



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

A genetic study of the hybrid progenies between common (*Pisum sativum* L.) and red-yellow (*Pisum fulvum* Sm.) peas

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Red-yellow or tawny pea (*Pisum fulvum* Sm.) has become an object of increasing interest for breeders in the last decade, since it has been proven to be a source of a partial or complete tolerance to various biotic stresses, such as the attack of pea weevil (*Bruchus pisorum* L.). Crossings were made between red-yellow pea and four distinct agronomic types of common pea, namely with fasciated stem, determinate stem growth, afilea leaf type and strongly developed funiculus. Each of these four traits was chosen because of its supposed positive impact on grain yield. A genetic analysis included monitoring of the main grain yield components, such as main stem length, number of fertile nodes, number of pods, number of grains and thousand grains mass, as well as the inheritance of those four morphological traits and the degree of the pea weevil attack in F₁ and F₂ hybrid generations. The results have shown that all grain yield components are controlled by numerous genes, since the average values in both hybrid generations were between those of the parents, as well as that the morphological traits are inherited as in common pea. They also confirmed that there were probably three independent genes controlling pea weevil resistance.

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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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