

**RECHERCE CONCERNING APRICOT HYBRIDS OF SPRING CHOICE FOR
FRUIT QUALITY AND REOPENING PERIOD**

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S.C.D.P. Constanta

Abstract

The paper presents behaviour of some apricot hybrid selection in culture conditions under climatic factors and soil influencing in comparison with some cultivars created in Fruit Research Station Constanta. Seven of these apricot selections has been inscribed to “The State Institute for Variety Testing and Registration Bucuresti” with the view of trying for homologate as a new cultivars.

**RESEARCHES CONCERNING THE FRUIT YIELD OF SOME PEACH AND
NECTARINE VARIETIES IN THE FIRST TWO FRUCTIFYING YEARS IN
CLIMATE CONDITIONS OF TIMIȘOARA**

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Abstract

The experiment has been set in year 2000 within the Didactic Research Station of the University of Agricultural Sciences and Veterinary Medicine of the Banat in Timisoara. The variants represented by the studied varieties were linear arranged on three rows for each variety we have planted 5 trees. These represented the repetitions for the considered variants. The trees were grafted using Prunus rootstocks and planted at 4m between rows and 3m between trees per row. The trees were pruned according to simple palmate system. The soil is characterized by clay-like texture, slightly heavy for the considered species (39-42% clay). For the nectarine and clingstone varieties considered into our studies, none registered positive significant differences to the control. We may conclude that for peach species the best fruit yields were attained by Southland and Dixigem varieties

RESPONSE TO TRANSPLANTING OF THE HIGH ORNAMENTALS SPECIES

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Abstract

Ulmus, Cotinus, Lagerstroemia, magnolia, Acer varieties have proved to be of high interest as ornamentals and have grown as individuals, group, group arrangements or hedgerows. The studies carried out at the Research Institute for Fruit Growing have had in view the response of seven ornamental deciduous varieties to transplanting in pots, at the three Institute for Fruit Growing Pitesti-Maracineni, during 2004-2006.

DETERMINATION OF SOME HEAVY METAL CONTENTS IN SOIL SAMPLES FROM THE ȘAG-PARȚA DEPOSITION, TIMIȘ COUNTRY

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GERGEN I.*****

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***Facultatea de Tehnologie Produselor Agroalimentare*

Abstract

The aim of this was to assess the heavy metals content (Cu, Ni, Zn, Fe, Mn, Cd, Pb and Cr) in 16 places of prelevations situated in the Sag-Parta deposition of domestic waters. The concentration determined for these elements in the samples of this area have been compared to normal values of alerts and interventions established by SR ISO 11047/1999. There were also established correlations between the mobility of metal ions from the soil and soil characteristic (pH and texture).

METHOD OF FOLIAR NUTRIENTS APPLICATION

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Abstract

The experiment was conducted in a high density apple orchard at the Research Institute for Fruit Growing Maracineni. The foliar nutrient was applied in two ways: manually and mechanically. The application technique refers to: the application method, factors influencing the application, and the timing of application. The selection period of a product is related to the solution amount and the environmental conditions during and qualities: chemical stability, good solubility, compatibility with water used for dilution and other phytopharmaceutical products, good penetration for a rapid absorption, adherence to leaf surface and the specification if it is photodegradable or not.

**A NEW LOOK OF WEED CONTROL BY HERBICIDES APPLICATION
USING "SYSTEM 4" AND ISOLINK TECHNOLOGIES IN THE APPLE
ORCHARDS**

**PERIANU ADINA*, SUMEDREA D.*, CHIȚU VIORICA*, TĂNĂSESCU N.*,
PETRESCU SILVIA*, PAUL-BĂDESCU A.*, COSTEA ALINA**, RUGINĂ
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** ICDP Pitesti- Maracineni, **Syngenta, Agro SRL Romania*

Abstract

In the Romanian fruit culture, modern technologies for keeping a clean, nonpolluted environment should be applied, having in view the present status of the orchards. The further strategies used in tree growing should protect the man, animals and soil. The paper deals with the study of "key weeds" in orchards and the management of herbicides application by using "System4" and "Isolink" system.

