



# BOOK OF ABSTRACTS

First Legume Society Conference  
*2013: A Legume Odyssey*

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# Book of Abstracts

Editors:  
Aleksandar Mikić  
Diego Rubiales  
Vuk Đorđević

International Legume Society  
Institute of Field and Vegetable Crops, Novi Sad, Serbia  
2013

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

## Developing lines of less-widespread warm season legumes for cool climates

Vojislav Mihailović<sup>1</sup>, Aleksandar Mikić<sup>1</sup>, Branko Čupina<sup>2</sup>, Vuk Đorđević<sup>1</sup>, Jegor Miladinović<sup>1</sup>, Vesna Perić<sup>3</sup>, Mirjana Srebrić<sup>3</sup>

<sup>1</sup>*Institute of Field and Vegetable Crops, Novi Sad, Serbia*

<sup>2</sup>*University of Novi Sad, Faculty of Agriculture, Novi Sad, Serbia*

<sup>3</sup>*Maiže Research Institute Zemun Polje, Belgrade, Serbia*

In most Western, Central and Southeastern European countries, it is cool season legumes, such as pea (*Pisum sativum* L.), faba bean (*Vicia faba* L.), chickpea (*Cicer arietinum* L.), lupins (*Lupinus* spp.), grass pea (*Lathyrus sativus* L.), vetches (*Vicia* spp.), lucerne (*Medicago sativa* L.) and clovers (*Trifolium* spp.) that are mostly grown. Two warm-season exceptions are common beans (*Phaseolus* spp.) and soybean (*Glycine max* (L.) Merr.), cultivated mostly in Southern and Southeastern Europe. During the last decade, a programme has been launched at the Institute of Field and Vegetable Crops and assisted from the Faculty of Agriculture of the University of Novi Sad aimed at breeding and agronomy of the less-known warm season legume crops in this part of Europe, with a specific emphasis upon pigeon pea (*Cajanus cajan* (L.) Huth), hyacinth bean (*Lablab purpureus* (L.) Sweet), adzuki bean (*Vigna angularis* (Willd.) Ohwi & H. Ohashi), black gram (*Vigna mungo* (L.) Hepper), mung bean (*Vigna radiata* (L.) R. Wilczek) and cowpea (*Vigna unguiculata* (L.) Walp.). The first step was the establishment of a collection of each of these species, with characterising the most peculiar morphological and anatomical traits and evaluating the most important agronomic traits such as forage and grain yield, quality and stress response, as well as the photoperiodical reaction. Some of pigeon pea accessions were able to produce forage yield of more than 100 t ha<sup>-1</sup> of fresh forage, but remained in full flowering until very late autumn and were barely able to bring forth seeds. On the other hand, selecting the lines of all the said warm season annual legume crops led to the development of the first lines suitable for both forage and grain production in cool climates and temperate regions, such as Serbia, with a northern latitude of 45°. The ultimate goal of this complex programme are cultivars that would be able to fit into various existing crop rotations, providing forage in mid- and late summer, when the traditional annual legumes have already left the field and thus provide the local animal husbandry with quality forage in the driest period of a year.

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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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