SECȚIUNEA 1

MODERATORI:

Prof. univ. dr. Vasile Dumitru
Prof. univ. dr. Mocanu Romulus
Prof. univ. dr. Iancu Stancu

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RĂSPÂNDIREA ŞI CARACTERIZAREA GÂRNIȚETELOR ŞI CERETELOR DIN BAZINUL JIULUI

THE SPREAD AND CHARACTERISATION OF CERRIS AND HUNGARIAN OAK IN RIVER JIU RESERVOIR

Iulian Bercea – Direcția Silvică Craiova

The forests of Cerris and Hungarian oak taken into consideration here are to be found between the forest area and the steppe area, taking advantage of the flat fields, the plateaus and the sunny slopes with arid climate (567,7 mmters the average of precipitations for longer period in Craiova) and high temperatures (10,6° C average per year for longer period), and heavy, compact and most enriched with clay soils with varying conditions of humidity.

The Hungarian Oak (Quercus Frainetto) and the cerris (Quercus Cerris) belong to Fagales order, Fagacee family, Quercus gender.

Their distribution on altitude on this territory is not uniform: in the southern part the Hungarian Oak is predominant, then the mixtures are are following; uper, on the plateaus, the proportion of Cerrus increases, the mixtures of mezoxerophite oaks are next (evergreen oak) and in the northern area we can find again pure Hungarian oak forests.

The whole forest surface on the territory considered here is of 167 248 ha of which 72 151 ha (43%) consist of cerris and Hungarian oak (Hungarian oak 51 500 ha and cerris 21 651), divided into 5 groups of forest areas.

The characterisatin of cerris and hungarian Oak forests is based on their structure, on classes of age, production, vitality, consistance and regeneration way.

The structure based on classes of ages show the predominance of the third class(41-60 years), the predominant class of production – the third class (78%), most of these forests belonging to a middle production class (79%) with normal vitality (92%) and full or almost full consistance (95%).

The regeneration of cerris and Hungarian oak forests in the studied territories consists of brushwood (83% for hungarian Oak and 80 % for Cerris) due to bad way of managing, inauspicious anthropogenic influence.

The current study creates the possibility of regional orientation concerning forest administration and management of this area, the evaluation of wood resources on medium and long periods, and also the intervention for better protection actions and environment influences.

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CRITERII MORFO-ANATOMICE FOLOSITE ÎN TAXONOMIA SPECIILOR DE *ALCHEMILLA* L.

MORPHO-ANATOMICAL CRITERIA USED IN THE *ALCHEMILLA* L. SPECIES TAXONOMY

Violeta BORUZ - Gradina botanică „Al. Buia"
Universitatea din Craiova

Rezumat

Lucrarea reprezintă o sinteză a criteriilor morfo-anatomice frecvent utilizate pe plan european în determinarea speciilor acestui gen critic din Fam. Rosaceae.

Astfel, cele mai accesibile şi mai des utilizate sunt caracterele organelor vegetative: forma şi dimensiunile frunzei, sinusul bazal, numărul de lobi, forma şi numărul dinților lobilor, perozitatea (dispoziția perilor pe cele două fețe ale limbului frunzei, pe pețioluri, pe tulpină), precum şi caracterele organelor reproducătoare: pedicelii florilor – glabri sau păroşi, epicaliciul şi caliciul, cupa caliciului, raportul între sepale şi cupa caliciului, raportul între achenă şi cupa caliciului.

Cu toate acestea, recunoaşterea corectă a speciilor de *Alchemilla* din flora României este dificilă.

De aceea s-a încercat şi folosirea unor criterii anatomice: felul țesuturilor şi dispoziția lor în secțiuni transversale prin pețiol, limb, tulpină; secțiuni tangențiale prin limbul frunzei.

Folosind aceste criterii morfo-anatomice au fost identificate până acum în Unitatea Montană Parâng următoarele specii: *Alchemilla connivens* Buser, *A. crinita* Buser, *A. glabra* Neygenf., *A. glaucescens* Wallr., *A. flabellata* Buser, *A. micans* Buser, *A. monticola* Opiz şi *A. xanthochlora* Rothm.

Abstract

The paper presents a synthesis of the morpho-anatomical criteria which are frequently used in Europe, in order to establish the species of this genus belonging to the Rosaceae Family.

Thus, the most accessible and most frequently used features are those of the vegetative organs: the leaf form and dimensions, the basal sinus, the number of lobes, the number and the form of the lobe teeth, the hairiness (the distribution of the hairs on the two sides of the lamina, on the petioles, on the stem), as well as the features of the reproduction organs: the flower pedicles – glabrous or hairy, the epicalyx and the calyx, the calyx cup, the relation between the achene and the calyx cup, and so on.

In spite of this thing, it is difficult to recognize correctly the Alchemilla species in the Romanian flora.

Therefore, we have also tried to use some anatomical criteria: the tissue types and their transversal distribution through the petiole, lamina, stem; tangent sections through the leaf lamina.

By using these morpho-anatomical criteria, we have identified, so far, within the Parâng Mountain Unit, the following species: Alchemilla connivens Buser, A. crinita Buser, A. glabra Neygenf., A. glaucescens Wallr., A. flabellata Buser, A. micans Buser, A. monticola Opiz şi A. xanthochlora Rothm.

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INFLUENȚA PRODUSULUI KRISTALON ÎN NUTRIȚIA MINERALĂ A PLANTELOR DE BEGONIA

THE INFLUENCE OF THE KRISTALON PRODUCT ON THE MINERAL NUTRITION OF BEGONIA PLANTS

Sonia Cruceru, C. Becherescu, Silvia Osiceanu

Rezumat

În lucrare sunt prezentate rezultatele experimentale ale influenței diluției, la aplicarea îngrăşământului lichid tip Kristalon, pentru cultura unor specii şi hibrizi de Begonia. S-a constatat că, la aceeaşi doză de macroelemente, soluțiile cu diluție mai mică de 1%, determină o creştere mai mare a concentrației macroelementului în frunze, decât soluția cu diluție mai mare de 0,5%.

Abstract

The paper presents the experimental results of the dilution with the applying of liquid Kristalon fertilizer for Begonia species and hybrids. There was observed that, with the same macroelements dose, the solutions with a dilution less than 1% determines an increasing of the macroelement within the leaf than a solution higher than 0,5%.

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THE NITRATE POLLUTION - A NOWADAYS ISSUE

Ana Maria Dodocioiu

Abstract

The nitrate pollution is a historical phenomenon which has been increasing as the form and industrial technologies developed.
The researchs that were carried out on the nitrates content of the soil-plant-water system within the Dolj county have emphasized, in some situations, the overpassing of the MAL for nitrates.

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CLONE SELECTION OF SEVERAL PLANTS OF HORTICULTURAL INTEREST FROM THE SPONTANEOUS FLORA OF VÂLCEA COUNTRY

Fătu Petruța

ABSTRACT

The environmental protection and the conservation of biodiversity are the main issues regarding Romania`s integration process in the European Union.

Cozia National Park is home for over 800 plants, of which some are to be found exclusively either in this area, either in our country. During the period 2003-2005 we were able to identify 8 clone selections that we transferred afterwards to the experimental area of S.C.D.P. Valcea for experimentations and breeding.

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THE USE OF MALEIC ANHYDRIDE COPOLYMERS AS SOIL CONDITIONERS

F. Filipov, Gabrielle Chitanu, Valeria Harabagiu

The using of polymers as soil conditioners is known in the last 50 years. The polymers use for this purpose have very different chemical structures and properties. The water soluble maleic anhydride copolymers has been used in the prevention of crust building, as agent for improvement of hydric stability of structural aggregates and as additive of horticultural substrata. In this research paper it will be presented the preliminary results of some experiences with clay loam cambic cernozem and the horticultural substratum treated with different concentrations of synthetic polymer of maleic anhydride. Following of obtained results, the use of waters soluble polymers for improving of some chemical and physical properties of soil and horticultural substrata is recommended

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CERCETARI PRIVIND INFLUENTA LUCRARILOR DE BAZA ASUPRA UNOR INSUSIRI FIZICE SI A IMBURUIENARII LA GRAU, PE PRELUVOSOLUL ROSCAT DE LA BANU MARACINE

RESEARCHS ON THE INFLUENCE OF THE TILLAGE ON SEVERAL PHYSICAL FEATURES AND WEEDS WITH WHEAT-CROP, ON THE REDDISH PRELUVOSOIL FROM BANU MARACINE

Florina Grecu, D. Vasile, M Dobre
Facultatea de Agronomie Craiova

ABSTRACT

The paper presents the results of a trial using wheat as crop as influenced by the tillage on the reddish preluvosoil from Central Oltenia. The tillage were: normal and shallow plow, discing and direct drilling. These tillage have both influenced the main physical features of the soil and weed infestation. The resulting bulk density was higher with the unplowed variant at the soil surface while the discing have recorded higher values under 10 cm. The penetration resistance made with a dynamic device has shown low values with tilled variants very high values with the untilled variant. We believe that these influences were done mainly by water different retention of the tilled, untilled soil. The weeds were significantly higher in number with the direct drilled variant.

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WEEDING DYNAMICS ON SOME AGRICULTURAL LANDS WITHIN THE DENTA VILLAGE (TIMIŞ COUNTY)

Alma L. GRIGORIU, Ilinca M. IMBREA, Daniela AMZA

Abstract**:**

In this paper we present the state of weeding of some agricultural lands recently cultivated, after a long period of time. Seed reserve in the soil is high, and negative features of soils favour the setting of certain weed categories. We present in parallel the differences between the soles studies: soil type, existing crops, and pre-emergent ones, number of weed species, herbicides used, and their effects.

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FESTUCA PRATENSIS MEADOWS IN THE TIMIŞ RIVER BASIN

Alma L. GRIGORIU, Ilinca M. IMBREA, Natalia R. ALDA

Abstract**:**

Festuca pratensis meadows in the Timiş River basin are fragmentary spread inside of some orchards or like patches of hay

fields, usually enclosed, nearby villages, between 140 and 750 m altitude.

The species bio-diversity is medium after Shannon index (0.49) and high after the Simpson's one (0.68). Using the medium abundance-dominance index, the Festuca pratensis meadows shows an obvious mesophyllous character, but a rise level of xero-mesophyllous species indicates an evolutional tendency towards dryer meadows dominated by Festuca rupicola.

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THE COMPONENTS OF THE DURABLE AGRICULTURE SYSTEM THE TRIANGLE OF THE DURABLE DEVELOPMENT OF AGRICULTURE (SOIL MANAGEMENT, ECONOMIC, SOCIAL)

Iancu Stancu

The global durable development can't be made without the durable development of agriculture.

In order to practice a sustainable agriculture system there must be implemented the following strategies: the maintaining of the biological equilibrium, the conservation of the biological diversity,
the proper use of the resources, the individual and collective economical development, to develop a welfare life standard and a social balance, to diminish consumption in the developed countries, to reduce the increase of population, the global and local integration, the adaptation of the human systems to the natural, economical and political changes.

The components of the durable agricultural system are: the proper use of the land; the integration of the field and husbandry production; the development of new agricultural technologies; alternative tillage systems; environment protection, etc.

The triangle of the durable development is composed of: farmers, statesman, consumers and, in the center of this triangle, are the researchers.

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RESEARCHES ON THE INFLUENCE OF DISBUDDING AND PLANT TIP CUTTING ON THE TOBACCO PRODUCTION, CULTIVATED ON THE IRRIGATED PSAMOSOIL FROM MARSANI-DOLJ

Iancu Stancu, Pătru Ionel, Prioteasa Marilena-Alina

The most advisable vegetation stage for making the disbudding on the Virginia tobacco is at the finish of the blooming, when there was obtained 2,280 kg/ha dry leaves. There will be removed the flowers and the four leaves from the top to obtain a higher efficiency of 154 kg/ha of dry leaves; comparative with the remove of the flowers and two leaves.

Between the manual disbudding and the chemical one (Royal, 4%) it isn't significant difference.

With the plants without disbudding leaves there didn't appeared copse or their number was small.

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THE EFFECT OF THE CALCIUM CARBONATE AMENDAMENT ON HYDRIC STABILITY OF STRUCTURAL AGGREGATES OF THE ALBIC LUVOSOLS

G. Jitareanu, F. Filipov, S. Cara

Lime is primarily a soil amendment or conditioner of the acidic soils such is Luvosols. Lime performs several important functions: corrects soil acidity, reduces the solubility and toxicity of certain elements in the soil such as aluminum, manganese, and iron, improve soil structure, total porosity and the water regime. In this research paper it will be presented some results obtained in the field experiences loam/clay loam Luvisols treated with different dose of calcium carbonate. Following of obtained results, the use calcium carbonate for improving of some chemical and physical properties of acid soils is recommended.

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MORPHOLOGICAL, PHYSICAL AND CHEMICAL CARACTERIZATION OF SOILS OF GATAIA LOCALITY AREA, TIMIS DEPARTMENT

K. Lațo , I. Rusu

This paper presents the morphological, physical and chemical characteristics of the main soil types around Gataia locality, Timis department. The researches were made between 2003-2005 and the analyses were made in O.J.S.P.A laboratories in Timisoara. The purpose of the researches is to identify the main soil types and to establish after, the soil's favorability for each utilization and each crop separately.

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THE INFLUENCE OF GENETIC AND EVOLUTION CONDITIONS OVER THE SOILS COMPACTNESS IN FAGET HILLS ZONE, TIMIS DEPARTMENT

Viaceslav Mazăre

Abstract

The growing intensification of the agricultural production in the last years and the strong mechanization has as effect soil's compactness in the superior horizons. The processes of secondary compaction, being attentive studied, we observed in the soil profile a micro-structure with thin fissures, parallel disposed and frequently appear iron hydroxides deposits. In the studied area we determinate a surface of 31.821,4 ha (36. 11%) with different degrees of compaction from the total arable surface 36948, 6 ha.

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THE MODIFICATION OF SOIL COMPACTION DEGREE IN THE INTENSIVE PLANTATION OF THE DIDACTIC STATION TIMISOARA

Casiana Mihuț, I. Rusu, K. Lațo

Abstract

Research presented in this paper aimed at getting aware of the changes in physical features of soil setting degree occurring on a

cambic, moderately gleyied chernozem, weakly decarbonated clayey, on medium fine loess layers the influence of mineral and organic, in intensive system.

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THE FERTILIZER USE AND THE LAND YIELD IN ROMANIA

Mocanu Romulus, Roşculete Cătălin,
Ana Maria Dodocioiu

Abstract

The fertilizer use has been being the key factor of land yield increasing in Romania. Within the 1980-1990 period, the fertilizer consumption was of 129.9 kg/ha active ingredient while within the 1989-2004 period it decreased to 38.4 kg/ha active ingredient.

Comparing the average yield in 1980-1990 period with the one of 1991-2004 period there was recorded a decrease of 2.4% with corn, 15% with wheat, 26.6% with barley, 10% with sugar beet, 26% with sunflower and 18.1% with potato.

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VATAMARI PRODUSE DE DAUNATORII SEMINOFAGI AI CVERCINEELOR SI MASURI DE CONTROL A ACESTORA

THE DAMAGES PRODUCED BY SEMINOPHAGUS PESTS OF OAKS AND CONTROL MEASURES OF THESE

Dr. ing. Constantin Netoiu, ICAS Craiova
Ing. Marian Stoenescu, DS Craiova

Abstract:

As a result of general decline of oaks forests, the oak trees fructify more rarely and less abundant. The few acorn production is partial or total destroyed by the specific pests Balaninus glandium, Carpocapsa amplana and Carpocapsa splendana.This paper presents the results of the researches on biological elements of this species, the way and level of attack and also experimental measures of control. There were tested more insecticides in different concentration, repeated applicated for 3-4 times in the adults flying

period (July-August). The proposed treatments can be applicated only in orchards.