**BEHAVIOR OF PLANT MATERIAL MECHANICALLY GRAFTED AND
STRAIGHTLY PLANTED IN THE FIELD, IN YEARS 9 AND 10 AFTER
PLANTING**

**SUMEDREA D., SUMEDREA MIHAELA, MARIN F.C., TĂNĂSESCU N.,
PERIANU ADINA**

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Abstract

In order to decrease the cost of production, to satisfy the urgent needs of plant material and to rapidly change the cultivars in accordance with the consumer's demand, researches suggested that the planting material should be mechanically grafted and straightly planted in the orchard. The order of decrease in vigor of the studied cultivars estimated as the average increase in trunk cross-section area (TCSA) was: Prima, Florina, Pionier, Generos, Romus 3. On average in 9 and 10 years after planting the order of decrease fruit yields was: Florina (27.63 t/ha), Generos (22.40 t/ha), Prima (21.21 t/ha), Pionier (17.41 t/ha) and Romus 3 (10.53 t/ha).

THE PERFECTIONING OF CROP TECHNOLOGY OF THE OBLACINSKA SOUR CHERRY SORT

BĂNCILĂ MĂRIUȚA

U.S.A.M.V.B Timisoara- S.C.D.P. Caransebes

Abstract

The determination of the crop technology of the Oblacinska sour cherry sort to from the reduced height trees (maximum height of 2.5-3 m). the determination of the optimum tree density. The forming and supervision of the mechanic execution attendance, cutting and harvest works. The obtaining of high crop production of 10-15 t/ha even from the first years of outgrowth. The determination of the possibility of sour cherry multiplication on vegetative way.

RESEARCH CONCERNING THE QUALITY ANDE QUANTITY OF PEAR FRUITS BELONGING TO SOME VARIETIES AND ELITES OF PEAR TREE IN THE CONDITIONS OF THE LUGOJ TREE CULTURE ARIA

IORDĂNESCU OLIMPIA ALINA*, NICOLICI N.*, DRĂGĂNESCU E.*,BUCUREANU EVA**

*U.S.A.M.V.B Timisoara, **Facultatea de Horticultura Oradea*

Abstract

The fruit tree varieties are being ascertained for different cultivation areas and centers considering their reaction to the ecological conditions of that zone. In Banat, the pear tree is less represented in cultivation. The sortiment is poor, being represented mainly by the local varieties and some valuable varieties like: Cure, Clapp' Favorite, Williams Hardy and others. Even in the conditions of the Fruit Tree Growing Resort in Caransebes, Caransebes, in research and also in yield the pear tree was less represented and this in the reason why we have made this research in order varieties of pear tree to be cultivated in the conditions of the western part of our country.

BEHAVIOUR OF SOME BEGONIA SPECIES CONCERNING VEGETETIVE MULTIPLICATION POSIBILITIES, IN CONDITIONS OF DIDACTIC STATION TIMIȘOARA, RANCH NO.6

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Abstract

Begonia species are tropical and subtropical plants spread in Central and South America and in some island of Pacific Ocean. This species are meeting in principal in the forest zones, with humidity and shade: for example African's begonia growth especially in damp tropical forests or in damp mountains zones, begonia s grow up in interior of forest on rivers course edge , climbed on rock walls.

**THE COMPORTAMENT OF SOME NUT TREE BIOTYPES FROM
PĂDURENI, TIMIȘ COUNTY**

**BLIDARIU AURELIA*, IORDĂNESCU OLIMPIA ALINA*, DRĂGĂNESCU
E.*, BUCUREANU EVA****

**U.S.A.M.V.B Timisoara, Facultatea de Horticultură, ** Facultatea de Horticultura
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Abstract

The fruit tree flora in Banat is rich enough and very varied concerning the biological features of fruit trees and mainly the size, form and quality of fruits. In this paper work there are presented 9 nut tree biotypes from Padureni and the Geoagiu 65 variety as witness. Among the 9 biotypes we have remarked P 78 and P 382 biotypes.

