



BOOK OF ABSTRACTS

First Legume Society Conference
2013: A Legume Odyssey

9-11 May 2013, Novi Sad, Serbia

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Book of Abstracts

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

Assessing the potential of forage pea (*Pisum sativum*) cultivars for seed production

Branko Milošević, Đura Karagić, Dragan Milić, Vojislav Mihailović, Sanja Vasiljević, Aleksandar Mikić, Dalibor Živanov

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Producing the pea (*Pisum sativum* L.) seeds with high quality and able to meet diverse market criteria is not an easy task. Like many other annual legumes such as vetches (*Vicia* spp.), pea is rather susceptible to lodging. This is extremely specific for its forage agronomic type, where abundant aboveground biomass and high forage yield means poor lodging tolerance and large seed losses. The aim of our research was a comparative analysis of ten forage pea cultivars dominant on the Serbian market, targeting seed yield, number and length of internodes, plant height, first pod height and number of branches. A small-plot trial was carried out at the Experimental Field of the Institute of Field and Vegetable Crops at Rimski Šančevi in 2011 and 2012, including the cultivars with normal and afila leaf types, with white and purple flowers and with determinate and indeterminate stem growth. The seed yield in the cultivars with normal leaf type and white flowers (5012 kg ha⁻¹ and 5182 kg ha⁻¹) was significantly higher in comparison to the cultivars with indeterminate stem growth and purple flowers and insignificantly higher than in the cultivars with white flowers and afila leaf type. The average number of branches (1.3 plant⁻¹) was significantly greater in the cultivars with indeterminate stem growth and purple flowers as compared to the cultivars with determinate stem growth and white flowers. The average number of internodes, length of internodes and first pod length were highly greater in the cultivars with indeterminate stem growth (24.1 plant⁻¹, 6.6 cm and 101.6 cm). Overall, the number of internodes was 19.0 plant⁻¹, the length of internodes was 4.6 cm and the first pod height was 53.0 cm. The cultivars with determinate stem growth and white flowers proved to be the most suitable for seed production, with the leaf type insignificant.

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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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