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REMARKS ON THE MACROMYCETES IN THE FOREST TREAPTURI-HOREZU

Mariana Niculescu, Florentina Iancu, Alisa Nica

Abstract.

On the occasion of certain floral and vegetation research made in the forest Treapturi-Horezu betwen 2000-2002, we found 20 species of macromycetes that will present in this paper. For each species one point at: the ecological group, the biological form, the underground layer, the period of the collection in the mentioned is eatable, non-eatable or poisonous.

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NOTES FLORISTICAL IN THE ALPS MOUNTAINS (FRANCE)

Mariana Niculescu

Abstract.

The territory under research is located in the Alps Mountains, region of the Lautaret, France. The research on the field was carried out from july-august 2005, with planned itineraries. On the occasion of the certain floral and vegetation research made in this regions we found 680 taxa of cormophytes. For the identification of the taxa, we have used the Flora Alpina vol. I, II and Flora Europaea, vol. I.-V. Regarding the nomenclature, we have adopted the classified list solutions which are considered correct, according to the International Code of Botanic Nomenclature.

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THE INFLUENCE OF THE AZOTH AND PHOSPHOR DOSES ON THE CHLOROPHYLL PIGMENTS AT THE DANUBE HYBRID

Ing. drd. Pandia Olimpia

It was followed the administration of the different azoth and phosphor dose at the corn culture and at the Danube hybrid, to study the chlorophyll pigments and it has chlorophyll type **a** and chlorophyll type **b**, it follows tow stages:

I. Stage one- the forming of the five leafs

II. Stage tow- the appearing of the flower.

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THE INFLUENCE OF THE AZOTH AND PHOSPHOR DOSE AT THE MINERVA HYBRID AND AT THE AMINO ACIDS CONTENT TOO

Ing. drd. Pandia Olimpia

It was take in study the Minerva hybrid under the administration of the different azoth and phosphor doses, administrated in the tow systems, irrigated and not irrigated, following some general properties of this hybrid, and the amino acids content too, with reference at the important amino acids.

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INVESTIGATION ON THE WINTER BARLEY CULTURE ON THE IRRIGATED LEVELED AND UNLEVELED SANDY SOIL FROM TAMBURESTI-DOLJ (2002-2004)

Prioteasa Marilena – Alina, Iancu Stancu, Pătru Ionel

The production of the Miraj crop-kind was of 2,507 kg/ha on the psamosoil, unleveled and of 1,623 kg/ha (64,73 %) on the leveled one. By fertilization the production has grown gradually, from 1,516 kg/ha (with the unfertilized crop) to 2,482 kg/ha (at the maximum experimental dose).

On the unleveled soil, the number of the ears/ m2 was between 381 and 514, the number of grains in an ear between 23.5

and 33.4, while the number of grains/m2 was between 8,935 and 17,168.

On the leveled soil the number of ears/m2 was between 313-418, the number of grains in an ear was between 20,6-33,2 and of grains /m2 between 6,448-13,878.

To establish the quality of the winter barley crop there have been made chemical analyses in the laboratory, for the content of proteins, total P, total K. The Vigna sinensis has been used as green manure.

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INVESTIGATION ON THE INFLUENCES OF THE PLANTING DISTANCES AND OF THE RIDGING TILLAGE OF SANDY SOIL FROM MARSANI-DOLJ, ON THE TOBACCO YIELD (VIRGINIA TYPE)

Prioteasa Marilena – Alina, Iancu Stancu, Prioteasa Ionuț Alin

The cost necessary for the ridging tillage is not justified, because the production efficiency that was obtained on the ridged soil on the ridged soil, before planting, is not important.

The highest production of tobacco dry leaves has been obtained at the planting distances of 90 cm between rows and of 40 cm between plants on the row .The length of leaves was of 40.4-46.6 and the leaves width of 22,2-26,9cm, depending of the three factors that we have studied.

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THE SOIL RESOURCES OF THE DOLJ COUNTY AND THEIR ACTUAL QUALITY

Ing. Popa Cornel, director general D.G.A.D.R. Dolj

Abstract

Within the Dolj County there are 741,401 ha of which: 58,575 ha arable land and 155,642 ha of other use land. The farm land of the County comprises: 487,516 ha of arable land, 68,679 ha of pastures, 2,952 ha for hay, 18,260 ha vineyards and 8,352 orchards. These surfaces are included in 8 soil classes (after SRTS 2000) as

follows: protisoils, chernisoils, hydrosoils, salsodisoils, antrisoils. The largest surface is occupied by the chernisoils, 35.18%. The soils from the Dolj County have predominantly a weak acid reaction, an average nitrogen and phosphorus supplying and good potash supplying.

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THE CHANGE OF SOME SOIL CHEMICAL PROPERTIES AFTER INTENSIVE CHEMICAL FERTILIZATION

Isidora Radulov, Alina Aniței, F. Crista

Abstract**:**

In this paper we present research results concerning the change of some soil chemical properties of cambic chernozem in Timisoara after intensive chemical fertilization. Chemical fertilizers, who were applied, are ammonium nitrate and superphosphate. The study of soil chemical properties was made on the same soil surface, beginning with 1992, under a crop of wheat and maize. By analyzes were determinate: soil pH, total exchange cation capacity (T me/100 g soil), degree of base saturation (V %), sum of exchangeable bases (SB me/100 g soil), hydrolytic acidity (AH me/ 100 g soil).

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THE RESULTS OF MINERAL AND ORGANIC FERTILIZATION OVER THE QUANTITY AND QUALITY OF WHEAT AND MAIZE CROPS ON THE CAMBIC CHERNOZEM FROM TIMISOARA

Isidora Radulov, Alina Aniței, A. Şmuleac

Abstract**:**

The prezent paper shows the influence of mineral and organic fertilization over the quantity and quality of wheat and maize crops, on the cambic chernozem from Timisoara. We applied different phosphor and potassium doses on nitrogen agricultural background, but also organic fertilizers: manure, pig sludge and urban sludge. We cultivated variety Alex for wheat and simple hybrid Lovrin 400 for maize. The yields are presented as arithmetical averages for 3 years of research: 2003, 2004, and 2005.

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MANURE EFFECT FOR SUNFLOWER CROPS ON BARREN PLATFORMS IN HUSNICIOARA QUARRY, MEHEDINȚI

Dr. ing. Roşculete Cătălin Aurelian
SCDA Caracal

Summary

The recropping of the barren platforms is today a high necessity for degraded areas from Husnicioara Quarry.

The researchs aimed issuing of fast and low costs solutions, using as much as possible, the real conditions and available means from the specific area.

The sunflower, among the tilled crops was grown between 2000 - 2004, using rotation of mineral and organic fertilisers, such as special prepared manure.

The researched factors werw: the manure dose applied for the following variants: unfertilised 10 t/ha, 20 t/ha, 30 t/ha; applying period: yearly, every 2 year and every 3 year and the mineral fertilisers with N0P0, N40P60 and N80P60.

The displayed data contain information regarding the flower diameter, the crop hight, grain yield, weight for 1000 grains and hectoliter weight in a statistic manner of calculation and interpretation.

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THE EFFECT OF SEVERAL NITROGEN DOSES ON A CONSTANT PHOSPHORUS BACKGROUND ON THE WINTER WHEAT YIELD CROPPED AT A.R.D.S. CARACAL

Roşculete Elena, Dodocioiu Ana Maria, Mocanu R.

Abstract

The paper presents the experimental data of a trial that was unfolded on the chernozem soil from A.R.D.S. Caracal.

The trial has researched the effect of several nitrogen doses on a constant phosphorus background with the winter wheat crop in irrigated and unirrigated conditions. The nitrogen doses have varied between 0-150 kg/ha and the P2O5 background was of 80 kg/ha.

The best results were obtained with the variant fertilized with the maximal nitrogen dose (N150) and in optimal irrigated conditions (4,669 kg/ha).

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SOIL HUMIDITY DYNAMIC IN DIFFERENT CLIMATIC AND EDAPHIC CONDITIONS FROM BANAT FIELD

Şmuleac (Vulcănescu) Laura, Borza I.

Abstract

Soil moisture is a key variable for understanding many hydrological processes that are involved in a large variety of natural processes (geomorphologic, climatic, ecological, etc). Because of that is necessary to know the temporal dynamics of soil moisture over larger territories and long periods. Agriculture, respectively agriculture production, is directly influenced by soil humidity.

In the present paper is represented the humidity dynamic for the representative type of soil from Banat Field in climatic conditions of 2004-2005 agriculture year.

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RELATIONS BETWEEN SOIL HUMIDITY REGIME AND AGRICULTURE PRODUCTION IN BANAT FIELD

Şmuleac (Vulcănescu) Laura, Borza I.

Abstract

Water represents one of main factors that contribute to the formation of vegetal biomass, between the consumed water quantity and crop existing very tide relationships.

The respond functions domain between the culture production and soil humidity is very wide. This variation are influenced by the type of chosen water parameter, by measurement and accuracy of its estimation by experiment field, considered biomass (total dried material or useful production), same as weather condition experimentation year.

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THE INFLUENCE OF MINERAL AND ORGANIC FERTILIZERS UPON CLOROPHYLL CONTAIN OF CORN LEAFS

Şmuleac Adrian

Abstract

The chlorophyll is absolutely necessary for biosynthesis of the green plants (the corn), which have an essential role in maintaining life on our planets.

The **a** chlorophyll represents the main pigment from the corn leafs. It is only pigment capable of transforming solar energy in chemical energy.

Photosynthesis is the fundamental process in nature, there this process, green plants are producing, with the help of sunlight, big quantities of organic substances (carbohydrates, fats, proteins) from anorganic substances (CO2, H 2O, minerals fertilizer), elaborating the oxygen from breathing and oxidation of different substances.

Photosynthesis has a very important role in the process, the solar energy is converted with the help of chlorophyll in chemical energy, and witch accumulates in organic substances.

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SECONDARY PRODUCTION OF STALKS AND CORN CARS OBTAINED AS A RESULT OF FERTILIZERS APPLICATION

Şmuleac Adrian, Isidora RADULOV , Alina Aniței

Abstract

An important factor of corn plants growth is the mineral nutrition. Among the mineral fertilizers, a special role is played by the nitrogen, which determines increases of the production vegetal mass, in the conditions of applying together with the phosphor and potassium.

According to the experimental and production results, in different geographic areas it could be evaluated the secondary production by multiplying the main production, kg/ha, with some established coefficients. For the corn, as secondary products are considered the stalks and the corn cars. The use of these secondary products is different, the stalks may be used as fodder or in the industry of cellulose and at the manufacture of the hardboards, and

from the corn cars we may obtain the furfural, the fodder for animals, soaps, vitamins or are used as fuels.

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FAVOURABILITY OF THE CAMBIC CERNOZIOM MODERATE GLEYED FROM S.D.TIMISOARA FOR VARIOUS CROPS AND AGRICOLES UTILIZATIONS.

Stroia Marius

Abstract

Presentation of the morphological, physicalls and chemicals main typicals on which was determined the favorability of the soil type for the main crops and agricoles utilizations.

***

RESEARCHS ON THE FEATURES OF THE GLEYOSOILS FROM THE DANUBE LOWLAND (RAST – ZAVAL FLOOD – PROTECTED AREA)

Vasile Dumitru, Popescu Cristian, Grecu Florina

Abstract

The Rast-Zaval flood –protected area comprises 30 000 ha of which 10 000 ha are reclaimed. The land that was waterlogged has totally different features which evolve very much during cropping. After field and laboratory researchs there were identified two soil units that were waterlogged: hystic glyosoil and eutric glyosoil.

The hystic glyosoil (formerly lake bottom with bulrush) has a soil profile of T-G, is very loose, has a high water retention capacity and lot of organic matter. By cropping, its production capacity increases. The eutric glyosoil (formerly lake bottom without bulrush) has a soil profile of Ao-Go-Gr, is more compacted, has a lower water retention capacity and has little sapropelic organic matter. By cropping, its production capacity decreases.

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EFICIENCY OF IMIDAZOLINONE HERBICIDES FOR CONTROL OF WEEDS IN A SUNFLOWER CROP WITH ,,IT" HYBRIDS

Vilău Nicolae, SCDA CARACAL

Abstract

Sunflower is most important culture in Romania, abaut 1 milion ha cultivated in last years. Weeds could compromise the crop in a first vegetative stages, Xanthium italicum, Cirsium arvense, are most important weeds. These species cannot be chemical controlled, because postemergent systemic selective herbicides for sunflower have not been developed yet. Worldwide, the recent discoveried allowed the first resistent genetically unmodified sunflower hybrids to be obtained. The imidazolinone herbicides Eurolightning, Bolero, Escort were performed in a sunflower crop with ,,IT" hybrids.

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THE HERBICIDES INFLUENCE ON THE WHEAT CROP IN THE CARACAL PLAIN

Vilău Nicolae, SCDA CARACAL

Abstract

Wheat is the main field crop in Romania. The divesity of the weed species as well as the diference in their rapacity made the study of more efficient herbicides necessary.

As a matter of fact, an important obiectiv of herbicides reserces was to obtain new more efficient herbicides, with a minimal impact on the environment by using very small amaunts per hectare and easy manipulation.

The creation and use of the combined hebicides with a synergic effect rezulted in their efficiency growth.

The paper deals with the herbicides efficiency, their selectivity on the Flamura 85 wheat as well as the herbcides effect on some wheat panification indexes.

SECȚIUNEA 2

MODERATORI:

Prof. univ. dr. Voica Nicolae
Prof. univ. dr. Feher Ecaterina
Conf. univ. dr. Soare Marin
Asist. univ. drd. Matei Gheorghe

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NEW ASPECT REGARDING THE BEHAVIOUR OF SOME FOREIGN HYBRIDS OF THE SUNFLOWER CULTIVATED IN THE CENTRAL AREA OF OLTENIA

Elena Bonciu, Paula Iancu, Soare, M.

Abstract

Sunflower continues to be (after soybean) a world leader of the plants whith high nutritions value, as it is considered a miraculous source of food and a therapeutic miracle in the treatment of many diseases.

Numerous foreign hybrids of the sunflower have shown a good adaptability to the conditions of Romanian environment. In order to establish the most productive genotypes that can be cultivated successfully in the central area of Oltenia, at S.D. Banu-Maracine it was investigated the behaviour of 5 foreign hybrids, together with a Romanian witness, under the aspect of variability of the elements growth and fructification.

The best results have been obtained by the Flavia and Barolo hybrids, these being able to be extended in culture and, eventually, introduced in the programme of improving the sunflower as valuable producers.

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THE INFLUENCE OF THE GENOTYPE OVER THE PRODUCTIVITY OF THE SUNFLOWER

Elena Bonciu, Voica, N.

Summary

The achievement of a genetic diversity by cultivating more hybrids with different reactions at the conditions of environment, with different precocity, constitutes the simplest and the most secure way of reduction of the fluctuation of the production of the sunflower.

If the technological elements are to a great extend firmly and correctly applied, and the climatic conditions practically incontrollable, the genotype is the most dynamic factor of influence of the productivity of the sunflower.

The researches accomplished in the central area of Oltenia, have demonstrated the different reaction of some Romanian hybrids of sunflower, depending on the genotype.

The most performative Romanian genotypes of experienced sunflower had proved to be Saturn and Performer, these being able to be extended in culture and introduced in the programme of improving the sunflower, as parents of the creation of new productive and sound hybrids.

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ON THE INFLUENCE OF FERTILISING ON SOME SOY BEAN CULTIVAR YIELDS IN THE HYDROGRAPHIC BASIN OF THE CARAŞ RIVER

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Abstract**:**

Research carried out in the lower basin of the Caraş River concerning the behaviour of some soy bean cultivars in conditions of differentiated fertilising pointed out the possibility of getting yields above 2800 kg/ha.

Protein content varied between 26,8% and 29,6%, and protein yield varied between 453 kg/ha and 832 kg/ha.