**THE ECONOMIC EFFICIENCY IN COMPARISON WITH THE
ECOCLIMATIC CONDITIONS SPECIFIC TO THE MINIȘ-MĂDERAT
VNEYARDS**

VANC F.*, DUMA M.*, POPA C.*, DRĂGUȚ D.*, VANC ANIȚA, POPA
RODICA***

**S.C.D.V.V. Minis, **SC. GEN. Vladimirescu*

Abstract

The climate conditions manifest strikingly in the regular financial conditions from the viticultural economic-financial conditions for the viticultural ecosystem specific to the Mini-Maderat vineyard. The financial outcome depends strictly on the quality of the yearly factors of environment, especially during the vegetation period, reflected through the accumulation of sugar in the quality of the wine obtained.

**THE INFLUENCE OF CLIMATIC CONDITIONS OWER THE EVOLUTION
OF THE FENOLIC COMPOUNDS FROM THE GREAT BURGUND GRAPE
VARIETY FRIM THE VINEYARDS FROM EASTERN AND WESTERN SIDE
OF ROMANIA**

MUREȘAN CLAUDIA, CIUTINĂ V., CHIȘ S., PALCU S.

Universitatea Aurel Vlaicu Arad

Abstract

The present paperwork treats the evolution of the phenolic compounds from the Burgund grape variety within the eco-climatic conditions from the Minis and Murfatlar vineyards between 1998 and 2002 and their influence on the quality of the obtained superior wines. By analyzing the dynamics of the ripening of the Burgund grape variety from the Minis and Murfatlar vineyards the content in oeno-climatic indices, average air temperature and the heliothermal induces measured during this period.

**THE INFLUENCE OF THE TECHNOLOGICAL PRACTICES APPLIED
DURING THE VEGETATION ON TABLE GRAPE YIELD IN THE
CONDITIONS OF DIDACTIC STATION TIMIȘOARA**

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Abstract

The researches made by us were on behavior of some table grape varieties: hambrug Muscat and Chasselas dore considering different technological practices during the vegetation period. Through these technological practices during vegetation as well as those applied in the still period we have tried to control the growing and fruit setting on vine and improve commercial grape yield per vine. The use of these technological practices also altered the balance between foliar surface and grape weight, between fertile and sterile shoots in order to improve grape quality.

**THE EFFECT OF SOIL MAINTENANCE TYPES ON THE EVOLUTION OF
THE MATURATION OF THE CADARCA VARIETY IN THE
WINEGROWING CENTER RECAȘ**

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Abstract

The study concentrates on the maturation process of the Cadarca variety according to different types of soil maintenance in climate conditions of the Recas Winegrowing Center. Regarding the influence of the year, to the quality of production, it can be observed that, year 2004 was with a favourableness average, but 2004 was even less favourable, because of the several wather conditions. In spite of the differences between the years of the observation, the types of soil meintenance had important effects to the quality of the production. Comparing the received information it can be asserted, that in the given conditions the maintenance method through soil-mulching has given best results.

THE RESPONSE OF THE CREAȚĂ VARIETY TO THE DIFFERENT TYPES OF SOIL MAINTENANCE IN THE CONDITIONS OF THE WESTERN PART OF THE COUNTRY

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Abstract

The study concentrates on the production of the Creta variety, according to different types of soil maintenance, in three winegrowing centers in the western regions of the country. The observations contain the research results of the last three years. In spite of the differences between the climatic conditions of the winegrowing regions and of the years of research, the types of soil maintenance had important effects on the output of the variety. Comparing the received information it can be asserted, that in the given conditions the maintenance method through soil-mulching had given best results.

TECHNOLOGICAL ISSUES ON THE ACANTHACEAE SPECIES GREENHOUSE CULTIVATION

OSICEANU SILVIA, CRUCERU SONIA

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Abstract

There was observed that the ornamental researched taxons are of warm greenhouse, the temperatures during the summer are 20-22°C and 13-16°C during the winter, they require light places yet do not undergo direct sunshine; they need a moist atmosphere, in dry and direct sunshine conditions the leaves are rapidly lost or lose their turgescence. Of the researched soil mixtures the best development is archived in a rich, neutral, loosened, or light acid.

