AGRICULTURAL ENGINEERING. SOIL - PLANT - TECHNICAL EQUIPMENT WITHIN THE CONTEXT OF ECOLOGICAL AGRICULTURE AND ECONOMIC EFFICIENCY

28th October 2011, Bucharest, Romania

MINISTRY OF EDUCATION, RESEARCH, YOUTH AND SPORT

INMA BUCHAREST

with support of:

ASAS – Romanian Academy of Agricultural and Forestry Sciences

PACTMAR – Romanian Constructors Society of Agricultural Machines

P.U. Bucharest (Faculty of Biotechnical Systems Engineering)

University of Craiova

SIMAR - Romanian Agricultural Mechanical Engineering Society

Society for Environmental Protection of Serbia

University of Rouse

RILRAM - Research Institute of Land Reclamation and Agricultural Mechanization

International Symposium

AGRICULTURAL ENGINEERING

SYMPOSIUM PROGRAMME

BUCHAREST, ROMANIA 28 October 2011

AGRICULTURAL ENGINEERING. SOIL - PLANT - TECHNICAL EQUIPMENT WITHIN THE CONTEXT OF ECOLOGICAL AGRICULTURE AND ECONOMIC EFFICIENCY

28th October 2011, Bucharest, Romania

Friday 28 October 2011

 $7^{30} \div 8^{45}$ Registration of participants

9.00-9.30

Official Opening Assembly Hall - ASAS Bucharest

Welcoming Addresses by:

Ph.D. Eng. Pirnă Ion - President of the Organizing Committee

9.30-10.00

Welcoming Addresses by Supports Organizations

Prof. Ph.D. Eng. Paraschiv Gigel - Faculty of Biotechnical Systems Engineering

Acad. Prof. Ph.D. Sin Gheorghe - President of ASAS – Romanian Academy of Agricultural and Forestry Sciences, Romania

AGRICULTURAL ENGINEERING. SOIL - PLANT - TECHNICAL EQUIPMENT WITHIN THE CONTEXT OF ECOLOGICAL AGRICULTURE AND ECONOMIC EFFICIENCY

28th October 2011, Bucharest, Romania

10⁰⁰ ÷ 12²⁰ PAPER PRESENTATIONS

SECTION 1

Soil, Power and Machinery

(Time for report is 10 min)

Moderators: Ph.D. Eng. Pirnă Ion

Prof. Ph.D. Eng. Paraschiv Gigel

Scientific Secretary: Ph.D. Eng. Ganea Ion

1. Brătucu Gh., Păunescu C., Pasztor J.

Transylvania University Braşov / Romania

ESTABLISHMENT OF THE OPTIMAL TECHNOLOGICAL VARIANT UNDER ENERGETICALLY ASPECT FOR PREPARING THE GERMINATION BED IN GREENHOUSES

2. Boja N., Boja F.

"Vasile Goldiş" Western University of Arad, Faculty of Engineering / Romania

EXPERIMENTAL RESEARCHES REGARDING THE SOIL COMPACTION IN THE FORESTRY NURSERIES

3. Loghin Fl., Eng. Rus Fl.

Transylvania University Brasov / Romania

DEVELOPMENT AND SIMULATION OF VIRTUAL PROTOTYPE OF SEED DRILLS
TRANSMISSION

4. Brătucu Gh., Păunescu C., Căpățînă I.

Transylvania University Braşov / Romania

OPTIMIZATION OF THE ENERGETICALLY CONSUMPTION OF THE CULTIVATORS FOR OPEN CHANNELS IN GREENHOUSES THROUGH MATHEMATICAL MODELING

10⁴⁰ - 11⁰⁰ Coffe Break

5. Brencu Molder L.¹⁾, Marin E.²⁾

¹⁾University from Craiova / Romania; ²⁾INMA Bucharest / Romania

EXPERIMENTAL RESEARCHES OF COMPLEX TECHNICAL EQUIPMENT SOWING CORN IN NARROW STRIPS

6. Drăghia D.¹⁾, Bădescu M.²⁾, Mircea R.³⁾, Ciupercă R.⁴⁾

¹⁾Inspectorate Forestry Regime and Hunting – Râmnicu Vâlcea / Romania; ²⁾ University from Craiova; ³⁾INMA Bucharest / Romania

ROTARY MACHINE KINEMATICS WITH ARMS FOR SEEDLINGS PLANTED

7. Trajković R.¹⁾, Anđelković S.²⁾, Ivanović R.³⁾, Andjelković B.²⁾

¹⁾Faculty of Sciences, Kosovka Mitrovica / Serbia; ²⁾Institute for Forage Crops, Kruševac / Serbia; ³⁾Faculty of Sciences, Niš / Serbia

THE EFFECT OF WATER FROM THE RIVER VETERNICA ON THE GERMINATION OF SOME VEGETABLE CROPS SEED

8. Sbîrnă L.S.¹⁾, Mateescu M.D.¹⁾, Sbîrnă S.²⁾, Moldovan C.S.³⁾, Ionescu C³⁾

¹⁾University of Craiova, Faculty of Chemistry / Romania; ²⁾Craiova Regional Environment Protection Agency / Romania; ³⁾University of Petroşani, Faculty of Mining / Romania