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THE PRODUCTIVE PROPERTIES IN SOME POTATO VARIETIES UNDER DIFFERENT ECOLOGICAL CONDITION IN SERBIA

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Faculty of Agronomy–Cacak, Serbia and Montenegro

Abstract

Two-year study carried out at three locations: Zemun, Guca and Srbobran, involving nine potato cultivars: Adora, Jaerla, Cleopatra, Latona, Liseta (early to medium-early cultivars); and Frisia, Kondor, Desiree, Morene (medium–late to late cultivars). The method of field experiments was used in the different ecological conditions and on different soil types in Zemun (100 m above sea level; slightly calcareous chernozem), Guca (370 m above sea level; pseudo-clay), (86 m above sea level; chernozem). Mean monthly temperature and precipitation were observed during vegetation season. At the end of vegetation season, the total yield of tubers and yield of marketable potatoes including all healthy and non–damaged tubers heavier then 70 g. were examined. In addition we examined average number of tubers per plant and average tuber mass too. Average yields achieved in 2001, were significantly different from yields achieved in 2000. The best total yield was achieved at locality Zemun in 2001, with Morene, late potato cultivar. The highest yield of marketable potatoes was shown by cultivar Cleopatra obtained in Zemun in 2001. The highest average number of tubers per plant was found for the cultivars Desiree, Morene and Latona.

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THE EFFECT OF CHEMICAL FERTILIZATION OVER SOME PRODUCTIVITY ELEMENTS FOR WHEAT CROP.

Maria Mihaela Burz, M. Goian, Alina Aniței

Abstract

This paper presents the effect of chemical fertilizers (NPK 15:15:15 and NH4NO3) concerning the elements of productivity for wheat crop (variety Alex): plant highness, ear length, ear weight,

number of small ears, number of grains, grain's weight, that leads to the achievement of productivity. The researches were made on the cambic chernozem in Timisoara during the agricultural year 2004-2005.

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THE BENAVIOUR OF SOME WINTER TWO AND SIX ROWED BARLEY VARIETIES AND LINES IN THE CARACAL FIELDS

Constantinescu Eustațiu, Roşculete Cătălin, Florica Olga
SCDA Caracal

S u m m a r y

The paper contains the testing data over a 3 year period (2003 - 2005) regarding the behavior of the new winter two and six rowed barley varieties and lines obtained by I.C.D.A. Fundulea .

Besides the quantitative aspects of the medium yield achieved during a three - year period (2003 - 2005) in non irrigated conditions, the paper also presents data on the malt quality for beer, in acordance with the European Standards in use.

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FEATURES OF RADICULAR SYSTEM OF THE APRICOT SPECIES CULTIVATED ON THE SANDY SOIL FROM THE LEFT OF JIU RIVER

Ciobanu Andi, Cichi Mihai, Matei Gheorghe

Abstract

In this paper we present the depth of development of the horizontal root at Apricot species from the Tamburesti plantation.

The research was carried out in October 2004 to 3 varieties of apricot: Timpurii de Arad, Mari de Cenad and Cea mai buna de Ungaria, using the profile method.

It was observed that the maximum depth of the horizontal root was 60 - 70 cm, but the majority roots were situated on the 0-30 cm interval. Related to this aspect we recommend that the mechanical labors to be makes superficially at 10-15 cm and the incorporation depth of the organic and mineral fertilizers at 15-20 cm.

***

THE RESEARCHES ON ESTABILISHING OF THE EPOCH FOR ARACHIS SOWING

Dima Milica

Abstract

Number of the days sowing to springing is according to the soil temperature also its establish this time.

The sowing-springing time is decreasing per the soil temperature increasing.

The Dăbuleni and Viorica genotypes had the best percentage per springing plants (90-98%) by sowing at 25th of April.

The biggest number of pods per plant was for the both genotypes by early sowing.

The maximal yields for the both genotypes were also by the sowing on 25th of April.

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ORCHARD WEEDS IN SARAJEVO REGION TWENTY YEARS ON–PRELIMINARY REPORT

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Faculty of Agronomy–Cacak, Serbia and Montenegro;
Faculty of Agriculturae–Eastern Sarajevo, Bosnia and Herzegovina

Abstract**:**

In the summer of 2003 observations on weed occurrence in herbicide strips in orchards in the Sarajevo region were performed and the results were compared with similar studies carried out almost 20 years ago in the same area. The most important change in the weed flora stated in this period was a decrease in the ocurrence of perennial plants such as field bindweed (Convolvulus arvensis L.) and an increase of annuals, mainly barnyard grass [Echinochloa crus–galli (L.) P.B.] and common lamb`s quarter (Chenopodium album L.). Similar tendencies were reported in world literature. They are connected mainly with the application of foliar herbicides instead of those residual.

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THE PHOSPHORUS FERTILIZATION EFFICIENCY ON COWPEA CROP ON THE SANDY SOILS

Reta Drăghici

Abstract

The researches were made at SCDCPN Dăbuleni on irrigation conditions in a three years rotation: grains sorghum – cowpea - rye, on a sandy soils with a vegetable soil < 0,31% and little nutrition elements (N_t= 0,037%, P_{AL}=129 ppm, K_{AL}=28 ppm).

Comparatively with unfertilized variant phosphorus had the best yield (2675 kg/ha) when it was mixed with nitrogen and potassium, measured $N_{30}P_{40}K_{80}$, with an energetical efficiency of 4,69% and a profit rate of 99%.

***

THE REPELLENT EFFECT OF SOME MEDICINAL AND AROMATIC PLANTS INSIDE OF A BIOLOGICAL TOMATO'S CROP

Duță Adriana, Soare Rodica, Păniță Ovidiu

Abstract

The biological tomato's crop was realized inside of an associative system with three medicinal and aromatic species: marigold, annul savory and basil. The layout of medicinal and aromatic plants inside of the tomato crop was the main differentiation criterion for the 12 experimental variants.

To ascertain the repellent effect of the studied medicinal and aromatic plants, a registration of the weeds that were specific to the ecological area of Banu Mărăcine took place at the end of the production period

The association of two marigold plants emplaced between two tomato plants, variant V_6, was the variant less affected by weeds: 31 herbs/m^2. The variant V_{12}: one basil plant and one marigold plant between two tomato plants, follows with a density of 41 herbs/m^2.

The highest weeds densities: 184 herbs/m^2, respectively 150 herbs/m^2 were registered within the variant V_1: one annual savory plant between two tomato plants, respectively V_2: one basil plant between two tomato plants.

Setaria glauca and Amaranthus retroflexus were the prevalent weeds and they were counted in high numbers within the variant V_1: 43 herbs/m^2, respectively 33 herbs /m^2, and the variant V_2: 40 herbs/m^2, respectively 23 herbs/m^2.

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BIOLOGICAL VEGETABLES CROPS IMPROVEMENT OF THE SOIL FERTILITY BY INTRODUCING THE AMELIORATIVE FIELDS

Duță Adriana, Soare Rodica, Grecu Florina

Abstract

The transformation of the conventional vegetables farms into biological farms is a process of long standing (5-7 years). Among other changes, it is necessary during the crop rotation to introduce the ameliorative fields that preferably should be cultivated with species from leguminous family. These species are a very important source of biological nitrogen and this helps at the exclusion of mineral nitrogen from the fertilization scheme.

On a garden-peas tilled ameliorative fields, the crop was 7,72 t/ha green seeds and a quantity of 20,63 t/ha fresh vegetable matter (3,07 t/ha dry vegetable matter) was introduced in the soil. For garden-beans, the pod/hull yield was 10,20 t/ha and 26,82 t/ha fresh vegetable matter (4,88 t/ha dry vegetable matter) were afterwards processed.

On March 2005, the 17th the nitrogen's ratio from the Ap-horizon was 0,11%, while on September 2005, the 20th a ratio of 0,15 % was measured in the field with garden-peas and 0,13 % in the field with garden-beans.

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DRYING RATE OF THE GRAIN - THE MAIN CRITERIA FOR CHOOSING THE CORN HYBRID FOR CROPS IN CARACAL FIELDS

Florica Olga, Roşculete Cătălin, Constantinescu Eustațiu
SCDA Caracal

Summary

The paper releaves data regarding the importance of water loosing into the grain, this characteristics being one of the basis criteria in choosing the corn hybrid for Caracal Fields area.

There were used experimental results of climatically different years:
2000 - extremely favourable and,
2005 - very favourable for corn crop

Dryning rate of the grain is an attribute to each hybrid, but this is strongly infleunced by the environment conditions.

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THE CORN GLUTEN AT FEEDING OF DAIRY CATTLE

Gavan Constantin

Is recommendable as if dried corn gluten same the administration in a little level than moist corn gluten, being that have planer reduced assimilation, as little consuming rations.

The corn gluten moist have gradually introduction, for 2-3 week period, for dissuation fluctuation the daily consuming ration.

The corn gluten in not satisfaction protein necessary for cows at big production milk, at gift lactation.

***

FERTIGATION FOR IMPROVED POTATO YIELD ON SANDY SOILS

D. Gheorghe[1], M. Dumitru[2], Mihaela Croitoru[1], P. Ploae[1] , P. Voicu[2]
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Summary

In the south part of Romania there are a large area with sandy soils with a very low agricultural productivity.

The predominant soils in this is area are reprezented by psammosoil, being characterised by clay content lower than 12%, coarse texture, monogranular structure and low content of organic matter and nutrients.

The aim of regional project IAEA RER/5/011 was the increase of crop production and the protection on the environment using fertigation and isotope techniques. For this purpose an experiment with potato was initiated in 2001, where fertigation treatmens were compared with soil application of nitrogen fertilizer.

Fertigation contributing to the increase of tubers production on the psammosol and environment protection.Standed out in bold relief the variant with 200 kg N/ha + fertigation.

The efficciency of irrigation water for potato increased at once with increasing of fertilizer dose applied.By fertigation, yield efficiency have registered mean values more with 1,5 - 3,1 kg/m3 comparative with unfertilized variant. Similar average values was obtained in variants in which was applied 100 kg N/ha + fertigation and 200 kg N/ha on soil surface + drip irrigation.

By fertigation, nitrogen used coefficient decreased once with the increase of nitrogen dose, since 54,5% for 100 kg N/ha + fertigation until 31,6% for 300 kg N/ha + fertigation. In traditional method conditions with 200 kg N/ha applied on the soil surface + drip irrigation, was obtained the least values of recovery nitrogen.

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REACTION OF SOME COLZA VARIETIES AND OF SOME DIFFERENT DENSITIES AND SOWING DATA AT THE ATTACK OF PESTS

Ioana GROZEA, Georgeta POP, Alin CARABET
U.S.A.M.V.B. Timisoara

Summary

To establish the sensibility of the main pests attack comparative studies of some colza varieties were carried out. Thus a great variability was observed at Milena, Ontario and L.G ((Eurydema ornata, Psylliodes crysocephala, Calocoris norvegicus, Meligethes aeneus, Athalia rosae, Ceuthorrynchus quadridens, Epicometis hirta). The breeds L.G and Potomac were the most affected by the pests, while Ader, Culvert and Tennessee were more repellent to them. Regarding to behaviour of the Alaska breed at different densities, depending on the pests attack, it can be concluded that the sowing at a higher density (12.5cm) attracted more important pests than that at a lower one (25 cm, 37.5 cm). On the plots, where colza was cultivated earlier(sept.8-9, sept.21), the pest species were more numerous and had a greater variability than those present at the colza cultivated later on.(oct. 2)

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THE HERITABILITY OF SOME CHARACTERS OF GROUNDNUT IRRADIATED REPEATDLY FOR THREE GENERATIONS

Paula Iancu, Voica,N.

Summary

The handed down capacity of cantitative characters to the offsprings is a measure of the selective value and expresses herself with the heritability coefficient (h2).

For the morphological and cantitative characters with high heritability coefficient as the number of leaves, the number of ramifications and the number of pods/plant, it can practise the irradiation and than selection after phenotipical characters with thw condition that the studied population haracters have a high phenotipical variation.

SOME GROUNDNUT GENOTYPES PRODUCTIVITY SUBJECTED TO IRRADIATION

Paula Iancu, Soare, M., Elena Bonciu

Summary

Productivity to groundnuts is a complex feature, genetically conditioned, but influenced more by other factors. Among these, the influence of ionizing radiations, X and gamma rays. From the researches made until now it can appreciate that groundnut yield increased and decreased with the genotype. Best results gave Venus variety both in control and irradiated variants.

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ON THE BEHAVIOUR OF SOME MAIZE HYBRIDS CULTIVATED ON THE CAMBIC CHERNOZEM AT THE E.S. TIMIŞOARA

Imbrea Florin, Mircov Vlad, Botoş Lucian
University of Agricultural Sciences Timisoara-Romania,

Sumary

After the passage to market economy and after exchange liberalisation, more and more seed-producing companies have open sales representative offices in Romania, starting to market hybrids that have not always been tested by the CIS.

This asks for research from those working in the field to be able to help cultivators interested in the behaviour of some hybrids that are steadily demanded by cultivators. Our experiments focused on three maize hybrids produced by the Zemun Polje Institute in Belgrade (Yugoslavia) with different vegetation periods (ZP 394, ZP 670, and ZP 704). Research was carried out within the Experimental Station of the University of Agricultural Science and Veterinary Medicine of the Banat in Timişoara, on a cambic chernozem between 2002-2004.

Experiments have been of the bi-factorial type, in which factor A was the agrofund with two graduations (a_1 – $N_{100}P_{70}K_{70}$ and a_2 – $N_{150}P_{70}K_{70}$), and factor B was the hybrid, with three graduations (b_1 – ZP 394, b_2 – 670, and b_3 – ZP 704). Winter wheat was the pre-emergent crop.

ON THE INFLUENCE OF FERTILISATION ON YIELD IN A FEW WINTER WHEAT CULTIVARS IN THE TIMIŞULUI PLAIN

Imbrea Florin, Borcean Adrian,Proca Adriana
University of Agricultural Sciences Timisoara-Romania,

Sumary

The Timişului Plain offers good conditions for the cultivation of winter wheat, but all cultivars cultivated in the area nowadays also yield good results. As climate conditions have showed a trend to desertification of the area these last years - the frequency of the periods in which rainfall are less and the mean temperatures are getting close to 40^0C - the goal of our research was to test the influence of these conditions on some winter wheat cultivars under differentiated fertilisation.

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THE INFLUENCE OF THE DIFFERENT DOSES OF POTASSIUM APPLIED TO THE SUNFLOWER CROP CULTIVATED IN NON IRRIGATED CONDITIONS ON THE BROWN REDDISH SOIL

Gh. Matei, G. Păunescu, Ecaterina Feher,

Abstract

The sunflower is a great consumer of potassium and the fertilization with this macro element must be done related to many factors such as: soil type, the natural fertility of the soil, the level of the yield, culture crop conditions, etc.

From the research carried out to the sunflower cultivated in non irrigated conditions on the brown-reddish soil during the period 2000-2004, we can say:

1. the level of the obtained productions was influenced by the climate conditions and
to the level of fertilization;
2. the highest seed production to the sunflower cultivated in non irrigated conditions
was obtained in 2004, the average/experience in this year being 26.5 q/ha;

3. the average yield on the 5 experimented years was 19.8 q/ha;
4. for the less favorable years the best variants with potassium proved to be K40 and K80 on the agrofond of N80P80;
5. for the favorable years the most valuable variants with potassium proved to be K80 and K120 on the agrofond of N80P80.

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ELECTROMAGNETIC PROCESSING OF BASIL AND CARAWAY SEEDS TO IMPROVE INITIAL GROWTH

Branko Marinkovic, Jovan Crnobarac, Goran Jacimovic, Ilinka Imbrea, Miroslav Grujic, Miroslav Habán

Abstract

Electromagnetic processing of seed of cultivated plants is increasingly used in Serbia and the world to improve the yields and quality of cultivated plants. The results of these efforts are encouraging and prompt further study. Our trial with electromagnetic seed processing was carried out under controlled conditions in a nutrient solution. Basil and caraway seeds were treated with various frequencies up to 100 Hz with second decimal place accuracy. After processing, the seeds were germinated and grown in a nutrient solution for 26 days. Fresh and dry masses of young plantlets were measured. The experiment consisted of two series with four replicates each.