**RESEARCHES CONCERNING THE INFLUENCE OF PHOTOSELECTIVE
UPON PRODUCTION AND NITRATES CONTENTS OF TOMATOES
CULTIVATED IN SOLARIUM**

**CIOFU RUXANDRA, DAVIDESCU VELICICA, MADJAR ROXANA, NEAȚĂ
GABRIELA, DOBRIN ELENA, ROȘU MIHAELA**

U.S.A.M.V. Bucuresti

Abstract

In photosynthetic process the solar radiation and light have a primordial place. From the total solar radiation only 1,5-3% is used in that process and the rest are reflected radiation, caloric or used in the perspiration process. The energy utilization coefficient varied with the morpho-anatomics and physiological particularities of every species, horticultural plants have the capacity to reevaluate the radiations more than agricultural species. This research try to establish the plants growth under different colors photoselectiv folios, the effect of them upon the yield efficiency and also on the nitrates tomatoes content at the harvest moment. The experiment was made in University of Agricultural Sciences and veterinary Medicine Bucharest, Vegetable Department solarium in 2005. The biological material used was Cindel tomatoes. There were used 6 variant of folios> PE transparent no additive, transparent additive yellow additive, pink additive, green and blue ones. In the vegetation perior fthere were made some biometric measurements height of plants, number of flowers and number of fruits. Also it were registred the yields. Photosynthetic folios influence the growth of tomatoes plants. The heights and number of flowers were influenced by the yellow and pink folios. The heights and number of flowers were influenced by the yellow and pink folios. The heights fruit percent was obtained at pink and yellow folios variants. The biggest yields were obtained at variant with pink folio (27%) and blue folio inhibed the crop of tomatoes. The nitrates metabolize tomatoes fruits was intensive in variant with pink folio where the nitrates concentration was lower from all variants.

ESTABLISHING OF INFLUENCE FOR ORGANIC COMPOUNDS OF BORON OWER SOME QUANTITY AND QUALITY ELEMENTS OF WATERMELONS

SCOREI R.*, LASCU N.*, GIORGOTA N.*, TOMA V., PLOAE MARIETA**,
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Abstract

Agriculture soils from Romania contain on the average around 15-68 ppm of boron and quantity of mobile boron ranges between 0.1-0.8 ppm. The interest of watermelon culture in Romania, especially in South of the country, mainly in Dolj County, is reflected by these over 6500 ha cultivated only in Danube Plain. There were noticed the products called Folibor and Borcomplex with the quantity of 5 liters/ha and respective 53.0 t/ha, the gains begin 17% and 15% comparing with the variant not fertilized foliary. Fertilization with organic compound of boron determined increasing of average weight of fruit (1-10%), increasing of glucose containing (0.44-1.06%) and C vitamin containing (from 13.81 mg/100 g.d.s. to 19.53 mg/100 g.d.s.).

RESEARCH REGARDING THE INFLUENCE OF FOLIARY FERTILIZATION WITH PRODUCTUS BASIS ON ORGANIC COMPOUNDS OF BORON OWER SOME PHYSIOLOGICAL INDEXES FOR WATERMELON CULTURE

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Abstract

Foliary fertilization with products basis on organic compounds of boron to watermelon culture influenced physiological index of plants as following. Activity of catalase enzyme was intense to all foliary fertilization variants with organic compounds of boron, obtaining increasing from 1.0 to 1.8 ml $KmnO_4$ n/10, comparing with witness variant, but the differences between products weren't significant. The pigments of chlorophyll presented bigger values to all variants where there were applied treatments with different doses and types of fertilizer basis on organic compounds of boron comparing with witness variant, noticing values registered to variants where it was applied Cupribor with 2 treatments (3.72 mg/l g.f.s.) and Borcomplex with 4 treatments (3.91 mg/l g.f.s.). The intensity of photosynthesis was influenced by the foliary fertilization and also by the type of used foliary fertilizer, registering values between 35.0 mg d.s./dm²/8h, to the witness variant and 55.8 mg d.s./dm²/8h to Bromcomplex variant.

**THE INFLUENCE OF SOME ENVIRONMENT ON LETTUCE SEEDLING
BEFORE TO BY TRANSPLANTED IN CONTAINER SIZE**

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U.S.A.M.V. Bucuresti

Abstract

In the present study made in v egetables field of mthe Bucharest Horticulture University are shown some aspects regarding the reaction of temperature and light on lettuce seedling obtained on greenhouse in 2006. We had remarked some differences ragarding the duration of germination and the study was to identify the lettuce cultivars that respond negatively at the oscillating values of temperatures but also at very high level.

