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Clean technologies combining phytoremediation with biofuel production – Part II –

Project CleanTech, POC/P_40_308, SMIS:105958

Maria Paraschiv[1,2,] Carmen Constantin[1,2], Radu Kuncser[1,4], Marius Enache[1,4] and Malina Prisecaru[3], Ana Cracica[5], Elena Dumitrescu[5]*

1University Politehnica of Bucharest, Research Center for Advanced Materials, Products and Processes (CAMPUS), 313 Spl. Independentei, 060042, Bucharest, Romania
2National Institute of R&D for Biological Science, 296 Spl. Independentei, 060031, Bucharest, Romania
3University Politehnica of Bucharest, Faculty of Mechanical Engineering, 313 Spl. Independentei, 060042, Bucharest, Romania
4Romanian R&D Institute for Gas Turbines – COMOTI, 220D Iuliu Maniu St., 061126, Bucharest, Romania, radu.kuncser@comoti.ro
5OMV-Petrom – ICPT Campina, 29 Culturii Blvd., 105600, Campina, Prahova, Romania, ana.cracica@petrom.com
* Correspondence: maria.paraschiv1504@upb.ro

TOPIC: Combined technologies applied for maximizing the impact on the process efficiency and environmental issues related to salt level soils.

KEYWORDS: soil salinity, phytoremediation, biomass production for 2nd generation biofuels

OBJECTIVE:
- Selected halophyte sp. for soils contaminated with salts
- Germination and growth adaptative capacity
- Contaminated soil treatment solutions
- The evaluation efficiency of phytoremediation treatment in the field

Experimental work

a) Land affected by salinity

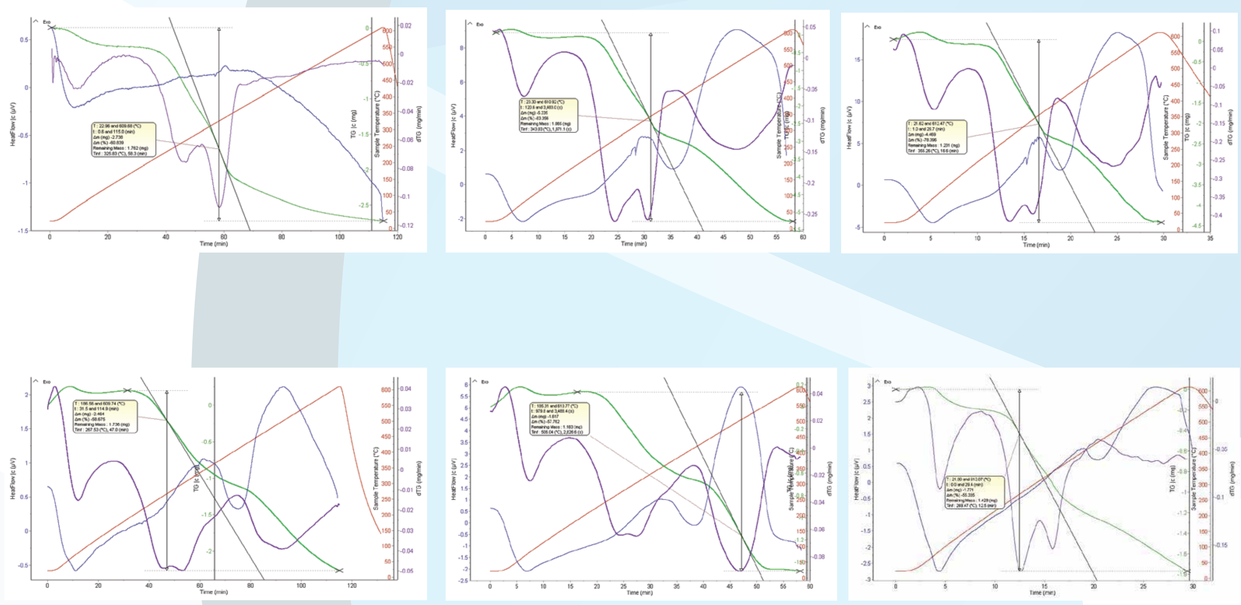
b) Soil preparation and sowing

c) Plant growth and monitoring

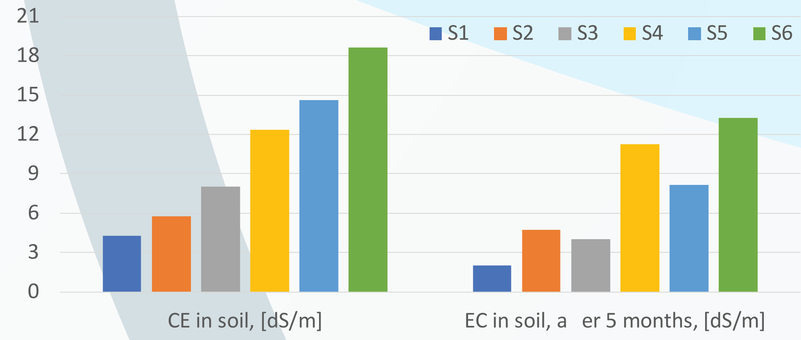
d) Roots development

Seed germination tests (Optical microscopy, 20x)

Thermochemical analysis (inert atmosphere): Limonium sp. - stem and leaves



Electrical conductivity of soil samples



Conclusions:

Based on the investigations carried out on natural soils sampled from land with salts increased contents it can be concluded that Limonium sp. may be used to control salt level in accidentally contamination of the land.

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