In basil, fresh seedling mass increased by 6.7-17.8% (1.2-3.19 mg/seedling), while the dry mass rose by 6.5-21.7 % (0.06-0.2 mg/seedling). The best treatment in both cases was Frequency No. 11.

In caraway, the fresh mass of seedlings increased by 0.3-26.1% (0.06-4.71 mg/seedling), while the dry mass increased by 2.2-22.6% (0.06-0.42 mg/seedling). Treatment E and Treatment G obtained the best results, respectively.

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INFLUENCE OF ELECTROMAGNETIC RADIATION ON GERMINATION AND YIELD IN WHEAT

Mircov Vlad, Imbrea Florin,Borcean Adrian
University of Agricultural Sciences Timisoara-Romania,

Abstract

Electromagnetic stimulation can increase not only microbiological activity in the soil but its quantitative and qualitative features of the crops.

Stimulating with electromagnetic radiation (RIES) impulsions is based on the action of the impulsion electromagnetic field, characterized by well-defined frequencies.

In establishing frequencies, we had in mind only frequencies that stimulate plant growth and improve product quality.

Research frequencies were within short wave frequency values, i.e. between 0-100 Hz.

The duration of the treatment was of 10 minutes. Sowing treated seeds was done immediately after the treatment, as seeds should be sown within 7-10 days after treatment.

We carried out the following measurements in the laboratory:

- germination (%) after 7 days;
- fresh root volume (mg) after 24 days;
- dry root volume (mg) after 24 days;
- fresh air part volume (mg) after 24 days;
- dry air part volume (mg) after 24 days.

***

ELIMINATION OF WEED INFLUENCE THROUGH FRUIT THINNING AND FERTILISATION IN APPLE TREE PLANTINGS

Mirko Kulina. Ivica Djalovic., Vlad Dragoslav Mircov
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Faculty of Agronomy–Cacak, Serbia and Montenegro
University of Agricultural Sciences and Veterinary Medicine of Banat–Timisoara, Romania

Abstract:

The objective of this research is to study the effect of two measures (fruit thinning and additional fertilization –222 kg calcium nitrate/hectare) compensating the negative influence of weeds (yield loss and reduction of growth) in plantings of Idared cv. In addition, the yield response of two other apple cultivars (Melrose, Gloster) to the exclusion of chemical weed control is discussed in this paper. The obtained results have shown that the differences between yields of individual variants of Idared cv. were smaller and not significant in the first year (2000) of experiment. In the second year (2001), the significant . (ά=0.05), was observed in the case of variant with mowing of weeds and fruit thinning compared with variant with herbicide treatments and additional fertilisation. The influence of measures on Idared cv. growth was not significant. The absence of herbicides has led to yield reduction (27%) of Idared cv. in 2001 in comparison with yield in 2000. However, the difference was not significant (ά>0.1), probably due to the relatively short period of trials. On the contrary, the yield of Gloster cv. observed in 2001 was significantly higher (ά=0.1), than in 2000 even though herbicides were excluded.

***

RESEARCH REGARDING THE BEHAVIOUR OF SOME SPECIAS OF PEAS IN PEDOCLIMATIC CONDITIONS IN TIMISOARA

Simona Niță, L. Niță, Adela Moşoarcă

Summary

The research has followed the crop result on peas depending on the various peas species.

The experiments were organized after the divided plots with 3 repetitions:

-Factor A - the cultivated species: -a1 – Corina; a2 – Renata; a3 – Profi.

-Factor B- the fertility level: b1 – N0P60K60; b2 – N30P60K60; b3 – N60P60K60.

When analizing the behaviour of the species it can be found out that the highest crop on the 3 agrofounds and in the 3 experimental years was determined on the species Renata.

What regards the variety of the number of the pods depending on the species and on the fertility level, on the the 3 agrofounds the highest

number was registered at the Renata species followed by the Corina species and the Profi species.

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RESEARCH REGARDING THE INFLUENCE OF FERITILIZATION WITH NITROGEN AND PHOSPHORUS TO THE SUNFLOWER, CULTIVATED IN ROTATION WITH WHEAT IN NON IRRIGATED CONDITIONS

G. Păunescu, Ecaterina Feher, Gh. Matei

Abstract

The research regarding the fertilization with nitrogen and phosphorus to the sunflower crop cultivated in rotation with wheat, in non irrigated conditions to the brown-reddish soil from SCDA Simnic Craiova, proved the following:

a. the obtained productions were different regarding the climatic conditions and levels of fertilization;

b. the yields average on the 5 experimented years varied between 12.3 q/ha to the unfertilized variant and 21.7 q/ha to the $N_{80}P_{120}$ variant;

c. the applied fertilizers conduct to significant increase in productions, all the experimented variants were realized higher productions than the standard, the unfertilized variant;

d. the most valuable agrofond proved to be P_{120} and the best levels of fertilization with nitrogen N_{80} and N_{120}.

e. for the favorable years, with many precipitations, we recommend to use the level of fertilization of $N_{120}P_{120}$, and for the less favorable years $N_{80\text{-}120}P_{80}$.

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ROTATION INFLUENCE UNDER WHEAT AND MAIZE YIELD DURING 43 YEARS AT THE AGRICULTURAL RESEARCH STATION ŞIMNIC

Gabriel Păunescu *, Mihai Nicolescu, Liviu Olaru****

Abstract :

An experiment with different crop rotations including wheat and maize has been conducted over 43 years in Romania at the Agricultural Research and Development Station Simnic-Craiova on a

brownreddish slightly luvic soil. Both continuous wheat or maize and the crop rotation ,,wheat-maize" reduced crop yields relative to a four-year crop rotation including pea or oat. The yield decrease of the continuous cropping and the simple wheat-maize rotation was mainly induced by increasing incidence of weeds and diseases. The four-year crop rotation gave high and stable yields, especially when including a legume crop in the rotation.

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THE INFLUENCE OF FOLIAR FERTILIZING WITH FERTILIZER RICH IN PHOSPHORUS AT VINEYARD ON SANDY SOILS

Rățoi Iulian, Rățoi Paul Robert, Dorneanu Aurel

Abstract

Supplementary fertilizing represents an increasing of production method and of improvement of their quality. At vineyard the foliar complex fertilizer contributed increasing of grapes quality and of wines obtained.

The grapes production spored, in foliar fertilized variants with 1386-2709 Kg/ha comparative with the variant fertilized on soil only. The spore of grapes production was misleaded of increasing of grape average weight.

The wines obtained from supplementary fertilized variants with fertilizers rich in phosphorum contributed the increasing of alcohol content with 0,3 - 0,5 vol. % comparative with unfertilized foliar variant.

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THE STUDY OF GENETICAL VARIABILITY OF SOME NEW NATIVE AND FOREIGN WHEAT GENOTYPES TO BANU MĂRĂCINE RESEARCH STATION

SOARE, M.,

Summary

The genetic variability of plants is a major component in the obtaining of new creations. The differences between genotypes are the premise of the obtaining of new forms by cross-breeding between these forms. To emphasize the differences between the studied genotypes were analised the main phenotypic characters of

wheat plants and the productivity elements. It was studied 18 genotypes of native and foreign wheat genotypes, with the goal to emphasize their productive potential and behaviour to the action of non favorable factors.

***

STUDIES CONCERNING THE ECOLOGICAL VARIABILIY OF SOME LOCAL POPULATIONS OF BEAN FROM SOUTH OLTENIA AREA

Soare Rodica, Voica, N., Păniță, O.

Summary

In the South of Oltenia area, the local bean germoplasma offers a very diversified biologic material with great possibilities of refinements for breeding process..

For the studies, there were cultivated a collection of bean populations from Oltenia area. There were studied the phenotypic and genotypic variability of quantitative characters. This variability was appreciated after the analysis of the identity characters of UPOV rules and after the analysis of variability coefficient (s %).

It can be seen between the biologic material forms with small stem, with proportional and tall stem.

For the breeding process, there are important the forms with proportional, tall stem and with conditioned growing up. In this way, it can be reveled the next populations: Braloştița, Poiana Mare, Şimnicul de Sus, Bârca, Vlădaia, Malul Mare, Calafat and Mârşani.

Regarding the vegatation period, there were reveled early cultivars that were recorded with under 80 days vegatation period. Among this, it can be enumerated Leu, Moțățăi and Calafat populations.

Concerning the forms and the colours of the seeds, there were identified genotypes with spherical, oval, oval-oblate, elliptical, reniform forms and most of them of white colour. There were also forms with yellow-green brown, violet and tessellated colours. The variability coefficient concerning the main quantitative characters recorded values between 20-30 % showing a very large variability and the possibility to make some selection procedures for bean breeding.

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THE STUDY OF BEAN SEED QUALITY TO SOME POPULATIONS EXTRACTED FROM OLTENIA AREA GERMOPLASMA

Rodica Soare

Summary

A basis factor in cultivated plants yield quality, including in bean quality breeding, represents the value and the diversity of biological material. This material must be reached in genotypes or forms which contain valuable genes in this concern.

Among the elements which determine bean yield quality, in this paper are presented the size of seed, the percent of skin, the boiling coefficient and the protein content. The variation of these elements indicates the value of studied genotypes and between the experimented materials it can be emphasized some forms with useful issues, which can be gene sources as concerns the yield quality to seed bean breeding.

***

RESEARCHES REGARDING FERTILIZATION AND NUMBER PLANTS IN THE CULTURE OF GREEN WATER-MELON GRAFTS, ON THE SANDY SOILS

Toma V., Mihaela Croitoru, Marieta Ploae. SCDCPN Dăbuleni.

In the 2004-2005 period at SCDCPN Dabuleni at the culture of green water-melons grafts were experienced on the sandy soils from southern Oltenia different variants of fertilization and number plants/ha comparative culture with the unfertilized variant, they were studied variants of mineral fertilization at the level of N100 P2O5 100 K2O 100 + N50 of N50 P2O5 50 K2O 50 +N25, at number plants of the culture of 7963 plants /ha and of 5555 plants/ha. He consisted as the settlement of the doses of fertilization at the culture of green water-melons grafts is the dependencies of number plants of the culture. The most big yield (59, 8 t /ha) he obtained through fertilization with N50 P2O5 50 K2O 50 + N25, at number plants of culture 7963 plants/ha.

At number plants of 5555 plants/ha ,the yield one the elder he obtained to the level of fertilization of N100 P2O5 100 K2O 100 +N 50. Cult the grafts turn to good account very well the organic manures, through the application 30 t/ha manure, at number plants

of 5555 plants/ha be obtained the yield of 54, 4 t /ha. At the cults of green water-melons grafts from the sandy soils the fertilization with manures and minerals cause during of influential big fruits, with an great content of SUT, glucids, the vitamin C and a reduce content in nitrates.

***

SYNTHESIS OF YIELD RESULTS IN THE TOMATO CROPS UNIREA AND ROXANA IN 2001

Vasiescu Realta Ninive
Agenția Domeniilor Statului Timiş

Abstract

The experiment objectives are as follows characterising the research area from the point of view of natural conditions and of practical implication, and checking some fertilising procedures that ensure the maintenance of the optimum level of mineral nutrition in the plants, by applying chemical fertilisers in a single stage and establishing some correlations between the different fertiliser doses also used in tomato crops.

The most efficient variant from the point of view of yields is the Roxana cultivar for a fertilising level N150P120K75, which also ensures an efficient weed control with the help of herbicides associated. Yields thus obtained are over 48.57 t/ha;

For Unirea crop whit asame level of fertilising N150P120K75 and weed control the yield obtained varying between 40.63 – 42.08 t/ha;

In conclusion, the N150P120K75 fertilising level ensures the optimum necessary of nutrients, i.e. there is no need for supplementary amounts;

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THE RESULTS CONCERNING CROP RESPONSE CURVES TO N, P, AND K FERTILISERS FOR THE CROPS ROXANA AND UNIREA

Vasiescu Realta Ninive
Agenția Domeniilor Statului Timis

Abstract

Research constituting the subject of this experiment aimed at knowing the main influence of herbicides and chemical fertilisers on yield increase and on weed control in field tomato crops.

The 3 fertilising treatments applied in the Roxana cultivar confirm the fact that during 2001 the most efficient fertilising doses were of approximately 101-92-53, which allows yields of approximately 36-36.5 t/ha;

In the Unirea cultivar, the fertilising treatments applied confirm the fact that during 2001 the most efficient fertilising doses were of approximately 102-85-52, which allows yields of approximately 33.5-34 t/ha;

***

CREATING THE SEED FROM THE HIGHER BIOLOGICAL CATEGORIES – NECESITY OF THE DURABLE AGRICULTURE

Vătămanu Viorel Victor, Băbălău Veronica Mădălina

Abstract

One of the most important steps for constant and high yields is represented by the quality of the used seed. Researches have shown that the use of the seed from the high biological categories determines a yield increase of 20-40 % according to the cultivated species.

In this case, creating the seed from the higher biological categories is one the request of a modern cropping technology.

In the present paper is presented the trend line of the obtaining the seed with the high parameters, in Romania, especially in Oltenia Plain.

***

THE DROUGHT AND THE INTENSE HEAT – LIMITATIFS FACTORS OF THE AGRICULTURAL PRODUCTION IN THE OLTENIA PPLAIN

Vătămanu Viorel Victor, Băbălău Veronica Mădălina

Abstract

Today, more than ever, world is interested by the climatic factors and their impact on the humans activities. Agriculture, in all the aspects is directly affected by this factors and their impact.

From those factors drought and intense heat have the higher impact, producing high damage up to the crop destruction, especially in the South and South-East of the Romanian Plain.

The early analysis of the crop behavior and yields years by years is one of the most important elements for the analysis of the resistance of the varieties and hybrids to the drought and to the other side to the influence of the technologies applied to the crop for reduce the negative effect of the drought and intense heat.

***

STUDIES REGARDING RELATION BETWEEN SOWS AGE AND THE REPRODUCTION PARAMETERS AT LARGE WHITE BREED

M. Vladu[*], V. Băcilă[**]

[*] Universitatea din Craiova, Facultatea de Agronomie

[**] Universitatea de Ştiinţe Agricole şi Medicină Veterinară Bucureşti

ABSTRACT

Profitableness of swines growing depends on efficiency of reproduction. Rhytmically carrying on the technological process in an industrial complex of swine growth is conditioned by cyclically reproduction process.

Reproduction is the starting point for a succession of organizational activities wich have as purpose increasing and ensuring of a continuous rhytmically production.

SECȚIUNEA 3

MODERATORI:

Prof. univ. dr. Bădescu Mircea
Prof. univ. dr. Stahli Walter
Acad. Bria Nicolae
Lect. univ. dr. Boruz Sorin

STUDIES CONCERVING THE PLOUGHS DESTINATED FOR GREAT POWER TRACTORS

Tudor Alexandru, Mihnea Glodeanu, Sorin Boruz

Summary

The paper analyse from the constructive point of view, ploughs destinated for great power tractors (160-240 HP), manufactured in Romania. The detached tendencyies from the achiesed study are compare with the achievements on internal plane, especially with the ploughs manufactured by S.C. MAT S.A. CRAIOVA.

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ASPECTS REGARDING THE FEEDING SYSTEMS FOR QUAILS

Eng. Gabriel Baciu, Ph. D student, **Transilvania University of Brasov**

Abstract**:**

In this paper are presented the requirements of quails related to the quality and quantity of feed, at different growing stage. The results of analyzing the main feeding systems, as well as their possibilities of automation, can represent an important guideline for quails farmers, with a view to choose the optimum feeding system.