**THE EFFECTS OF THE PHYSICAL FACTORS ON THE MORPHO-
PHYSIOLOGICAL AND PRODUCTIONS INDICATORS FOR *PISUM*
SATIVUM IN ARAD AGRO-ECOLOGICAL AREA**

PALCU S.*, CÂMPEANU GH., CHIȘ S.*, MUREȘAN CLAUDIA***

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Abstract

The physical factors that can influence, negative or positive, the morpho-physiological and production chracteristics for pea cultures are referring mostly to light, temperature humidity and pH. Pea, being a long day plant, needs at least 8 hours/day lught peiod, otherwise the blooming will not take place. The said physical factors had been watched and recorded for an experimental parcel that has 18 plots, with 6 variants and 3 repetitions. Soil reaction and temperature, recorded at sowing are favorable and ensures the growths of vegetative mass with direct implications on some mprpho-physiological and production indices for garden pea.

**THE USE OF MINERAL AND ORGANIC SUBSTRATES FERTILISED WITH
STIMUSOIL 200 FOR TOMATO CROPS IN INDUSTRIAL HOUSHOUSES
WARMED WITH GEOTHERMAL WATER**

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Abstract

The reason for using mineral and organic substrata with Stimusoil 200 is to make profitable the tomato crops in hothouses. These are carried out in terms of increasing physical production and incomes, on one hand, and of decreasing expenses through the removal of the infected soil, on the other hand, and also using the unconventional energy at a lower cost, ensuring in this way the necessary profit to continue the production process. The carried out researches established the crop variants with substrata in which the productive potential of the hybrid Platus F1 was performed at maximum under the present conditions in terms of quality, and also quantity. The experiment revealed the effects of application with the liquid organic fertilizer Stimusoil 200 upon various variants of nutritive substrata (mineral and organic), the assessment being also performed depending on the level of the hybrid's productive potential. The continuation of our researches is going to confirm the conclusions we have so far, from the point of view of the best variant of used substrata, and also of the recipient used to grow and develop the radicular system.

**OF SHOOTING CAPACITY AND GROWTH RATE OF SHOOTS TO
BILLBERGIA WINDII**

**FĂRCĂȘESCU ALINA MARGARETA, IORDĂNESCU OLIMPIA ALINA,
NEACȘU ALINA GEORGETA**

U.S.A.M.V.B Timisoara, Facultatea de Horticultură

Abstract

The studies plants belong to bromeliads collection from Floriculture departament of USAMVB Timisoara. We observe the Billbergia "Windii" and other 6 bromeliads species behaviour on different culture substratums. Here is presented two of the measured parameters: off-shooting capacity and growth rate of shoots.

BEHAVIOURS OF CHAMAECIPARIS SP. CULTIVATED IN CONTAINERS UNDER SUNSTRATE PH CORRECTING EFFCET

**DAVIDESCU VELICICA, MADJAR ROXANA, FLOAREA L., PETICILĂ A.,
NEAȚĂ GABRIELA**

U.S.A.M.V. Bucuresti

Abstract

The most of dendrological species requie an acid pH, which can be obtained by using acid peat in the substrate composition. Cultivators are confronted with difficulties in obtaining peat, because it must be extracted from natural resources and transported, and all this process leads to high price in the technology of producing the dendrological material. According with the specifics and particularity of the dendrofloricol material produce technique in container, research was concerning to finding compounds of the substrate with characteristics required by the ornamental plants and also to use as substrate compounds the recyclable urban and industrial waste. There are acidophillic dendrological species for which the pH substrate must be maintaiined constantliy or just scaled down by some units. The research preformed by the agrochemical collective in 2003, 2004 aimed at testing susbtances with acidifyng effect in substrate, the quantities and the applied methodology for substrate pH decrease. The results and the conclusions obtained during the previous years led to the main objective of the research, to apply during the vegetation period directly on dendrological plants, the acidifyng substance, sulphur, substance with results in pH decrease.

