



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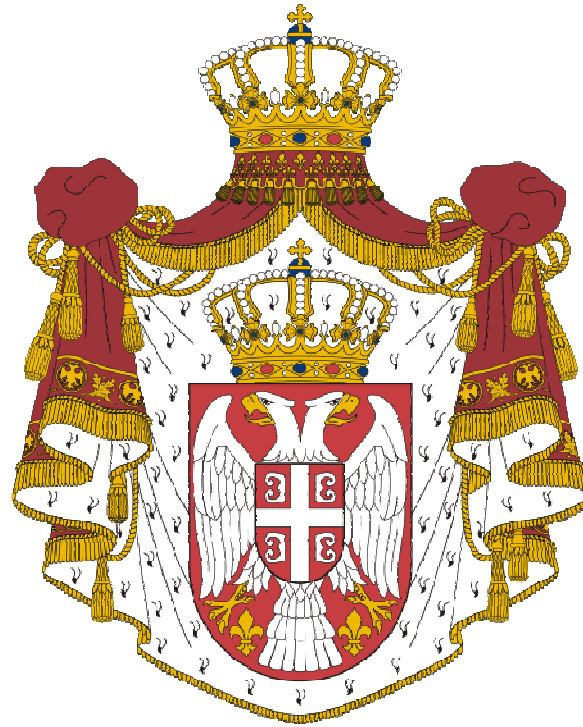
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Getting the message out: grow, use, feed and eat legumes

Lucerne and clover in pure stand or in association with ryegrasses under intensive conditions in Flanders

A De Vliegheer, G Cnops

Institute for Agricultural and Fisheries Research ILVO, Unit PLANT, Melle, Belgium

Monocultures of red (*Trifolium pratense* L.) and white clover (*Trifolium repens* L.), lucerne, perennial (*Lolium perenne* L.) and Italian ryegrass (*Lolium multiflorum* Lam.) and grass/legume mixtures were compared at 3 levels of chemical N fertilisation: 0, 105 and 265 kg N ha⁻¹ in order to investigate the effect on botanical composition, dry matter yield, forage quality and nitrate residue in the soil at the end of the growing season. From agricultural point of view, mixtures of ryegrass with clover or lucerne, fertilised with 105 N ha⁻¹ were the best in the 4-year period (2004-2007). The levels of nitrate residue in the soil were very acceptable for all the treatments and were the highest for the legume monocultures and the lowest for the grasses.

Developing schemes for intercropping annual legumes

Aleksandar Mikić¹, Branko Ćupina², Vojislav Mihailović¹, Đorđe Krstić², Svetlana Antanasović², Vuk Đorđević¹, Mirjana Srebrić³, Vesna Perić³

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We established four main principles for mutual intercropping annual legumes: same time of sowing; similar growing habit; similar cutting time; and one component has good standing ability (supporting crop) and another one poor (supported crop). There are three main intercropping groups: (1) 'tall' cool season legumes; (2) 'short' cool season legumes; (3) warm-season annual forage legumes. In the 'tall' cool season group, faba bean and white lupin are supporting crop, while the supported crops are normal-leafed pea common vetch, Hungarian vetch, hairy vetch and grass pea. This may be beneficial for both by weed reduction and preservation of photosynthetically active leaves. The 'short' cool season group comprises semi-leafless pea as supporting crop and normal-leafed, bitter vetch and lentil as supported crops. If intercropped, semi-leafless pea provides improved standing ability of the whole intercrop, while normal-leafed pea, bitter vetch or lentil fill the available space within the stand and contribute to better utilisation of sunlight, at the same time reducing weeds. In the warm-season group, soybean and pigeon pea are supporting crops, while mung bean, adzuki bean, black gram, cowpea and hyacinth bean are supported crops. Soybean may bear cowpea or hyacinth bean stems and thus assist in preserving their leaves and profit from significantly decreased weed infestation.

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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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