***

EXPERIMENTAL INQUIRY ON SYSTEM TRACTOR – ROWTILLAGE MACHINE DINAMICS

S. Boruz, M. Bădescu, M. Glodeanu
University of Craiova

Summary:

Introducing new types of machines, tools and agricultural equipments, the improvement of mechanization technology or their replacement with others, with superior performance, improving and optimisation of the usage of equipments, in order to obtain quality works, economicaly efficient, less polluting are some of the targets of the experts, in the field of agricultural machines.

Starting from here, new solution have been searched for, and there are still efforts made for searching constructive tzpes of machines able to perform the main tillage works that lead at the reduction of the pollution and the degradation of the soil.

Experimental research relating to the dinamics of tractor - tillage machine has the main aims the following: the determination of the forces that takes action in joint points of the machine on the tractor (press down force and tractate force); the determination press down force of the front axle; the determination of the moment of rotation transmitted at the machine trough the power take off of the tractor; the determination of the moments working weels; the determination of the moment of rotation at the vertical axle of the rottary; the analysis of the constructive, functional and working factors of the machine on the dinamic parameters tractor-machine.

***

ACTUAL ASPECTS OF SOWING IN UNPLOUGH LAND

Prof. dr. ing. Gheorghe Bratucu
***Transilvania* University of Brasov**

Abstract:

In the paper it is analyzed the factors that influence the crops of sowed plants in unplought land. It is highlight the fact that the technical aspects of the problem it is solved completely, while the elements of agrotechnics are very little researched in Romania.

Based on the experience accumulated are proposed ways of improvement for the present situation.

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TECHNICAL-ECONOMIC ASPECTS CONCERNING PRIMARY AGRICULTURAL TRANSPORTS

Prof. dr. ing. Gheorghe Bratucu
Transilvania **University of Brasov**

Abstract**:**

The transition to the market economy has strongly shaken the primary agricultural system. In this paper it is made an analysis of the actual situation and it is highlighted the possibilities of solving of the problems, such that it is assured the transportation in maximum security conditions, on time and with the prescribed efficiency.

***

OPTIMIZATION OF THE CONSTRUCTION OF PLATELITE TYPE MOULDBOARD BY DETERMINING MAXIMUM STRESS ARRAYS THAT ARE PRESENT ON ITS SURFACE USING FINITE ELEMENT PROGRAM "COSMOS/M"

Sorin-Tiberiu Bungescu, Walter Stahli, Sorin-Ştefan Biriş, Valentin Vlăduț
University of Agricultural Science and Veterinary Medicine Banat – Timisoara, Stuttgart – Germania, University of Polytechnics Bucharest, I.N.M.A. Bucharest

Abstract:

In the technical documentation from our country there is no calculus methodology concerning the optimization of the design of platelite type mouldboard and for that the present paper tries to bring a contribution to this field using the advantages offered by the method of analysis with finite elements.

***

THE THEORETICAL SIMULATION AND THE EXPERIMENTAL CONTROL OF THE CALIBRATION PROCESS OF THE POTATO TUBERCLES USING AN INSTALLATION PROVIDED WITH SIEVE BAND AND ELLIPTICAL WHEELS IN THE ACTIVE AREA

Prof. Eng. Ioan Cândea
Prof. Eng. Aurelian Popescu
Hon. Prof. Eng. Nicolae Bria

Abstract:

In this paper on present the theoretical analysis of the potato tubercles calibration using a sieve band system provided with elliptical wheels in the band active area. Thus on establish the differential equation of the sieve movement and the angular speed of the elliptical wheels which ensure the calibration degree imposed by the potato tubercles requirements. From this study results that the calibration precision depend on the sieve band speed, on the ratio between the elliptical wheels semi-axis and the montage position of the intermediary elliptical wheels. The experimental researches results justify the theoretical assumptions where through the sieve band kinematical regime and the elliptical wheels position influence the calibration degree.

***

MECHANIZATION TECHNOLOGIES OF STRAW CEREALS FOUNDING WORKS IN CONSERVATIVE SYSTEM BY TECHNICAL EQUIPMENTS PERFORMANCE QUI ENSURE THE REQUIREMENTS IMPOSED BY THE DURABLE AGRICULTURE

Dr. Eng. Iosif Cojocaru
Hon. Prof. Eng. Vergil Gangu
Dr. Eng. Marinela Mateescu

Abstract:

In this paper on present ecological mechanization technologies of the base soil works in conservative system using the cizel plough which execute the soil work without the furrow overturning, maintaining above-ground a plant remains quantity till 30 %. Also, on present the mechanization technology of direct crop minimize the soil work which stir itself only on a narrow band where

on introduce the seeds into soil. For the two technologies there are presented the coresponding technical equipments realized by INMA Bucharest as: the cizel plough PC-13 and the straw cereals seeding machine in unprocessed field SCN-3.

***

THE DYNAMIC STUDY OF SOME TRACTOR SYSTEMS-AGRICULTURE MACHINES HOLD IN BACK, WITHOUT WHEELS, USED TO THE PREPARATION OF THE LAND FOR SOWING

Lecturer Augustin CONSTANTINESCU, Ph. D. student
University of Craiova, Faculty of Mechanics,

Abstract

In the paper it is about on dynamic analyse of a two systems made up from tractor and engine, without wheel used for the preparation of the land for sowing:

- the system made up from tractor equipped with hydraulic rigging with automatic self-adjusting control and a disc harrow, of type GDV 2,2;
- the system made up from tractor T195-1U equipped with hydraulic rigging without self-adjusting control (with external cylinder) and the combiner for the preparation of the germination soil ACPG3.

There are identified the forces on and moments which act on, working, over the tractor and of over the engine too. These are determined by account the reactions of the soil and of the two bridges of the tractor taking into account the role of the agriculture machine over these reaction. These reactions are compared with the other bridge tractor reactions without engine and we derive about the adherent power loading and including the force of pulling, but about the steering and the manoeuvrability of the tractor too.

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THE GENERAL DYNAMICS OF SELF-PROPELLED COMBINES EQUIPPED WITH BUNKERS

Lecturer Augustin CONSTANTINESCU, Ph. D. student
Professor Alexandru-Grigore PISOSCHI, Ph. D.
Lecturer Gheorghe POPA, Ph. D. student
University of Craiova, Faculty of Mechanics,

Abstract**:**

In this paper we have made a study of the general dynamics of self-propelled combines during stationary harvesting (threshing from corn stacks) and also during field harvesting, both in case of a solo-combine an in case it tows a trailer.

We have defined and calculated the reactive moment generated by the action of the motion moment and by the moment of the power axis and also the additional reactions appearing on combine bridges. We have determined the total reactions on the soil on combine bridges in order to ensure a better stability, manoeuvrability and maniability.

We have established the sum of forces resistant to traction and the sum of powers for all the previous cases.

Key words: Self – propelled combines, general dynamics.

***

FRUIT AND VEGETABLES BEHAVIOR UNDER MECHANICAL LOADINGS ASSESSED BY A COMPUTER CONTROLLED PENDULUM

Dănilă Daniel Mihai

Abstract

Fruits and vegetables are exposed to many short time mechanical forces (impacts) and to pressure. To study the effect of different types of impacts a computer controlled computer is used.

By means of this device the impacts that potatoes experience in the practice can be simulated. The system configuration consists of a pendulum, an interface and a computer. The pendulum can be instrumental in studying the relations between impact and subcutaneous tissue, particularly in visco-elastic products.

***

THE INFLUENCE OF CONSTRUCTIVE AND WORK PARAMETERS OF AGRICULTURAL MACHINERY WHEELS TIRE UPON THE SOIL STRESS

PhD Student Dinu Liviu LaurenGLX
Prof. dr. eng. Simion POPESCU
Transilvania Universitaty –Brasov

Abstract*:*

In the paper it is analyzed the influence of constructive and work parameters of the tire wheels (model, dimensions, load, inner pressure of air) and of working conditions of the machinery (speed, number of passing on the same tracks etc.) over the propagation way of the pressure from the contact surface wheel-soil in the depth of soil and over the penetration resistance and of soils apparent density.

In the end it is presented the technical possibilities of tire pressure modification during the run (during the work process), using tire centralized pumping air pressure systems.

Thus, through the control and adjusting (manual or automatic) it can be realized the optimum air pressure correlation from tires with the actual working and run of the machinery.

***

APPLICATION OF MODERN AGRICULTURAL MACHINES IN SEED CORN PRODUCTION

Markovic D., Brankovic D.

Abstract

This paper analyze advantages of appliance of modern special purpose agricultural machines (harvester and detasseling machines) in seed corn production in order to increase the quality of seed material and decrease of overall costs of production. Paper presents comparison of different technological designs of harvesters, as well as experiences with usage of sweet corn harvester in seed corn harvesting and experience with new type of detasseling machine with rubber disc system.

REENGINEERING OF SELF PROPELLED CHASSIS BASED ON SUGAR BEAT HARVESTER

Markovic D., Veljic M., Brankovic D

Abstract

This paper analyze possibility for reengineering old type of self propelled sugar beat harvesters and their application as all purpose self propelled chassis. Paper presents some new ideas how this new chassis can be used in completely new operating conditions

***

RESEARCH METHODOLOGY FOR ANALYZING AND TESTING DATA FOR THE MATHEMATICAL ALGORITHMS FOR OPTIMIZING THE FUNCTIONING OF DIESEL ENGINES WITH MECHANICAL INJECTION

Lecturer Ilie DUMITRU, PhD
Lecturer Cezar Alin UNGUREANU, PhD
Assistant Mihnea CATANEANU, doctoral student
University of Craiova, Faculty of Mechanics

Abstract: The authors present in the paper the methodology conceived for testing the mathematical models used to obtain optimum working maps of diesel engines with mechanical injection that are common on local made tractors and road vehicles.

To achieve the established goals programs were initiated for experimental determinations in case of laboratory as well as in real conditions case, on track, dependant on traction testing situation, monitoring the energetic parameters and modifying the obtained data.

The devices used were specific for laboratory determinations (a custom made hydraulic brake, acquisition interface, data processing device etc.) and for testing in real conditions situation (hydraulic braking car, measurement lines, data acquisition equipment, etc.).

The analyze of experimental data was made according to standards, using correction coefficients, being completed by an indirect determination of the values of parameters under observation.

In order to establish the precision of the conceived mathematical models, the correlation coefficient is used and thus the intensity of the liaison among the values particular to the system type identification is determined.

The research methodology was finalized with programs made under Maple and by using sequences of programs in the Statistical module of Microsoft Excel.

***

PRESENT STAGE AND PERSPECTIVES IN THE DOMAIN OF BUILDING TECHNICAL EQUIPMENT FOR CONDITIONING BULB VEGETABLES

Drd. Eng. Ganea Ioan
Prof. eng. Brătucu Gheorghe

Summary:

In the paper there are presented the main achievements on the national and international level on the researches regarding the performing of technical equipment for conditioning bulb vegetables. Alongside with these, the author presents his personal contributions for improving the functional and qualitative indexes by researching, designing, performing and testing within INMA – Bucharest the prototype of an equipment for conditioning onion and chive meeting the quality requirements, but also, those for environment and operators' health protection.

***

EXPERIMENTAL MODEL OF A POWER AMPLIFIER IN ORDER TO AUTOMATIZE THE WORKING PROCESS FOR AGRICULTURAL SPRINKLING MACHINERY

Mihnea Glodeanu*, Alexandru Tudor*, Sorin Boruz*
***** University of Craiova**

Abstract

The most important demand imposed for sprinkling treatments is to ensure the stability of liquid rate. That is the reason for what the sprinklers are fitting aut with automatic adjusting

systems of the agro-pharmaceutical liquid flow. A such system can not work without an adequate power amplifier.

***

RESEARCHES REGARDING THE OPTIMIZATION OF SHAKINGSEPARATING PROCESS OF STRAW CEREALS HARVESTING MACHINE

Dipl. Eng. Ivan Gheorghe
Prof. Eng. Popescu Simion
Hon. Prof. Eng. Gângu Vergil

Summary:

The system of separating the seeds out of the harvested vegetal mass, made up of a threshing unit and a shaker, has suffered most modifications along the history of cereal harvesting machines constructing. After being subdued to the strong action of the threshing unit, the loosened straw layer comes under the action of the shaker provided with an intensive shaking-separating system. In this area the straw layer is subdued to some simultaneous actions of hitting, drawing, rolling and rummaging produced by a retractable finger rotor, which intensifies the separation of the seeds which had remained into the straw mass.

By means of the intensive shaking-separating system there were obtained the following working quality indexes :reducing the rate of total losses for seeds at the shaker by about 30%; increasing the total working capacity by about 25%;seed total losses less than 1,5%

***

CONSIDERATIONS REGARDING THE ACCURACY OF DOSING PUMPS USED IN FOOD INDUSTRY

Drd. ing. Ramona LUPŞA,
Drd. Ing. Daniel OLA,
Transilvania University BRASOV, Romania

Abstract:

In this article are presented differed tips of errors witch take place in dosing process of the viscous food materials. They are presented the characteristics and metered mass flow fluctuations

and the principal parameters that have a negative influence on dosing process with pumps witch cause the metering errors. In the last part of the article it is presented an example of error potential in case of metering with dosing pumps and the metering method use in this case.

Error comes from elasticity effects due to fluctuating discharge pressure, which basically could be corrected by pressure measurement, but if the error is based on other random influences, volumetric metering should be involved in a flow control circuit.

***

STUDY REGARDING THE MODERN TECHNOLOGY OF STRAW CEREALS CROPS FOUNDATION ADAPTED TO THE DURABLE AGRICULTURE CONCEPT, BY USING THE PNEUMATIC SEEDING MACHINES EQUIPPED WITH CULTURAL, SINGLE-DISK OR DOUBLEDISK SHOVELS

Drd. Eng. Dragoş MANEA
Dr. Eng. Iosif COJOCARU
Dr. Eng. Eugen MARIN

Abstract:

In this paper is realized a comparative study of the working processes accomplished by the mechano-pneumatic seeding machines equipped with cultural, single-disk or double-disk shovels, seeing the durable agriculture requirements. On present constructive solutions of similar equipment realized by foreign firms and at the same time theoretical aspects for the three sorts of shovels towards the establishment the optimal solution. Beyond this analysis on may be select the equipment variant for various operating conditions which will be used to the SDC machine realized at INMA Bucharest.

***

CONSIDEARTIONS REGARDING SOIL COMPACTION BY AGRICULTURAL MACHINES

A. Molnar, K. Koller, V. Ros

Abstract

The compaction of agricultural soils is a major problem in agriculture due to its negative effects on soil and plants being related also with land degradation. Because of soil tillage and agricultural traffic the applied stresses are transmitted into the soil at a certain depth and many change physical, chemical and biological properties of soils. This paper analyses the following main topics: requiems regarding the optimum soil state for plants growth related to physical and mechanical properties of soil, analysis of soil compaction from mechanical point of view, evaluation of soil compaction state related to rolling systems used by agricultural machines.

***

NEW CONCEPTIONS IN THE AGRICULTURAL TRACTORS IMPROVEMENT AT THE BEGINNING OF THE IIIrd MILLENNIUM

Prof. Eng. Alexandru Naghiu
Lect. Eng. Livia Naghiu
Hon. Prof. Eng. Nicolae Bria

Abstract:

In this paper there are presented the tendencies regarding the agricultural tractors improvement by power categories. From this analysis in the main result next improvements: the use of engines with turbine and high pressure injection pump which ensure a fuel specific consumption with tendencies for 200 g/kWh; gear boxes which permit the speeds automatic coupling; cabs with conditioned air, with low noise and vibrations levels, with a good visibility and ergonomic chair; rolling systems which permit the adherence improvement and the soil pressure attenuation (rubber belts track); the steering gear handiness increasing by the increment of wheels camber angle; electro hydraulic control systems of the suspension mechanisms by the digital electronic equipments enlargement; the pollutant emissions attenuation; the components reliability increasing etc.