OXIDATIVE STRESS ANTIOXIDANTS AND TOTAL ANTIOXIDANT ACTIVITIES IN VEGETABLES

**ERDEI L.*, CSISZAR JOLAN*, TARI IRMA*, BARTHA BERNADETT*,
SZEPEI AGNES*, ȘULEA DIANA CORINA**, LAZĂR A.***, CAMEN D.***,
STAIKU MIHAELA**, PETOLESCU CERASELA**, GABOR LAURA**,
MADOSA E.***, MIHACEA SORINA**, NEDELEA G.****

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Abstract

Under normal atmospheric conditions, metabolic reactions often from reactive oxygen species, most abundantly in the photosystemic and respiratory redox reactions in their electron transport chains. During the evolution, both plant and animal organisms have developed non-enzymatic defence substances and enzymatic mechanisms to avoid or eliminate these harmful reactive oxygen species. The non-enzynatic antioxidant capacity of plants, therefore, is important in the view of human health (clinical practicum) and food chemistry. Intake of dietary antioxidants may protect against oxidative stress-related diseases. In this work we give a summary on the oxidative stress and antioxidants in plants and a critical review of the possibilities for assessment of antioxidant capacities of some vegetables.

**PRELIMINARY STUDY REGARDING THE RESPONSE OF SOME
VALERIANA OFFICINALIS L., GENOTYPES AT *IN VITRO* CULTURE
CONDITIONS**

CAMEN D., NEDELEA G.

U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

In this study we obtained 2 type of response at in vitro culture: callus and roots. We used 2 type of explants: leafs and stems, inoculated on MS (Murashige-Skoog) culture medium with 3 diferent hormonal balance.

**RESEARCHES CONCERNING THE DETERMINATION OF THE
ANTHOCIAN FRACTIONS FRON CELL CULTURES OF *VITIS VINIFERA* L.
USING HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC)**

LAZĂR A., NEDELEA G.

U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

*The studies indicate the presence of three major and important anthocyanin compounds found for grape varieties of *Vitis vinifera*: cyanindin – 3 monoglucoside (in greater proportion), peonidin – monoglucoside and peonidin – 3, 5 diglucoside.*

**THE EVALUATIONS OF LEAD EFFECT OF THE SYMBIOTIC SYSTEM OF
Medicago sativa – *Rhizobium meliloti***

MIHACEA SORINA, BOLDURA OANA MARIA

U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

*The presence in soil of some chemical pollutants has a negative effect on the nitrogen biological fixation process. Among polluting chemicals, lead plays an important role; it is regarded as soil pollutant, especially along roadsides, as a consequence of lead release from ethylated gasoline. It also found in atmosphere, in underground or surface waters in the adjacent areas profiled on lead industry. There are also areas with increased lead content due to pedogenetic processes that occurred during soil formation. The main goal of this paper was to evaluate the lead effect on the symbiotic system of *Medicago sativa* – *Rhizobium meliloti*, to identify possible mutations induced by lead bioaccumulation in plants that were grown in vitro and also to determine lead concentrations that induced mutations and which could be detectable by RAPD markers.*

**GENES TRANSFER USING AGROBACTERIUM SYSTEM IN
*Solanum melongena***

FURDI FLORINA, BOTĂU DORICA

U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

Genetically modified plants give the possibility to use sustainable agriculture, decreasing the chemical pollution for environment and protecting the useful entomofauna. In our research we have observed plant regeneration using eggplant transformation tissue, this being obtained via Agrobacterium system.

**FLORA AND VEGETATION ASPECTS IN THE PARÂNGUL MIC, MIJA AND
CÂRJA MOUNTAINS**

BORUZ VIOLETA

Universitatea Craiova, Gradina Botanica, „Al. Buia”

Abstract

The paper presents a synthesis of the floristic and vegetation data in the Parangul Mic, Mija and Carja Mountains, which belong to Parang Massif. We have pointed out the vascular species with a special ecological and phyto-geographical value. We have also made considerations on some rare/vulnerable species in the Romanian flora and on some aspects regarding the monitoring of those populations.

