

International Conference on

Green Energy & Expo

September 21-23, 2015 Orlando, USA

Camelina sativa: A promising cost-effective crop for biofuel feedstock testing the optimization of *Camelina* farming in Romania

Ana Rosu¹, Stefana Jurcoane¹, Yuri Herreras Yambanis², Delia Dimitriu³, Florentina Matei¹ and Gheorghe Campeanu¹ ¹University of Agronomical Sciences and Veterinary Medicine, Romania ²Camelina Company Espana, Spain

³Manchester Metropolitan University, UK

Global energy insecurity in the face of diminishing fossil oil reserves revitalized the interest to identify alternative renewable sources of energy feedstock with an emphasis on plants. There is increased interest in *Camelina sativa* due to the exquisite quality of its seed oil as a source of green energy namely of bio-based petroleum substitutes especially aircraft biofuel. A top priority on the EU environmental agenda is the use of alternative aviation fuels aiming to achieve an annual production of two million tons of sustainably produced biofuels for the European civil aviation by 2020 (European Advanced Biofuels Flightpath). Though *Camelina* seed oil has been used on Romanian territory since the Bronze Age for food, medicinal purposes and as lamp oil, after the Second World War it was replaced by higher yielding crops. It is now obvious that in order to provide sufficient *Camelina* seed oil to be used as a bio-based petroleum substitute, it is imperative to develop new varieties characterized by high and stable yield, higher oil content and increased adaptability to the environmental conditions. Another basic requirement for having enough available feedstock is to develop reliable and cost-effective agro-technology for the cultivation of this species. Answering these challenges was the aim of two European research projects with Romanian participation (ITAKA and NICAVA). The trials of *Camelina* production in different Romanian locations proved that this crop has a good production potential even on polluted soils and the production variables which affect the seed yield and the oil quality are discussed.

Biography

Ana Rosu is a Graduate of the faculty of biology, University of Bucharest and scientific researcher in the field of cell biology and plant biotechnology at the Institute of Biology, Romanian Academy of Sciences. She completed her PhD in Biology in 1987. She is a scientific research coordinator and is responsible for professional formation of young specialists as professor of plant biology and biotechnology of the faculty of biotechnology at University of Agronomical Sciences and Veterinary Medicine of Bucharest. She has published more than 70 articles in scientific journals; 24 scientific presentations at international and national scientific events.

anabiotech@yahoo.com

Notes: