

BOOK OF ABSTRACTS

First Legume Society Conference 2013: A Legume Odyssey

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Book of Abstracts

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

Effect of seeding rate on plant density and dry matter yield of alfalfa

Snežana Katanski¹, Slobodan Katić¹, Dragan Milić¹, Branko Ćupina²

Alfalfa, as the most important perennial forage legume, is cultivated in Serbia on about 200.000 ha. In the world and in Serbia sowing rates are very variable (15-30 kg ha⁻¹). The aim of this research was to investigate effect of seeding rate on dry matter yield of alfalfa and number of plants. The trial with three replications was located at experimental field of Institute of Field and Vegateble Crops at Rimski Šančevi. In the second and third year of growth (2010-2011) influence of two different seeding rates (8 kg ha⁻¹ and 16 kg ha⁻¹) on dry matter yield was tested. A two-year average of the total dry matter yield was determined from the four cuts of four cultivars. The number of plants per square metre after emergence, then in the fall of the seeding year, and again the next spring and autumn was determined. A sowing rate had no influence on the yield of dry matter of alfalfa. The same dry matter yield (22.2 t ha⁻¹) was achieved under both low and high seeding rate. The sowing rates did not affect plant density. At the end of the year of establishment number of plants per square metre was approximately the same in both seeding rates (8 kg ha⁻¹ - 270 plants per m² and 16 kg ha⁻¹ - 273 plants per m²). In the third year of growth a plant density of 88 plants per square metre was the same in both low and high seeding rates. Results obtained in our study clearly show that higher seeding rates do not produce higher yields and higher density of alfalfa plants.

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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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