



BOOK OF ABSTRACTS

First Legume Society Conference
2013: A Legume Odyssey

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Book of Abstracts

Editors:
Aleksandar Mikić
Diego Rubiales
Vuk Đorđević

International Legume Society
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Sanja Mikić and Aleksandar Mikić

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

Visualize to explore: Towards a different model of scientific information retrieval with emphasis on legume research

Dejan Pajić¹, Aleksandar Mikić²

¹*University of Novi Sad, Faculty of Philosophy, Novi Sad, Serbia*

²*Institute of Field and Vegetable Crops, Novi Sad, Serbia*

In the era of ubiquitous computing and academic hyperproduction, researchers are often encountered with the problem of information overload. Scientific information retrieval systems such as Google Scholar or commercial bibliographic databases, usually display search results as textual lists. This form of representation is suitable for typical browsing tasks, but not for thorough search and exploration. Textual search interfaces usually do not provide users with the appropriate feedback on some relevant aspects of scientific communication, such as the relevance of used terminology, authors' field of expertise, or patterns of collaboration among institutions. This paper presents the basic features of the *SCIIndeks Visual Search*, an alternative information retrieval system which implements different visualization techniques for presenting search results, with a specific emphasis upon publications, scientists and institutions related to legume research. Multidimensional scaling and conceptual maps model were used to visualize the relationships among descriptors and authors of scientific papers dealing with legumes referred in the *Serbian Citation Index*. The system of visual search was not designed to replace the existing information retrieval model, but rather to enrich the users' information retrieval experience, especially in the case of specific exploration tasks, such as resolving typical vocabulary problems (e.g. polysemy), or analyzing collaboration networks among researchers. Several examples are given to illustrate the advantages of visual search model in the field of legume research and agricultural sciences in general. The authors point out possible benefits of the information visualization as a mediator between the user's query and search results, i.e. between user's information need and information space of the document corpus, anticipating a significant enhancement of mutual awareness of each other's achievements in various topics of legume research.

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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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