EVALUATING BY SIMULATION THE IMPACT OF ACID RAIN ON CATIONS IN A REDDISH-BROWN SOIL SAMPLED FROM COŞOVENI, DOLJ (ROMANIA)

AGRICULTURAL ENGINEERING. SOIL - PLANT - TECHNICAL EQUIPMENT WITHIN THE CONTEXT OF ECOLOGICAL AGRICULTURE AND ECONOMIC EFFICIENCY

28th October 2011, Bucharest, Romania

9. Usenko M.

Lutsk National Technical University / Ukraine

AIRSCREW AS A STABILIZING DEVICE FOR SMALL AGGREGATES

10. Nagy M.¹⁾, Cota C.¹⁾, Cioica N.¹⁾, Fechete L.²⁾

1)INMA Bucharest - Cluj Napoca Branch / Romania; 2)Technical University Cluj-Napoca / Romania MODELING OF THE GEOMETRICAL PARAMETERS OF ACTIVE BODY FOR THE SOIL PROCESSING OF THE EQUIPMENT EXPLANT 500

12⁰⁰ - 13⁰⁰ Lunch Break

1300 ÷ 1420 PAPER PRESENTATIONS

SECTION 2

Power Machinery, Irrigation, Phytosanitary Treatments

(Time for report is 10 min)

Moderators: Prof. Ph.D. Eng. Paraschiv Gigel

Ph.D. Eng. Voicu Emil

Scientific Secretary: Ph.D. Eng. Drâmbei Petronela

9. Aliyev Ch.

Azerbaijan Scientific Research institute of Forages, Meadows and Pastures / Azerbaijan

FEATURES OF TECHNOLOGY FOR GROWING TOMATOES AND EGGPLANTS IN THE REPUBLIC OF AZERBAIJAN

10. Ganeva D., Pevicharova G.

Maritsa Vegetable Crops Research Institute / Bulgaria

"IZK Alya" NEW CHERRY TOMATO VARIETY

11. Nagy M.1, Cârdei P.1, Coța C.1, Fechete L.2

1)INMA Bucharest, Cluj Napoca Branch / Romania; 2)Technical University Cluj-Napoca / Romania

METHOD OF ESTIMATING THE SOIL RESISTANCE FORCE TO SOIL WORKING MACHINE
PARTS WITH APPLICATIONS TO THE OPTIMIZATION OF WORKING REGIMES OF
MACHINES USED IN HORTICULTURE

12. Ciupercă R.¹⁾, Drăghia D.²⁾, Lazăr G.¹⁾, Radu M.¹⁾, Bodea C.¹⁾, Grădinaru V.¹⁾

¹⁾INMA Bucharest / Romania; ²⁾Inspectorate Forestry Regime and Hunting – Râmnicu Vâlcea / Romania INNOVATIVE TECHNOLOGY FOR WORKING SOIL AND PLANTING OF FOREST SAPLINGS

13. Gadjalska N., Petrova R., Markov E.

RILRAM Sofia / Bulgaria

QUALITY OF WATER USED FOR IRRIGATION

14. Tadjer J., Căzănescu S., Grancharova El.

RILRAM Sofia / Bulgaria

SUSTAINABLE CONTROL OF DANUBE WETLANDS

15. Sedlar Al., Bugarin R., Turan J., Đukić N.

University of Novi Sad, Faculty of Agriculture, Department of Agricultural Engineering / Serbia

TEHNO-ECONOMIC ANALYSIS OF CLASSIC AND SELECTIVE PESTICIDE APPLICATION

IN APPLE AND APRICOT ORCHARDS

AGRICULTURAL ENGINEERING. SOIL - PLANT - TECHNICAL EQUIPMENT WITHIN THE CONTEXT OF ECOLOGICAL AGRICULTURE AND ECONOMIC EFFICIENCY

28th October 2011, Bucharest, Romania

17. Knezevic J., Knezevic D., Ciric SI., Sekularac A.

University of Pristina, Faculty of Agriculture, Lesak / Serbia

MEASURING OF THE EFFICIENCY OF SOME HERBICIDES ON SPRING BARLEY
AGROPHYTOCOENOSIS WEED VEGETATION

14²⁰ – 14⁴⁰ Coffe Break

14⁴⁰ ÷ 16⁵⁰ PAPER PRESENTATIONS

SECTION 3

Transport, Harvesting, Food Industry, Climatic Factors

(Time for report is 10 min)

