

## BOOK OF ABSTRACTS

First Legume Society Conference 2013: A Legume Odyssey

9-11 May 2013, Novi Sad, Serbia

# First Legume Society Conference 2013: A Legume Odyssey

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### Book of Abstracts

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### Response of three varieties of peanut (Arachis hypogaea) to the inoculation with Rhizobium and the stress saline

MR El-Akhal<sup>1</sup>, T Coba de la Peña<sup>2</sup>, A Rincón<sup>2</sup>, MM Lucas<sup>2</sup>, N El Mourabit<sup>3</sup>, JJ Pueyo<sup>2</sup>, S Barrijal<sup>1</sup>

The performance of three peanut cultivars inoculated with two different rhizobial strains, which differ in their salt tolerance, was evaluated under saline water irrigation and compared with that of nitrogen-fertilized plants. Under non-saline conditions, higher yields were obtained using nitrogen fertilization rather than inoculation for all the varieties tested. However, under salt stress, the yield of inoculated plants became comparable to that of nitrogen-fertilized plants. Thus, nitrogen fixation might represent an economical, competitive and environmentally-friendly choice with respect to mineral nitrogen fertilization for peanut cultivation under moderate saline conditions.

#### Forage yield in autumn-sown intercrops of annual legumes and brassicas

Ana Marjanović-Jeromela, Vojislav Mihailović, Aleksandar Mikić, Sreten Terzić, Dragana Miladinović, Petar Mitrović, Radovan Marinković

Institute of Field and Vegetable Crops, Novi Sad, Serbia

A small-plot trial has been carried out in the trial years of 2010/2011 and 2011/2012 at the Experimental Field of the Institute of Field and Vegetable Crops at Rimski Šančevi. It included eight intercrops of autumn-sown brassicas with autumn-sown annual legumes. Two brassicas, fodder kale (*Brassica oleracea* L. var. *viridis* L.) cv. Perast and rapeseed (*Brassica napus* L. var. *napus*) cv. Zorica were supporting crops for four legumes, pea (*Pisum sativum* L.) cv. NS Krmni, common vetch (*Vicia sativa* L.) cv. NS Tisa, Hungarian vetch (*Vicia pannonica* Crantz) cv. Panonka and hairy vetch (*Vicia villosa* Roth) cv. NS Viloza, acting as supported crops. All six cultivars were also sown as sole crops. The highest two-year average individual contribution in the total forage dry matter yield among brassicas was in fodder kale (4.5 t ha<sup>-1</sup>) when intercropped with Hungarian vetch, while the highest individual contribution in the total forage dry matter yield among legumes was in hairy vetch (6.6 t ha<sup>-1</sup>) when intercropped with rapeseed. The two-year average values of LER<sub>FDMY</sub> ranged between 1.05 in the intercrop of fodder kale with common vetch and 1.14 in the intercrop of fodder kale with Hungarian vetch. The autumn-sown intercrops of brassicas with legumes have demonstrated a considerable potential for forage production.

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a) Maxyнарке – Апстракти COBISS.SR-ID 278447623 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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