***

STRESSES CALCULATION OF A SILO DESIGNED FOR STORAGE OF AGRICULTURAL DRIED SEEDS

Asist.eng Daniel OLA
Lectureur dr.ing. Liviu GACEU
Transilvania University of Brasov

Abstract**:**

In this paper it is presented a method of calculation of stresses in bin and hoppers used for the storage of bulk solids from food industry and agriculture. The method for the determination and calculation of stresses was developed by Jenike and this article will present the method of slices applied to a bin and hopper evaluation with consideration of the Janssen's constant K. Finally it is presented the influence of the Janssen's constant K for different values in the calculation of the vertical stresses at various depths.

***

CONSIDERATIONS REGARDING THE ACCURACY OF GRAVIMETRIC AND VOLUMETRIC DOSING EQUIPMENTS FOR AGRO-FOODS BULK SOLIDS

Asist. ing. Daniel OLA,
Drd. ing Ramona LUPaA
Transilvania University of Brasov

Abstract**:**

The paper presents the types, shapes and frequencies of errors that appear during the process of dosing of bulk solids from food industry and agriculture, using volumetric and gravimetric dosing systems. Methods of calculation are described for the two types of materials tested on the dosing stands. In the end, the article presents examples of errors determined on stands for volumetric dosing for bulk solids and viscous materials from food industry and agriculture.

***

DETERMINATION OF POWER CONSUMPTION OF AGRICULTURAL MACHINERIES DRIVEN THROUGH THE TRACTORS POWER TAKE OFF

Drd.ing. Adrian OLTEANU*
Prof. dr. ing. Simion POPESCU**
Drd.ing. Tudor Adrian ENE**
*** SC SUDV SA -Braºov**
**** Transilvania University -Brasov**

Abstract

In the paper it is presented the energetic model and the power balance of the tractor-implement systems in the work conditions and power consumption of machineries and equipments driven through the tractor power take off. It is presented the relations for the determination of the power consumption of different types of agricultural machineries for the soil tillage (tillage cutter, holes digging machines, ditches digging machines etc), for forage harvesting (mowing cutter, gatherer and bale machines) and for technical plants harvesting (potatoes, sugar beet etc). Finally it is presented the experimental determination method of the power consumption of machineries through the tractor power take off.

***

RESEARCHES REGARDING THE INFLUENCE OF AUTOMATICALLY SETTING SYSTEMS TO THE DYNAMIC AND ENERGETIC ASPECTS OF PLOUGHING AGGREGATES

Alexe Nicolae ORMENIŞAN
Universitatea TRANSILVANIA Braşov

Abstract:

Using automatically setting systems for settings and control of the ploughing aggregates gets to the achievements of some high dynamic, energetic and agro technical performances. Ploughing aggregates have one of the greatest total and specific energetically consumption among the agricultural aggregates, because of the rather great forces which appears in the work process. By the increase of the ploughing aggregates performances presumes the connection between some functional and exploitation parameters of

the engine with the agricultural machines parameters, due to the tractor transmission elements and those of the suspension mechanism. The number of the influence elements which actions to the tractor and to the agricultural machine are very important for an optimized functionality, makes possible to connect this elements without the help of the automatically setting systems.

***

SEEDING MACHINES. ON BOARD WATCHING OF WORKING PARAMETERS

Dan Păunescu, Valentin Vlăduț, Cristian POPA

Abstract

The study presents a description of national and abroad achievements in field of survey and measurement for working parameters such as speed, in tillage surfaces and seed box filling up level.

***

THE DYNAMIC STUDY OF SELF-PROPELLED AGRICULTURAL COMBINES AS TECHNICAL SYSTEM

Professor Alexandru-Grigore PISOSCHI, Ph. D.
Lecturer Gheorghe POPA, Ph. D. student
Lecturer Augustin CONSTANTINESCU, Ph. D. student
University of Craiova, Faculty of Mechanics,

Abstract**:**

This paper consist of a dynamic study of self-propelled agricultural combines as technical systems, by analysing the transmission of the power flux and the dependency of the necessary power (at the level of subsystems and also total in order to reduce power consumption during harvesting.
Key words: Self – propelled combines, necessary power.

***

THE GENERAL DYNAMICS OF SELF-PROPELLED COMBINES WITHOUT BUNKERS

Lecturer Gheorghe POPA, Ph. D. student
Professor Alexandru-Grigore PISOSCHI, Ph. D.
Lecturer Augustin CONSTANTINESCU, Ph. D. student
University of Craiova, Faculty of Mechanics,

Abstract**:**

This paper is a study of the general dynamics of self-propelled agricultural combines without bunkers, both when these combines work solo and when they have a towed semi-trailer, in case of moving on plane ground or on a transversal steep incline (on the level curve).

The study has been made in order to determine the factors which influence stability, manoeuvrability and maniability, for improving these dynamic characteristics.

***

THE INFLUENCE OF THE HYDRAULICALLY PARAMETERS OVER THE TRACTION'S PERFORMANCES OF THE TRACTORS EQUIPPED WITH HYDROSTATIC TRANSMISSIONS

Lecturer Gheorghe Popa, Ph.D student,
University of Craiova
Professor Simion Popescu, Ph.D,
"Transilvania" University of Brasov

Abstract:

The paper present the traction calculus of the U650 tractor equipped with an additional transmission – the hydrostatic transmission. The variation of the hydraulically parameters – the working liquid pressure, the hydraulic pump delivery – modify the parameters of the hydraulic motor – the rotative speed of the motor axle, the motor torque – and, also, the traction performances of the tractor.

***

STUDY OF THE INFLUENCE OF LATERAL FORCES ON THE DEVIATION OF THE TRAJECTORY OF TRACTOR-IMPLEMENT SYSTEMS

Prof.dr.ing. Simion POPESCU
Prof. dr. ing. Ion CÂNDEA
Transilvania University of Braşov

Abstract**:**

The paper presents the effect of exterior lateral forces and torques generated in the movement of the trajectory of tractor-implement systems. These forces are transmitted to the wheels, connected with the soil by the contact surface. The value of the lateral forces on the front and rear axles depend on the type of machines that the tractor works with in aggregate. As an effect of the lateral deviation angles of tyres, to the lateral forces in the contact surface wheel-soil it is determined the deviation radius of the trajectory in movement of the mass centre of the tractorimplement system.

***

THEORETICAL AND EXPERIMENTAL RESEARCHES ON THE INFLUENCE OF PARAMETERS OF TRACTOR-CARRIED HOLE DIGGING MACHINES ON THE DRIVING POWER

Prof. dr. ing. Simion POPESCU,
Transilvania University -Brasov
Drd. ing Adrian OLTEANU,
SC SUDV SA -Braşov

Abstract**:**

The first part of the paper analyses the working process of tractor-carried hole digging machines, driven by the tractor power take-off. The dynamic model of the working process is developed such as to allow the establishing of the mathematical model for determining the driving power of the drill depending on the constructive and functional parameters of the machine and on soil properties. The second part presents experimental research method and equipment for establishing the dynamic and energetic

parameters of a holedigging machine carried by the U-650 M tractor (of Romanian make).

***

UNCONVENTIONAL METHOD FOR WALNUT TREES SHAKING – HARVEST

Roşca Adrian, Roşca Daniela

Abstract

The paper presents an unconventional method for nutty fruits harvest.

There are presented general description for working modules of an unconventional equipment making pneumatic impulses which realizes shock wave equivalent to wind blast with velocity up to 150 km/h.

The paper also presents the FEM simulation for modeling the configuration and geometric dimension of the pneumatically shock wave directioned to the walnut tree branches.

***

CONCERNING PNEUMATIC IMPULSES UTILIZING IN AGRICULTURAL AND FOOD INDUSTRIES

Roşca Adrian, Roşca Daniela

Abstract

The paper presents the theoretical consideration concern the principle due to can be obtained pneumatic impulses with supersonic velocity. There are presented the description for working modules Pneumatic Impulses Device, and an example concerning in optimal design of bulk materials discharge systems.

***

TECHNICAL METHODS TO UPGRADE THE PERFECTION INDICATORS OF THE THERMAL ENGINES

Prof. univ. dr. ing. Sărăcin Ion*
Prof. Univ. Dr. Eng. Bădescu Mircea*
Conf. Univ. Dr. Ing. Marin Gheorghe**
*** University from Craiova Romania**
****UP Bucureşti**

Abstract

In the paper work are presented the most important perfection indicators that are studied theoretical and in the laboratory to be upgraded in the thermal engines building and functioning: the hardness and the maintainability, the power on the volume unit, the specific power on the area unit of the cylinder section, the mass and the gauge dimensions, the polluting emissions level, the fabrication price, etc.

For all theses perfection indicators, in the paper are presented upgrade methods and possibilities of theses with the purpose to satisfy better the needs that are required in the modern engines.

***

AUTOMATIC WEIGHTBATCHERS USED AT LIFT ENCASEMENT OF THE SOLID GARDEN STUFF PRODUCTS

Drd. Eng. Sorin Sârbu
Prof. Eng. Simion Popescu
Hon. Prof. Eng. Nicolae Bria

Abstract:

In this paper on present the importance and the necessity of using equipments and technologies for gravimetric measurement of the solid garden stuff products which by lift encasement ensure an increase of the economic efficiency and has an instant impact on the delivered materials distinction and the increase of the products quality but the facilitation and quality encasement. Thus there are presented schedules of the weightbatchers devices with discontinuous work as the ones which ensure the gravimetric measurement with continuous work.

From the last category on present the spiral dosimeter operating principles, with band, with deflector plate, with rotating dosimeter and centrifugal evacuation the ones with material abstractions.

***

INFLUENCE OF FUNCTIONAL PARAMETERS OF THE GRAVIMETRIC DOSING MACHINE OVER THE DOSING PROCESS OF GRANULAR AGRO-FOOD MATERIALS

Drd. ing. Sorin SÂRBU,
INTELPACK –Craiova
Prof. dr. ing. Simion POPESCU,
Transilvania University- Brasov

Abstract**:**

In the paper are presented the basic of vibrating transporters of the gravimetric dosing machine and the kinematics of the particles in the process of transportation on the transporters. Also are analysed the influences of transport parameters (amplitude, frequency) and the characteristics of the material over the displacement regime during the transportation process. For the experimental research it was developed an experimental stand, which allowed the study of the influences of the vibrations amplitude and thickness of material layer over the dosing precision for different granular agro-food materials.

***

THE STUDY OF THE CAR'S STABILITY USING A SIMPLIFIED MODEL

L. Simniceanu, V.Oţăt, D-tru Neagoe,
Facultatea de Mecanica, Universitatea din Craiova

Abstract

In this paper is presented a study of car's stability using a simplified model and a different types of moving are making obvious. The study is applied for velocity's values witch are content in the stability field, but also for those values of velocity who surpass the critical value of speed.

***

TENDENCIES IN THE FIELD OF MACHINERY CONSTRUCTION USED FOR CEREAL SEEDS CONDITIONING

Drd.Eng. Cristian Soricã
Dr.Eng. Iosif Cojocaru
Dr.Eng. Eugen Marin

Abstract:

In this paper are presented the tendencies regarding the machinery construction used for cereal seeds conditioning designated for storage or milling. From this analysis result the actual tendencies of milling machineries construction plants for obtaining machineries and equipments utilizing concomitant separation of multiple impurity categories, using compound cleaning principles. There are many machinery plants producing a large area of machinery and equipments, starting from the simple manual command modules up to the most complex and complete automated processing lines.

***

RESPECTAREA UNOR PREVEDERI NORMATIVE LA RAMPELE DE STROPIT CU LĂȚIME MARE DE LUCRU

Dr. ing. Walter Stahli*, Dr. ing. Sorin Tiberiu Bungescu*, Dr. ing. Valentin Vlăduț**
*** Universitatea de Ştiințe Agricole şi Medicină Veterinară a Banatului Timişoara**
**** INMA Bucureşti**

Abstract

The paper is propose to analyze so far as the field crop sprayers accomplished of European constructions can hold to obligatory wants of European Regulations EN 12761-1:2001 and EN 13790-1:2003 concerning the cross distribution uniformity.

***

PARTICULARITIES OF THE DYNAMIC STABILITY OF FORK LIFT TRUCKS

Ing. Năstase Şutru, RAT Craiova
Prof. dr. ing. Simion POPESCU, Transilvania University -Brasov

Abstract**:**

The paper presents the equivalent dynamical model of the fork lift truck, specifying the exterior forces acting in the most difficult work situations: descending on a slope braking of the vehicle in translatory motion and acceleration of the fork while lifting the load. Based on the equivalent dynamical model, are elaborated the mathematical models describing the dynamical behavior of the forklift truck during moving or working. These models deliver the criteria for the overturning stability. By computer simulation of the mathematical models the longitudinal stability of the forklift truck is analyzed with application for a constructive model of fork lift truck.

***

INFLUENCE OF COUPLING METHODS OF AGRICULTURAL IMPLEMENTS ON THE LOAD OF THE TRACTOR AXLES

Drd. ing Tudor Adrian ENE
Prof. dr. ing. Simion POPESCU
Transilvania University of Braºov

The paper presents the dynamic and mathematical modeling of the systems consisting of tractor and implement coupled at the rear of the tractor, based on which the dynamic loads can be determined, which act upon the tractor axle. The paper analyses the dynamic models for the systems consisting of tractor and semi-carried and carried machines (with and without supporting wheels), further mathematical models which allow computer simulation of the dynamic behavior of these systems are developed, aiming at the optimization of the constructive and functional parameters of the components (of tractor and implement).

***

APPLICATIONS OF THE PLAN BARS MECHANISMS IN THE FOOD INDUSTRY

Lecturer Cezar-Alin Ungureanu, Ph.D,
Lecturer Gheorghe Popa, Ph.D student,
Lecturer Ilie Dumitru, Ph.D,
University of Craiova

Abstract:

The paper presents some of the theoretical researches regarding the kinematic possibilities of the five bars mechanisms with RTR and RTT dyads and their applicability in the food industry. The kinematic possibilities are understood like trajectories described by some points and, also, like zero order function of transmission, so-called movement laws. All these are stored into bi-dimensional vectors into a base of data.

***

NEW TECHNOLOGIES AND EQUIPMENT FOR HARVESTING AND ENSILAGING GREEN FODDER

Dipl.Eng. Voicu Emil,
Dr.Eng. Gângu Vergil,
Prof.Dr.Eng. Popescu Simion

Summary**:**

There are presented the main mechanizing tehnologies for harvesting and ensilaging green forage plants, in concordance with the new organization form of live stock farms in our country and their requirements in order to reduce the losses and exploitation costs.

Then there are presented the main tehnical functional features of a trailed harvester for fodder harvesting and a trailed windrower with a rotating cutting unit, performed by INMA Bucharest and designed to small and middle-sized farms.

The trailed harvester is endowed with three working equipments for various forage crops and it works in aggregation with a 65 HP tractor.

The trailed windrower is provided with a crushing device with rolls and it can work with 45- 65 HP tractors.

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SECȚIUNEA 4

MODERATORI:

Prof. univ. dr. Mustață Ion
Prof. univ. dr. Popescu Agatha
Conf. univ. dr. Pînzaru Lucian

TOURISM AND AGRICULTURAL TOURISM – AN ALTERNATIVE TO THE DEVELOPMENT OF ROMANIAN RURAL AREAS, UNDER THE CIRCUMSTANCES OF EUROPEAN UNION INTEGRATION

Blajovici Liliana, Tudor Valentina

Abstract

The work has as purpose an outline of tourism and agricultural tourism development, in Romania, during the last three years there have been analysed the positive aspects but also the negative ones.

The work proposes itself to emphasize measures, as, during the following years, Romanian tourism may reach requested parameters, according to standards available within European Union, but it has also to become an alternative for rural areas economic development.