**THE INFLUENCE OF THE CULTURE MEDIA *IN VITRO*
DIFFERENTIATION FOR SOME APRICOT CULTIVARS**

CĂLINESCU MIRELA, ISAC MARIA, PLOPA CATIȚA

ICDP Pitesti- Maracineni

Abstract

The researches made on harcot, NJA 19, CR 2/63 and dacia cultivars, show the behaviour that is different for apricot in differentiation phase. A one influence factor was represented by the components of the culture media (macroelements, microelements and vitamins) used in experiments> Murashige & Skoog, Lepoivre, Lee Fossard and WPM with results between 100% and 0. Also the high values differences were obtain between culture media/explant type raport, were a very low regenerativly power on this media show the explant with 0.8-0.9 mm size.

**TAXONOMY, ECOLOGY AND CHROLOGY OF SOME *MACROMICETES*
SPECIES FROM MONTAINS REGION OF OLTENIA (PARÂNG AND
VÂLCAN MONTAINS) (FIR TREE FOREST STAGE)**

CIORTAN IOANA

Universitatea Craiova, Gradina Botanica, „Al. Buia”

Abstract

The paper presents 60 species of macromycetes < 4 species belong to Ascomycota and 56 to Basidiomycota. Each species has on updated the some synonymes, the popular names, the fenophase, the ecology data, whether ot is edible or poisonous. The paper also contains the information on the general and local spread, the vegetal association, the sub-layer, wether it is common or rare and chorology from Oltenia.

**ECOLOGY, CHROLOGY AND COENOLOGY OF THE *ORCHIDACEAE*
IN OLTENIA**

**POPESCU G., CIORTAN IOANA, BORUZ VIOLETA, RĂDUȚOIU D.,
COSTACHE I.**

Universitatea Craiova, Gradina Botanica, „Al. Buia”

Abstract

*After a short of the historical-geographical province Oltenia locations and limitis, relief hydrographical conditions, climate and soil, all species of orchids are enumerated and hove been semnalated till now from this province. This list (enumerationa) from the studied yone has 36 species and 7 subspecies and 2 varieties fron the total of 57 species and 15 subspecies from Romania. Silvicole species > *Cephalanthera damasonicum*, *C.longifolia*, *C.rubra*, *Corallohiza trifida*, *Cypripedium calceolus*, *Epipactis atrorubens*, *E.helleborine*, *Himantoglossum hircinum*, *Limodorum arborivum*, *Listera ovata*, *L.cordata*, *Neottia nidusavis*, *Orchis mascula* subsp. *Signifera*, *O.purpurea*, *Plathanthera bifolia*, *P.clorantha*,. Species of swampy meadows > *dactylorhiza cordigera*, *D.incarnata*, *D.maculata* subsp. *maculata*, *D.fuchsii*, *Epipactis palustris*, *Orchis paxiflora* subsp. *Elegans*. Species of mesophyle and mezoxerophyle meadows > *Anacamptis pyramidalis*, *Coeloglossum viride*, *Dacftylorhiza sambuccina*, *Gymnadenia conopsea*, *G.odoratissima*, *Ophrys apifera*, *Ochris coriofora* subsp. *coriofora* and subsp. *fragrans*., *O.morio* subsp. *morio* and subsp. *picta*, *O.papilionacea*, *O.ustulata*, *Spitranthes spiralis*. The plant are joined at ecologic, chorological, coenological, cariological data and some aspects viewing the population and the dynamic in space and time.*

THE FLORA AND VEGETATION OF THE TOPANA FOREST (OLT COUNTY)

POPESCU G., RĂDUȚOIU D., CIORTAN IOANA, BORUZ VIOLETA
Universitatea Craiova, Grădina Botanică, „Al. Buia”

