



# BOOK OF ABSTRACTS

First Legume Society Conference  
*2013: A Legume Odyssey*

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# Book of Abstracts

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

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## **Intercropping spring-sown annual legumes with brassicas for forage production**

Vojislav Mihailović<sup>1</sup>, Aleksandar Mikić<sup>1</sup>, Ana Marjanović-Jeromela<sup>1</sup>, Svetlana Antanasović<sup>2</sup>, Đorđe Krstić<sup>2</sup>, Branko Ćupina<sup>2</sup>, Snežana Katanski<sup>1</sup>

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Available references on intercropping brassicas with legumes are rather scarce. However, there are recent reports showing numerous benefits for a brassica component, especially in the form of an easier uptake of less available nutrients because of a positive influence of the legume companion. The goal of this study was to assess the potential of intercropping various spring-sown brassicas with legumes for forage production. A small-plot trial has been carried out in the trial years of 2010, 2011 and 2012 at the Experimental Field of the Institute of Field and Vegetable Crops at Rimski Šančevi in the vicinity of Novi Sad. It included six intercrops of spring-sown brassicas with spring-sown annual legumes. Two brassicas, in this case, rapeseed (*Brassica napus* L. var. *napus*) cv. Jovana and white mustard (*Sinapis alba* L.) cv. NS Gorica played the role of supporting crops for four legumes, namely pea (*Pisum sativum* L.) cv. Jantar, common vetch (*Vicia sativa* L.) cv. Perla, and grass pea (*Lathyrus sativus* L.), acting as supported crops. All six cultivars, developed at the Institute of Field and Vegetable Crops, were also sown as sole crops. The two-year average forage dry matter yield in the sole crop of rapeseed (6.9 t ha<sup>-1</sup>) was much higher than in the previous trial in the same agroecological conditions, while the two-year average forage dry matter yield in the sole crop of pea was also higher than in the preliminary results, with 8.2 t ha<sup>-1</sup>. The highest two-year average individual contribution in the total forage dry matter yield among brassicas was in rapeseed (3.9 t ha<sup>-1</sup>) when intercropped with common vetch, while the highest individual contribution in the total forage dry matter yield among legumes was in grass pea (6.2 t ha<sup>-1</sup>) when intercropped with white mustard. The two-year average values of LER<sub>FDMY</sub> ranged between 1.07 in the intercrop of rapeseed with grass pea and 1.25 in the intercrop of whit mustard with 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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