***

THE ROLE OF THE ECONOMICAL AND PSYCHO-SOCIAL FACTORS IN THE AGRICULTURE OF THE FUTURE

Boiangiu Florentina, Iorga Adina, Soare Elena

Abstract

Confronted with the structural transformation in agriculture, a profound mutation appears both in the behavior of the rural population, in general and especially in that of the farmers, concerning the land, the farmers' household, their occupation as farmers, their acceptance of the innovation.

It is highly important to know the norms and the judgment of values specifics the rural communities, their cultural characteristics,

the relation between the traditional behavior and the new-one, more inclined to accept the new, the significance of the relation: innovation- uncertainty – risk.

Besides the ecological and economical agents those psycho-social performs a basic role in the development of a durable agriculture.

***

THE ORGANIZATION AND THE ARRANGEMENT OF THE TERRITORY FOR SETING UP A VEGETALELE AGRICULTURE EXPLOITATION IN THE LOCALITY BAILESTI

Brumar D., Mustata I., Cioboata M

Abstract

In the present conditions, laking in considerations UE, s hit in claims, O.A.T. activity must respect the legal european stipulations, for that lecing necessary to amend the present situation.

In this case, it is proposed to organize and to arrange a territory for setting up a vegetalele agriculture exploitation au area of 734 ha in Bailesti.

***

THE ESTABLISHMENT OF THE WATER CONSUMPTION THROUGH INDIRECT METHODS FOR COTMEANA (ARGES)

Brumar D., Mustata I., Cioboata M.

The establishment and the consumptions of water is important for the agricol practice, that is because it allow to establish the factors which influence negative or positive the development of plants. Sa is the purpose are laken in consideration the values temperature and rainfall recorded to the Cotmeana meteorological station.

***

THE STUDY CONCERNING TOPOGRAPHICAL SURVEYS FOR OLTET RIVER REGULARIZATION

Aurel Călina, Jenica Călina, Marius Miluț

The topographical study was done to realize the planimetrical and leveling mapping required for planning and execution of the Oltet flow regularization on the Lalasu section, in the best conditions.

This supposes the building of a bridge-head network with is proceeding between 500 – 505 points into the Oltet river basin. From the bridge-head points was picked all near details, and from distinctive points was built 7 cross sections (profiles). On the basis of obtained data was draw the hydrographic basin plan (projection) on 1:5000 scale and was made medium profiles for both old and new river bed, finally was calculating the embankment volume witch will be moved.

***

THE PREMISES OF AGROTOURISM APPEARANCE AND DEVELOPMENT IN OLTENIA

Aurel Călina, Jenica Călina, Claudiu Buzatu

The paper estimates the general premises of agrotourism appearance and development in Oltenia region. Is founding that in conditions of Oltenia these premises are in different proportion, and in the next 5-10 years may hope to agrotourism development in the places with special vocation for tourism. Beside general premises the agrotourism development in Oltenia is serried joined by creation of specific conditions without is not imagine this development.

***

THE AGROTOURISM ACTIVITY INITIATION IN A MOUNTAIN FARM

Jenica Călina, Aurel Călina, Alin Croitoru

The agrotourism constitute an ideal solution for work resources and agricultural products capitalization on the spot, in

farm. The agrotourism choice as new activity that will be developed within farm imply special analysis of an essential elements (living space, work time, agricultural products) and also the analysis of agrotourism forms that are lend to be developed (accommodation, farm that may be visited, recreation, logistics, activities etc.).

***

MODERNISING CADASTRAL RECORDS IN ROMANIA

Chezan Mihaela, Ciolac Valeria, Popescu C.

Abstract**:**

Romania has made much progress in transferring ownership of real estate from the state to the private sector. The Basescu' s Government is now implementing a programmer of modernizing real estate records in the Cadastre and Land Books to support the development of a land market.

A word Bank loan is funding the conversion of maps and documents to digital form. The results will simplify the quality improvement of the information, enable a more efficient means of maintaining the records and support more effective distribution of information to users.

***

SOME ASPECTS ABOUT IMPLEMENTATION OF GEOGRAPHICAL INFORMATION SYSTEMS IN CADASTRE

Chezan Mihaela, Popescu C., Fazakas P.

Abstract**:**

GIS is an integrated system of computer hardware, software, and trained personnel linking topographic, demographic, utility, facility, image and other resource data that is geographically referenced. The Cadastre as a basic land information system will cover the entire EU territory.

Besides this common information, the cadastre will be managed as open databases, able to include any other parcel information according to the needs of both, Member States and the European Union.

***

PROGRAMMING SOLUTIONS REGARDING BUSINESS INTELLIGENCE

Lect. univ. dr. Chichea Emanuela Mariana
Facultatea De Ştiinţe Economice

Summary**:**

Business intelligence is a modern technology, this concept having several versions, but all these assume the use of all data and information of a organization aiming at improving the decisional process through the rule of proper decisions, on a scientific base.

The architecture of a programming system for the Business Intelligence allows to make up deposit date through the aid of characteristic devices and interfaces, beginning with a data source and also starting to accomplish the goal for which it was created: the accounting for the meta data and the management of the whole system.

The most important solutions software for Business Intelligence are: data warehouse, data marts, data mining, On-line Analytical Processing.

***

WIRELESS NETWORKS – A NEW PROGRAMMING WORLD

Lect. univ. dr. Chichea Emanuela Mariana
Facultatea De Ştiinţe Economice

Summary**:**

In the paper it is presented the architecture of a wireless network opened by the OSI standard (Open System Interconnect), developed by the International Organization for the Standardization (ISO), the essential differences between a wireless network and one without wire, and also the advantages of wireless networks.

Data communications are made in the visible mode, through the signals of radiofrequency or the luminous signals, and this principle was used to create the intercontinental networks (Wireless Wide-Area Network), that means that the global networks that use radio active repeaters placed in artificial satellites on the Earth orbit.

***

DIVERSIFYING THE INCOME IN THE ROMANIAN RURAL ENVIRONMENT

Drd. ing. Chirfot Cristu Gabriel, ing. Olteanu Victor, Drd.ing. Gergely Silvia

Abstract

Non-agricultural rural activities are represented by those activities associated with paid or self work for non-agricultural income activities, taking place in the rural environment.

Diversifying those activities in the Romanian rural environment takes place in agricultural enterprises having as target the production of food or industrial materials and a strategy for this kind of activities is needed, starting from the farmers' social, economic and cultural issues and possible solutions.

***

ASSESSMENT BY PARCELING

Ciolac Valeria, Ciolac L., Popescu C.

Abstract

The paper approaches some aspects regarding the conception of value for real business in Romania, in connection with TEREGOVA, European Standard.

One of the most important removable resources is the soil. A substantial property of the soil is fertility, but there are many factors that impede good effect of fertility. The ground valuation is a new field in Romania and it was taken seriously even when it was professionally well-founded and justified.

***

THE IMPORTANCE OF THE CADASTRE AS A LAND INFORMATION SYSTEM FOR SOCIAL AND ECONOMIC DEVELOPMENT

Ciolac Valeria, Ciolac L., Chezan Mihaela

The Cadastre plays an important role in the regulation of land use. Land use regulations stipulate conditions for the initial

establishment of a parcel (e.g. subdivision or amalgamation); the use to which the land will be put; parcel size; and the necessary access to water and sewerage, roads, etc.

In land development, the Cadastre forms an essential part of the information required by the private developer, land owners, and the public authorities to ensure that benefits are maximized and costs (economic, social, and environmental) are minimized.

***

MANAGEMENT OF THE ENVIRONMENTAL IMPACT

Raluca Florentina Crețu
Academy of Economic Studies –Bucharest

Abstract

The unfavorable consequences of the agricultural activities as well as the measures that the society takes in order to diminish these consequences are synthesised in the collocation “social costs”. The social costs definitions converge to the material living conditions, their deterioration, which is essential, but it is not all. The content of these costs is better presented in a larger sense in the Sociology Dictionary. Working with the general concept of social cost, the authors of the above mentioned dictionary show that this includes: economic and non-economic resources spent in order to accomplish a social activity; the negative effects resulted from the social activity.

***

LEGISLATION IN THE AGROTOURISTIC FIELD

Romeo Cătălin Crețu
University of Agronomical Sciences and Veterinary Medicine-Bucharest

Abstract

Romania is on the last mile in the competition towards the adherence to the European Union and, most certainly, agriculture is going to be the most affected area.

To diminish the adherence impact upon the rural life, we suggest agrotourism as one of the alternatives. The current

presentation aims at displaying a few ideas regarding the improvement of the legislation in the agrotouristic field. We will specifically refer to the normative documents with regards to brevetting the persons who administer agrotouristic pensions, to the modification of the way these pensions are classified and, last but not least, we will refer to the implementation of a new legislation meant to improve the quality of the services offered to the tourists by the agrotouristic pensions in our country.

***

AGROTOURISM AND DURABLE DEVELOPMENT

Romeo Cătălin Crețu
University of Agronomical Sciences and Veterinary Medicine-Bucharest
Raluca Florentina Crețu
Academy of Economic Studies –Bucharest

Every day, we are drawing closer and closer to the 1st of January 2007, when, as we all hope, Romania will join the big European family. The contrary is proven by the experience of other countries that have joined the E.U recently and yet the impact with the Western market was extremely severe. One of the most affected categories was that of the farmers.

We are convinced that the same thing will also happen with the farmers in Romania and, therefore, in this paper we intend to provide a few ideas regarding an alternative that those who labour the earth and grow animals may have, in their attempt to survive in rural areas – the durable development of agrotourism.

***

WAYS OF RISK COVER IN AGRICULTURE

Ec. Drd. DEMSOREAN ANA
Ec. Drd. Mara Gabriela Cristina
Jurist Drd. Isbasescu Teodor

Abstract

The study describes different risks of the agricultural activities, risks faced by the agricultural producers. The focus is upon the two basic cathegories of agricultural risk: price risk and production risk.

***

WAYS OF RISK COVER IN AGRICULTURE – THE AGRICULTURAL INSURANCE

Ing. Drd. Dragomir Vili
Ing. Drd. Simion Petru Laurentiu
Ec. drd. DEMSOREAN ANA

Abstract

The study describes the insurance system in agriculture, largely modified especially after the adoption of the Law no 381/2002, for the protection against the destructive effects of natural hazards. The study treats as well some problems which appeared after the agricultural legislation application.

***

A STUDY REGARDING DRIP IRRIGATION AND FERTILIZATION AT LETTUCE CULTURE IN GREEN HOUSES OF THE USAMVB TIMISOARA

Fazakas P., Teodoreanu C., Vasiescu Realta

Abstract

Presently drip irrigation has an important place for vegetable cultures in green houses. The most important advantage of this irrigation method is a possibility of association to fertilization. By this it is an accomplished a new efficient utilization of chemical fertilizers.

Thus, from economical point of view, considering the production costs and production income, there are achieved qualitative and quantitative production amounts.

Depending on dripping equipment type used, fertilization can be applied in many ways.

***

IMPACT OF EU AGRICULTURAL POLICY ON CROP ROTATION

F. Forgeard-Grignon*, M. Vladu**

Abstract

In 1992 EU Agricultural policy began to sustain farmers income through a subsidy system based on the crops grown on farms.

These subsidies have been negociated between farmers unions and government, according to yield history in each region.

Farmers have included this factor in their business management plans and previsionnal revenue target.

Then ecology became a condition for farmers to recieve those subsidies, inputs and irrigation became controled and tracked.

Now subsidies are reviewed and modified, a new program will be effective in 2006, farmers will have to adapt their programs to these new datas and they will do so, over centuries and over the world, farmers have aways been the most adaptable category of population.

***

ORIGIN NAME AND PRODUCT TRADEMARK JURIDICAL DIFFERENTIATION CONDITION FOR SECONDARY NEGATIVE EFFECTS CONFUSION IN PRODUCERS AND CONSUMERS FIELDS

I. GAVRILESCU
University of Craiova, Faculty of Agronomy

The necessity of consumers protection imposed in common times the trade mark witch from the juridical basis has all the attributes needed for this job.

For certain products, as are the foods in a justified way near the trade mark muyst be also attached the geographical indication of

the production area. This association is an important commercial aspect.

By disregarding close attention to this aspect and the enlisting at OSIM of certain trademarks my have large negative implication on the production owners and even on the consumers. The forgeries witch had in the last few years such ideas had made dysfunctional the traditional writes of the writes production owners and almost destroyed the market.

***

WINE AND WINE AGED DISTILLATES ORIGIN NAME JURIDICAL BASES

I. Gavrilescu
University of Craiova, Faculty of Agronomy

From the very beginning, the merchants and the consummators associated the wine and the wine's origin place name with the purpose of clearly delimitation of the wine's production vineyard. Closely after, the people realized that it is a direct link between the wine and wine distillates quality and the origin vineyards soil, microclimate, production technologies, distillates aging process, etc, link witch attributes the products uniqueness and finely it came out that the origin name has an important value as the quality guaranty.

The production is limited there fore its characteristics are unique and it started a sub offer crisis. This limitation had as a consequence product forgeries. The only viable solution left for protecting both the consumers and the producers was a strict legislation.

The key elements of this kind of legislation are the production strict area delimitation along its environmental characteristics.

***

THE IMPLICATIONS OF AGRICULTURAL PRODUCTS DIRECT MARKET ON SUSTAINABLE DEVELOPMENT – A THEORETIC STUDY

Drd. Ing. Silvia Gergely
Drd. Ing. Dragomir Vili
Ing. Andrei Mihaela Cristina

Abstract

The present paper helps to understand the place of farm market through direct sales of agricultural products and its' importance for the small agricultural producers, rural communities and consumers, in the broader context of integrating agricultural development in regional development.

Direct sales, through its nature, eliminate intermediaries, the result being the growth of the profit per unit and marginal profit of the producers and their rehabilitation on the agricultural market.

***

RISKS IN AGRICULTURAL ACTIVITIES

Jurist Drd. Isbasescu Teodor
Ec. Drd.Ana Demsorean
Ing.Drd. Dragomir Vili

The paper presents the specific risks of the agricultural activity, especially the production risks, which refers mostly to the natural factors generated risks and the commercial risks, in principal market and price risks.

***

DEVELOPING AND DIVERSIFYING ECONOMIC ACTIVITIES IN RURAL AREAS THROUGH AGROTURISM ACTIVITIES

Daniela Lazăr, Corina Ruşeț

The main fields we have to focus on in our future EU rural development policy are, besides agriculture, forestry and the development of an extended rural environment. There is no rural area development in Romania based only on agriculture. Agrotourism is both the way and goal of this policy of development

and diversification of economic activities in the rural area which together with developing agriculture forestry, and agricultural and non-agricultural services in the area can have beneficial effects from an economic and social point of view.

***

AGROTOURISM IN THE INSULA OSTROVUL CORBULUI (COUNTY OF MEHEDINȚI) AREA

Daniela Lazar, Corina Ruşeț

The hydro-energetic system of Porțile de Fier I şi II results, through its complex functioning and spatial display, in essential changes in the natural landscape of the County of Mehedinți and of the whole area (S-W Romania). Taking into account the development of tourism in this part of the county and its location within the concept of regional development, we need to follow its priorities and turn the Ostrovul Corbului area into a “leisure” function. Through its particular features this area can serve the development of some complex forms of tourism in which agrotourism is a main opportunity from an economic and social point of view.

***

CADASTRE IN THE TERITORIES INHABITED BY ROMANIANS

I.N.LEU
University of Agricultural Sciences and Veterinary Medicine Bucharest

Abstract: In the first part there are mentioned the Romanian marks in the field of terrestrial measurements along time, beginning in the Dacic period and up to our days. There are presented also the first attempts of cadastre in the Romanian territories till present days. After year 1996 there are registered the first attempts to introduce cadastre in our country.

