



# BOOK OF ABSTRACTS

First Legume Society Conference  
*2013: A Legume Odyssey*

9-11 May 2013, Novi Sad, Serbia

First Legume Society Conference  
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# Book of Abstracts

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International Legume Society  
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2013

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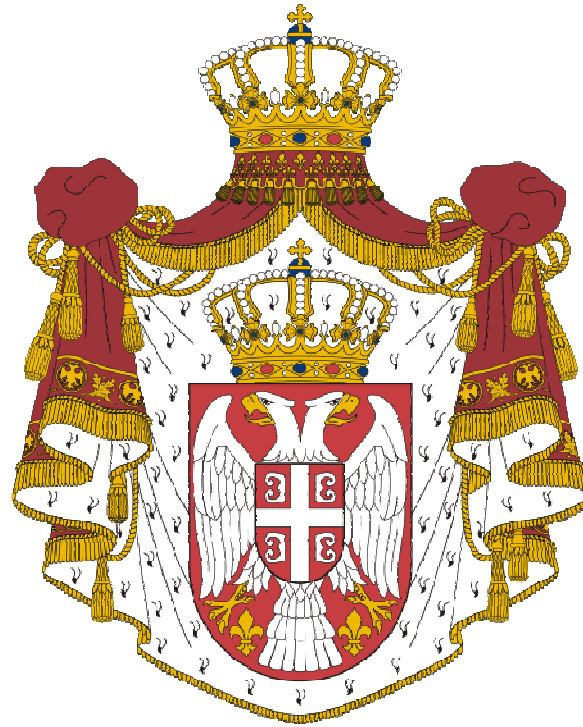
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Getting the message out: grow, use, feed and eat legumes

**Salt stress response in three pea species (*Pisum arvense*, *P. sativum* and *P. fulvum*) in *vitro* cultures**

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Salinity is one of the major abiotic factors limiting plants productivity. Processes, such as seed germination, seedling growth and vigor, vegetative growth, flowering, and fruit set, are adversely affected by high salt concentrations, ultimately causing diminished economic yield and also quality of products. Shoots of micropropagated *Pisum fulvum*, *P. sativum* and *P. arvense* were treated with 75, 120, 150 and 200 mM NaCl in order to study pea tissues capacity to tolerate salt stress and their antioxidant capacity. We used the phenol content and DPPH antioxidant assay as oxidative damage indicators. Results showed that salt stress caused slower plant growth, leading to an increase in lipid peroxidation and a decrease in total chlorophyll in pea tissues. Further, results showed that *P. fulvum* is to be considered as potentially less sensitive to high NaCl concentrations in comparison to *P. sativum* and *P. arvense* and could represent a gene pool which could be used for improving the characteristics of field pea.

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In the rich world of global agriculture, diverse legumes can play key roles to develop environment-friendly production, supplying humans and animals with the products of high nutritional value.

The Legume Society was initiated in 2011 with two primary missions. One of them was to treasure the rich legume research tradition of the European Association for Grain Legume Research (AEP), with emphasis on carrying out its the triennial legume-devoted conferences. Another one is to fulfill a long-term strategy of linking together the research on all legumes worldwide, from grain and forage legumes pharmaceutical and ornamental ones and from the Old World to the Americas.

We do anticipate that the First Legume Society Conference will be a unique and genuine contribution to our common goals: to promote the legume research and all its benefits into all spheres of the society, linking science with stakeholders and decision-makers, and to demonstrate how an efficient, useful and firm network of the legume researchers of the world is possible and sustainable.

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