Moderators: Ph.D. Eng. Vlăduț Valentin

Ph.D. Eng. Nicolescu Mihai

Scientific Secretary: Ph.D. Eng. Nedelcu Mihai

18. Simikić M., Savin L., Tomić M., Dedović N., Matić-Kekić S.

Faculty of Agriculture, University of Novi Sad / Serbia

INFLUENCE OF OBLIQUE TRACTION ON TRACTION PERFORMANCES OF A WHEELED TRACTOR ON DIFFERENT SOIL SURFACES

19. Hermenean I.11, Mocanu V.11, Voicu E2)

1)ICDP Braşov / Romania; 2)INMA Bucharest / Romania

EXPERIMENTAL RESEARCHES CONCERNING DYNAMICS AND ENERGETIC OF WHEEL TRACTOR FOR SLOPES (4X4) – FRONT RAKE SYSTEMS

20. Bozhkov S., Badrikov E., Yankova V., Stefanov K., Mihov M.

Research Institute for Land Reclamation and Agricultural Mechanization – Sofia, Bulgaria

RESEARCH ON STABILITY AND DESIGNING OF PROTECTIVE STRUCTURE

OF TRANSPORT VEHICLE FOR SMALL FARMS

21. Căpătînă I, Brătucu Gh.

Transylvania University Brasov / Romania

RESEARCH REGARDING THE MECHANICAL TUBERS INJURY AT THE HARVESTING WORK

22. Chirilă C., Ţenu I.

University of Agricultural Sciences and Veterinary Medicine "Ion Ionescu de la Brad" Iași / Romania CONSIDERATIONS ON THE OPTIMAL COMBINE ESTABLISHMENT,

DEPENDING ON SURFACE STRUCTURE

23. Voicu Gh., Constantin Gh., Ştefan E.M.

Polytechnic University of Bucharest / Romania

RELEVANT RHEOLOGICAL PROPERTIES OF BREAD DOUGH IN SMALL AMPLITUDE OSCILLATORY DYNAMIC TESTS (SAOS)

15⁴⁰ – 16⁰⁰ Coffe Break

AGRICULTURAL ENGINEERING. SOIL - PLANT - TECHNICAL EQUIPMENT WITHIN THE CONTEXT OF **ECOLOGICAL AGRICULTURE AND ECONOMIC EFFICIENCY**

28th October 2011, Bucharest, Romania

24. Murad E., Safta V. V., Haraga G., Panţiru G. A., Fărăoanu C. E.

Polytechnic University of Bucharest / Romania

CONVECTIVE DRYER ENERGETICALLY COUPLED TO A GREENHOUSE

25. Păunescu C.G.

Transylvania University Braşov / Romania

THE METHODOLOGY AND THE EQUIPMENTS USED FOR TRACKING THE CLIMATIC **FACTORS IN A POTATOES WAREHOUSE**

26. Marinova S., Pchelarova H., Toncheva R.

N. Poushkarov Institute of Soil Science, Sofia / Bulgaria

ATMOSPHERIC EMISSIONS RESULTING FROM LAND APPLICATION MANURE

27. Alovsat G.

Nakhchivan State University / Azerbaijan

THE SETTLEMENT METHODS OF WATER PROBLEMS IN ARID CLIMATE ZONES

Ćirić SI., Knežević J., Andjelković S.

University of Priština, Faculty of Agriculture / Serbia

BACTERIOLOGICAL AND SANITARY STATE OF RESERVOIR ĆELIJE WATER AT THE **CATCHMENT SITE**

$16^{50} - 17^{00}$ Coffe Break

29. Burtea R.¹⁾, Vlăduţ V.¹⁾, Tudor A.²⁾, Voicea I.¹⁾, Găgeanu G.¹⁾ INMA Bucharest / Romania; ²⁾P.U. Bucharest

RESEARCHES REGARDING DETERMINATION OF LUBRICATING PROPERTIES OF A **BIODEGRADABLE OIL**

30. Brăcăcescu C.

INMA Bucharest / Romania

THEORETICAL AND EXPERIMENTAL RESEARCHES REGARDING THE OPTIMIZATION OF WORKING PROCESSES OF GRAVITY SEPARATORS AIMED AT CEREALS IMPURITIES

31. Găgeanu P.1, Moșoiu C.2, Zaica Al.1, Sandric M.2

¹⁾INMA Bucharest / Romania; ²⁾IBA Bucharest / Romania

HUMAN CAPITAL RECOVERY IN RURAL AREAS IN ROMANIA, BY ACQUIRING OF SKILLS AND KNOWLEDGE WITH HIGH ADDED VALUE

Pirnă I., Cristea O., Vlădutoiu L., Ganea I.

INMA Bucharest / Romania

IMPLEMENTATION IN ROMANIA OF INNOVATIVE CLUSTER CONCEPT IN THE FIELD OF AGRICULTURE AND FOOD INDUSTRY

33. Nedelcu D., Bădănoiu B., Niţu M.

INMA Bucharest / Romania

ACHIEVING FLEXIBLE PROGRAMS OF LIFE-LONG TRAINING FOR PLANT AND ANIMAL **FARMS WORKERS**

1750: DISCUSSION

Closing of the Symposium

Note. The time limit of presentation in scientific sessions is 10 minutes. There will be a possible to use PowerPoint program if you need it for your presentation.