***

ECONOMY AND WORLD COMMERCE – ESP (ESTIMATION OF SUPPORT FOR THE PRODUCER)

Drd. Mara Gabriela
Dr. Chirfot Cristu
Drd. Toma Elena

The economy and world trade tend to have a larger view and the international relations vary from one day to another in a substantial way, leading to commercial opening and the reduction of governmental interventionism on the national markets. These are key elements in an international scenario, in which appear a greater interdependency between the stock markets and the financial markets.

***

THE FOREST MANAGEMENT BETWEEN PRESENT AND PERSPECTIVES

Dr. ec. MARCU NICU
Director economic-Regia Nationala a Padurilor-ROMSILVA

In order to define a global strategy for administrating the forest resources it is necessary to provide:

- the promotion of a system of harmonious administration of the forest patrimony;
- the forest protection and the development of their riches;
- the improvement of the capitalization channel of the wood resources and others;

In order to attain these objectives, the forest management must have in view:

- the adoption of some forest development plans on long term duration which could guarantee the achievement of durable administrations;
- the afforestation activity in accordance to the integration policy of the forest fitting out within the plans of organizing the territory;

- the maintenance of the biodiversity and the preservation of the forest protected areas;
- the promotion of technology in the field of the wood running and industrialization which could allow a wide integration of the role of forests in the life of the rural communities;
- the coordination of the scientific programs regarding the functioning of the forest natural ecosystems.

***

ROMANIAN VITICULTURAL PATRIMONY STRUCTURE BETWEEN 1997 – 2001

Medelete D. M., Pânzaru R. L.,

Abstract

In the integration context of Romania in European Union, regarding legislative regulation which lead this “Commune Market", we consider intresting an ensemble look about the national viticultural patrimony, showing the report between different variety of grape vine cultivated.

***

THE EVOLUTION OF ANIMALS NUMBER IN PODARI VILLAGE, DOLJ COUNTY(2002 – 2004)

Medelete D. M., Pânzaru R. L.,

Abstract

View as suburbia, Podari village may capitalize through the zootechnic sector, the potential of an important market such as Craiova. In this meaning it follows the analyses of animal’s number - concerning the grand total and production direction.

***

THE INFLUENCE OF RURAL SPACE INFRASTRUCTURE FROM BANAT IN MITIGATION OF NATURAL CALAMITIES

Oncia Silvica, Şmuleac (Vulcănescu) Laura, Popescu C.

Hidroameliorative works constitute the main link in the infrastructure of agriculture exploitations and their communities, being the modern concept in rural development.

In Banat, there were preoccupations for comfort conditions improvement through hidroameliorative works in 1700 period, when the human communities from filed area were developed.

This works, which represented special solutions from technical point of view in the time of their realization, should be exploited, maintained and extended in accordance with specific conditions of the progress recorded in area.

***

ANALYSIS OF METEOROLOGICAL FACTORS IN COLD SEASON FROM 2004-2005 AGRICULTURAL YEAR AND THEIR INFLUENCE ON LOW BANAT FIELD ENVIRONMENT

ONCIA Silvica, ŞMULEAC (VULCĂNESCU) Laura, UNIPAN Laura

Clime determines the risk factors appearance (drought, flood, erosion, etc) with major impacts on environment. These factors have negative consequences for many aspects of our lives, including: health, water supply, agriculture, industry and transport.

In spring of this year, the floods from Banat Field have shown how vulnerable we are in front of these phenomena.

***

WORK RESOURCES STRUCTURE AT NATIONAL LEVEL FROM 1998 TO 2002

Pânzaru R. L., Medelete D. M.

Abstract

Human resources available in an area(in this case national area) are premises for social-ecomonical evolution, at least regarding the aspect of available human resources and global consumtion requirements. From this point of wiew we consider interesting the contents of this paper.

***

PRIMARY CEREALS OFFER IN LIVEZILE VILLAGE MEHEDINȚI COUNTY

Pânzaru R. L., Medelete D. M.

Abstract

Livezile village is a traditional cereal supplier of Mehedinți County. The rate of primary cereal offer is based on surface, total production and medium yield for wheat, barley, oat and corn.

***

CERCETARI PRIVIND CONSUMUL DE APA AL PRINCIPALELOR CULTURI AGRICOLE DIN CÂMPIA CARACALULUI

Eugen Petrescu, Catalin Rosculete, **SCDA Caracal**

Summary

Irrigation is a hydrological improvement that allows water application to the crops in a controlled way, making the agriculture an efficient and sustainable activity. The purpose of this study was to identify specific water consumption level for the main agricultural crops that grow well in this part of Oltenia's field. The field experiment was conducted at the Caracal Agricultural Research Station. The climate of the region is characterized by an annual average rainfall of 537,4 mm and an average air temperature of 10,6oC. Using the irrigation for maintaining water reserve between

minimum level of easily water content and field capacity has improved the crop water consumption and the yield of studied crops. The efficiency of total water and irrigation water use is presented too.

***

CONSIDERATIONS REGARDING UNCERTAINTY MEASUREMENT QUANTIFICATION, ESSENTIAL CRITERIA OF TESTING METHODS VALIDATION OF THE AGRICULTURE PRODUCTS

drd.ing. Maria-Magdalena Poenaru, Director adjunct, BRML
Prof.univ.dr.ing. Fănel Iacobescu, UNIVERSITATEA DIN CRAIOVA

Under the conditions of unprecedented development of the trade worldwide, the necesity of trusting the quality of agriculture products become a major requirements.

The authors of the work make an analyse of the criteria and of the recogntion conditions of the analyse reports performed by the testing laboratories in the field of agriculture products.

Taking into account that the major part of the testings are performed by measurement, the measurement uncertainty represents the basic characteristic that need to be evaluated.

After establishing the general framework by presenting the most recent approaches of the international scientific organisations reagarding the measurement uncertainty quantification, the results of the research regarding the quantity determination of the fibros part within animal fodders are presented.

***

THE ECONOMIC EFFECT OF THE INCREASE IN MILK FAT CONTENT BY 0.1 %

Prof. Dr. Agatha Popescu

Summary

The study aimed to evaluate the economic effects of the increase in milk fat content by 0.1 % by means of a better feeding in a small dairy farm, situated in Timis County. Two experimental

variants were considered as follows ; V1 – cows fed with the traditional rations assuring 13.63 N.U. for producing 16 milk kg with 3.91 fat % and V2 - cows fed with an improved ration assuring 14.15 N.U. for achieving the same daily milk yield but 4.01 fat %.

The main conclusion is that a better feeding, as in case of V2 , may lead to : 128 kg milk gain/cow/year , an improved milk quality (4.01 fat %), an increased milk price (RON 0.78 /milk kg) , RON 100 additional income from marketable milk , RON 5,312 total yearly income/cow (by 8.14 5 higher than in case of V1), an increased feeding cost by 21.03 % and an increased total cost/year/cow reaching RON 3,452.83 by 8.90 % higher than in case of V. As a result, gross margin is RON 2,543.17/cow/year by 4.86 % higher and profit/cow is RON 1,859.17 by 6.76 % higher than for V1.

Therefore, farmers have to pay more attention to cow feeding for getting an improved milk fat content . Milk fat content is one of the solutions to get higher economic performances in dairy farming , as long as milk price is paid for marketable milk recalculated at the standard fat percent of 3.5 .

***

THE ECONOMIC IMPACT OF INVESTMENTS IN DAIRY FARMING

Prof. Dr. Agatha Popescu

Summary

The study aimed to evaluate the economic impact of investment in a dairy farm raising 15 cows and producing 5,000 kg marketable milk/year . The calculations were made for two variants : V1 – without investment , meaning manual milking and no milk storage and V2 - with investment in a milking machine IMB -2 type and a milk tank of 200 litre capacity , the total investment value being RON 6,600. For each variant the following indicators were determined: variable, fixed and total cost, total income and by income source, gross margin and profit .

Starting from the records in the year 2005, the prognosis for these indicators was elaborated for the period 2006-2010, taking into account an increased milk yield by 10 %, an increased milk price by 7 % and the inflation rate . The conclusion was that the investments lead to higher costs , but the increased income expected due to the

better milk hygiene and quality is able to assure a higher efficiency and profitability .

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RESEARCH CONCERNING THE POTENTIAL EVAPOTRANSPIRATION (PET) ESTIMATE THROUGH THE THORNTHWAITE METHOD AND THE CORRECTION FACTORS FOR THE WHEAT CROP

C. V. Popescu

The research has been carried out in irrigated and rainfed conditions on the brown-reddish soil from the Research and Development Agricultural Station „SIMNIC" between 1996-1998, at the wheat crop. There were estimated through the Thornthwaite method the monthly and daily PET, and determined the monthly correction factors (KC) into water consumption. At the end, the KC correction factors were compared with the monthly pan correction factors KT obtained from the evaporation from the class A pan evaporimeter.

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THE POTENTIAL EVAPOTRANSPIRATION (PET) ESTIMATE THROUGH THE THORNTHWAITE METHOD AND THE CORRECTION FACTORS FOR THE SUNFLOWER CROP

C. V. Popescu

The research has been carried out in irrigated and rainfed conditions on the brown-reddish soil from the Research and Development Agricultural Station „SIMNIC" between 1996-1998, at the sunflower crop. There were estimated through the Thornthwaite method the monthly and daily PET, and determined the monthly correction factors (KC) into water consumption. At the end, the KC correction factors were compared with the monthly pan correction factors KT obtained from the evaporation from the class A pan evaporimeter.

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WAYS OF INCREASING MANAGERIAL WORK EFFICIENCY ON AGRICULTURAL EXPLOITATIONS

Corina Ruşeț, Daniela Lazăr

Increasing managerial work efficiency on agricultural exploitations is a main concern of managerial theory and practice. Though they have carried out numerous research studies, they couldn t reach any formulation of priciples, of universally valid recipes whose application or practice ensure with certainty an increased efficiency of the management, as managerial work efficiency depends not only on the features of the manager but of the features of the situation as well.

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ON THE MANAGEMENT OF PRODUCT AND SERVICE QUALITY

Corina Ruşeț, Daniela Lazăr

Abstract

This paper is particularly important as firm managers have as a main goal the improvment of product and service quality. At present most consumers no longer accept medium quality products. For a firm that wishes to keep on the market, and profitable the only solution is to adopt total quality management.

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GAME OF THE FACTORS IN ECONOMIC DEVELOPMENT OF RURAL AREA

Ştefan Gavril, USAMV Iaşi
Toma Dinu, USAMV Bucureşti

The economical reality of Romania after 1990 has marked important quantitative and qualitative changes in order to fulfil the principles of market economy. In this context, the main objective of the present paper is to design rural development strategies starting with the diagnosis analysis of the area in order to establish the most

important measures which will constitute the basis of the concrete actions confirmed with the rural development projects. Within the diagnosis analysis, after establishing the rural space issue from Dorna area, there are identified the issues dealing with the future area development (first the difficulties, constraints, weaknesses) and it is formulated the possible main strategies. All this elements are discussed concerning with game of the factors in economic development of rural area .

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THE QUALITY OF THE SERVICES OFFERED BY ROMANIAN PENSIONS

Elena Stoian, Romeo Crețu, USAMV-Bucharest

The criteria for adhering to the European Union, the competitiveness more and fierce with the tourist markets in the region, the raising of the clients' exigency – Romanians or foreigners – for quality services in tourism, force us to approach this topic with a completely different view than the operators in the Romanian rural tourism system have been previously accustomed to.

For the future, the three evaluation levels of conformity on the offered services will be configured as such: the base level will be compulsory, the standard and the excellence level will be voluntary and certified by the accredited structures for certifying quality and management, including according to ISO 9001, ISO 22000 etc.

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GREEN TECHNOLOGIES FOR SUSTAINABLE AGRICULURE

Doctorate Scholar Rashid Saeed
Doctorate Scholar Gun Mardiatmoko
Dr. Sturzu Cristiana Silvia U.S.A.M.V Bucharest

Abstract**:**

Sustainability targets the economic well-being of the current generation and the ability of future generations to meet their needs. Sustainability requires investing in diverse forms of capital including both human-made and natural capital. Agriculture relies on natural capital for producing food and is a major source of impairment of rivers, lakes, and estuarine waters. Recently, "green" or more

sustainable technologies are receiving a great deal of attention because they can potentially improve the environmental performance of agricultural production. The economic risk may inhibit adoption of green technologies like Integrated Pest management, Conservation tillage and enhanced Nutrient management The same barriers exist in Romania, Pakistan and Indonesia though their nature may vary to some extent.

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A STUDY REGARDING WATER USAGE FOR IRRIGATION IN TIMIS PLAINE FROM LOCAL WATER RESOURCES

Teodoreanu C., Peptan Carmen Aurelia, Fazakas P.

The intensive cultures, vegetables, trees and vineyard are placed on relatively small surface comparing with the crops cultures. Thus, necessary water supply for irrigation can be covered from local sources having a small flow. This type of sources represents different complexity drillers depending on depth, soil layers, water quality in necessary flow and used pumps. This study refers to Timis Plain area having a long tradition in vegetables cultures.

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MANAGEMENT PRACTICES USED BY SUCCESSFUL FARM MANAGERS SITUATED IN THE SOUTH OF CANTRY

Toma D., Fîntîneru Gina, USAMV Bucureşti,
Ştefan G., USAMV Iaşi

The aim of the paper is to determine, on survey basis, which are caracteristichs of the successful romanian farms and of these managers; most frecvently financial administration practices; future projects; the sources of internal information and external privileged of the managers farms; principles of marketing use and strategically planning practice; level of information concerning on the governmental and communitarian programs.

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MARKETING RESEARCH REGARDING THE ROMANIAN MARKET OF CEREALS AND MILLING PRODUCTS

Drd. Toma Elena
Dr. Chirfot Cristu Gabriel,
Drd. Mara Gabriela Cristina

The paper is aiming to present the situation of cereals and milling products for Romanian market, the developments during the transition period. The international commercial companies have entered the market and look for opportunities especially in the exterior commerce with cereals.

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THE UTILIZATION OF GRAPHIC REPRESENTATION IN THE PROBLEMS ANALYSIS WHICH CAN APPEAR IN THE DEPOSITED AGRICULTURAL FARM PRODUCES

Asist. univ. Cristian VASILE
Universitatea din Craiova

Abstract:

This paper presents a study about agricultural farm produces depreciations which are due to the humidity of this produces which were deposited in different enclosed space.

The computer utilization is very beneficent in any domain of activity, because it permits the facilitation of intellectual work, relieved in this way the specialist or the researcher for a series of activities very difficult in the absence of this technology of computing. Also, the computer permits the work with a very large volume of information in a very small period of time, in this way it determined an increase of the work speed.

After obtaining of some final results concerning researches in a certain domain of activity, they can be presented either in a table format or in a graph or a diagram format. In many cases, for a better valuation of the obtaining results, is preferred the final presentation of these results in a diagram form, in a 2D or 3D format. For this reasons, using a collected data from the researches relating to the humidity effects on the deposited agricultural farm produces, in this

paper we try to present some forms for graphical displaying of the final obtaining results.

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INTERNET – AN IMPORTANT COMPONENT OF THE EVERYDAY LIFE

Asist. univ. Cristian VASILE
Universitatea din Craiova

Abstract:

Lately it can be observed a diversification of the activity and research domain which conducted to a meaningful increase of the volume of information, of studies and obtained results. In order that all these knowledge's to be easily used by any user, no matter they are or not specialists in a certain domain of interest, there was put the problem to make a huge data storage including on the basis of certain sorting criteria, these information to be enclosed.

In this manner there has appeared the Internet web, which is a kind of gigantic data base, spreaded all over the world, where there can be found information and services of any kind, that are available from each connected to Internet computer. Also, the Internet web does permits the quick communication between users located at high distances and the transfer of files between computers within the Internet web.

Due to these offered advantages, the Internet web has became an important device in the didactical and researching activity, representing a valuable information source for teachers and students.

This paper tries to presents few important aspects on the Internet web, as well as of offered advantages, all of these proving the huge popularity of the Internet.

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