AND BIOTECHNOLOGIES
- EDUCATION IN BIOLOGY
- BIOLOGY OF THE HUMAN
- APPLIED BIOLOGY

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UNIVERSITY OF PLOVDIV "PAISII HILENDARSKI"
FACULTY OF BIOLOGY







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PROGRAMME & ABSTRACTS

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Screening of Selected Bulgarian Herbs for Immunomodulating Acidic Heteropolysaccharides (Part 1)

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Abstract. In the current study were obtained immunomodulating polysaccharide extracts from 21 Bulgarian herbs by extraction with boiling water traditionally used in the Japanese Kampo phytomedicine. Polysaccharides were isolated with four volumes 95% ethanol and resulted lyophilized polysaccharide extracts were analyzed for anhydrouronic acid content, molecular weight and molecular heterogeneity, protein and total polyphenol content. Herb polysaccharide extracts were subjected to primary *in vitro* immunomodulating screening tests by estimation of their complement-fixing activity and stimulation activity against intestinal Peyer's patch immunocompetent cells. Antioxidant activity of polysaccharide extracts was studied in search of some correlation between polysaccharides and polyphenol content in the extracts. To our knowledge several of the studied herbs were investigated for bioactive polysaccharides for the first time.