



University of Agricultural Sciences
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Romania



THE 17TH INTERNATIONAL SYMPOSIUM
PROSPECTS FOR THE
3rd MILLENNIUM
AGRICULTURE

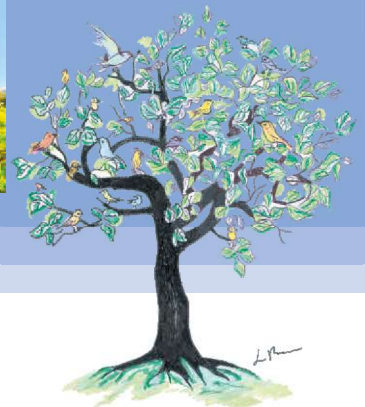
27th- 29th September 2018, Cluj-Napoca, Romania

BOOK OF ABSTRACTS

No. 5/2018



27 - 29th September 2018, Cluj-Napoca, Romania
www.usamvcluj.ro



SOIL RESOURCES AND PEDOCLIMATE AREAS OF CLUJ COUNTY

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Keywords: *soil resources, pedoclimate areas, Cluj county.*

Introduction. Cluj county lies in the north-western half of the country, at the intersection of three representative natural units: the Apuseni Mountains, the Someș Plateau and the Transylvanian Plain. Lying on a surface of 6674.4 km², Cluj county represents 2.84% of the Romanian territory.

Aims. The paper presents the soil resources and the pedoclimate areas of Cluj county, as well as the main factors which influenced their evolution.

Materials and Methods. The assessment of soil resources was made based on the operation of pedological mapping according to the Methodology of Preparing Pedological Studies (1987) and of the Romanian System of Soil Taxonomy (2012). The soil layer at the level of Cluj county is the following: protisoils 24.98% (lithosoil 0.25%; aluviosoil 24.73%); cernisoils 10.76% (chernozemic soil 0.65%; phaeosiom 9.32%; rendzina 0.79%); cambisols 23.51% (eutricambosoil 6.47%; districambosoil 17.04%); luvisols 30.61% (prelivosoil 4.91%; luvosol 25.70%); spodisols 4.68% (prepodzol); pelisoils 1.26% (vertosol); hidrisoils 1.89% (gleiosoil 1.88%; stagnosoil 0.01%); salsodisols 0.03% (solonceac); antrisoils 2.28% (erodosoil).

Results. The evolution of soils at the level of Cluj county is influenced by the combination of natural and anthropic factors. The natural factors are climate - especially rainfall, wind, drought and relief. The list of anthropic factors is longer and it comprises: unadequate agricultural technologies, urban aggression and the social component, of which one can mention the aging of the population, the youth's lack of interest for the rural, low prices of agricultural products, lack of infrastructure and deforestation. At the level of Cluj county, of a total of 67720 ha of lands seriously damaged by the processes of natural and anthropic erosion, one can classify them according to their gravity as follows: surface erosion 41353 ha (59.3%); depth erosion 3983 ha (5.7%); landslides 12250.1 ha (17.6%); excavations, deposits and debris 52 ha (0.1%); moisture excess 10707.9 ha (15.4%); salt marshes 168 ha (0.2%); lithosoils 1206 ha (1.7%).

Conclusion. Cluj county has 10 pedoclimate areas, the characterization, technological priorities and directions of evolution of which are made to set up useful recommendations for the practical activity of production, respectively for the durable use of lands. The 10 pedoclimate areas are: area 1 - Huedin; area 2 - Panticeu; area 3 - Chiuiesti; area 4 - Unguras; area 5 - Mociu; area 6 - Campia Turzii; area 7 - Mihai Viteazu; area 8 - Ciurla; area 9 - Culoarul Somesului; area 10 - Maguri Racatau.

Acknowledgements: This work was supported by a grant of the Ministry of Research and innovation, RDI Programme for Space Technology and Advanced Research - STAR, project number 699, contract 184/2017: HORUS - Software platform for pedological monitoring in Transylvania area based on Sentinel-2 data.