Abstract

*The Topana Forest lies in the north extreme part of the Olt County, in the region of the Cotmeana Piemont, covering an area of 1.982 ha, with an altitude between 310 and 240 m. The hydrographic network is represented by the Vedea River with a permanent and abundant water flow and by some smaller tributaries: Fagetel and Ciocarca. The fragmentation of the piemont due to the hydrographic network led to the creation of various habitats regarding sublayer, exposure, inclination, etc. The flora contains a number of 126 vascular species, most of them being Eurasian, European and Circumpolar. The southern species are generally well represented: *Aremonia agrimonioides*, *Lithospermum purpureo-caeruleum*, *Tamus communis*, *Potentilla micrantha*, *Lathyrus hallersteinii*, *Asparagus tenuisoliis*, *Polygonatum latifolium*, *Festuca heterophylla*, as well as the two woody species: *Quercus cerris* and *Q. frainetto*. Two associations are ecologically and floristically well developed from the vegetation point of view > *Quercentum frainetto-cerris*. C.C. Georgescu & Constantinescu 1945 – lying on the sunny plateaus and slopes, either southern or south-western and *Convallario-Querquetum roboris* Soo (1934) 1957 – on the northern, shadowed slopes, along the streams.*

RESEARCHES CONCERNING NITRATE AND NITRITE CONTAMINATION OF VEGETABLE SPECIES IN DISTRICT OF TIMIȘ

NEGREA MONICA, ALEXA ERSILIA, LĂZUREANU A.
U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

Among the anorganic origin products which contaminates the vegetable products are the nitrate and nitrite compounds. The causes of the contamination with nitrogen compounds are: intensive agriculture, raising animals, rain-falls and leviagation of the nitrogen compounds. This study determined the nitrate and nitrite contamination of the vegetable products (spinach, lettuce, salad) taken from the markets in autumn 2005, and 2006 in spring.

**THE EFFECT OF THE SOIL MANAGEMENT SYSTEM ON SOME
BIOCHEMICAL COMPONENTS OF THE SOIL AND PLANTS IN A HIGH
DENSITY APPLE ORCHARD**

PETRESCU SILVIA, MARIN F.C., CHIȚU E.
ICDP Pitesti- Maracineni

Abstract

In the present study, conducted between 2002-2004 in a high orchard of Golden Delicious variety grafted on MM 106 was revealed the influence of the soil management system applied many years on enzymatic soil activity (urease, sucrase) and some plant leaves compounds as chlorophyll "a", chlorophyll "b", carotenoids pigments. The results of the study revealed a high biochemical activity in the variant with the soil worked along the tree rows and covered with grass cover stripes between the rows and a high content of leaves chlorophyll pigments in the variant with mulch along the rows and tilled soil between the rows.

**RESEARCH CONCERNING THE CONTAMINATION WITH NITRATES,
NITRITES AND AMONIUM OF THE SURFACE WATER AND
UNDERGROUND WATER IN THE RIVER BEGA AREA**

**TRĂILĂ CRISTINA*, ALEXA ERSILIA*, LĂZUREANU A.*, COSMA
ANTOANELA****

** U.S.A.M.V.B. Timisoara, Facultatea de Horticultura, Facultatea de Agricultura*

Abstract

Among the inorganic origin products which contaminate surface waters and sediments there are the nitrogen compounds. The causes of the contamination with nitrogen compounds are: intensive agriculture, raising animals, rain-falls and leaching of the nitrogen compounds. The study determined the nitrate, nitrite and ammonium contamination of the surface and underground water taken from the Bega river area.

THE INFLUENCE OF THE UNCONVENTIONAL TILLAGE SYSTEM UPON FUEL INTAKE IN MAIZE CROP

TONEA CORNELIA, DRĂGOI G., POPA D., LĂZUREANU D., PILOCA L.
U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

This paperwork presents the influence of tillage methods upon fuel consumption, one of the basic requirements of a profitable agriculture. Soil works represent the intervention – usually mechanical – performed upon soil with various tools in order to achieve a proper environment for plant development. We used two tillage systems: the classical system and the unconventional one. Experiments were performed under the pedoclimatic conditions specific to the Banat's Field at the Banat's University of Agricultural Sciences and Veterinary Medicine Timișoara – the Didactic Station, during 2004-2005. Taking into account the necessity to eliminate the conventional system's disadvantages, the elaboration of some alternative soil working technologies to assure the preservation and maintenance of its productive capacity, and also the decrease of energy intake, represents now a necessity in order to develop and strengthen a durable agriculture.

THE INFLUENCE OF SOIL MINIMAL TILLAGE UPON SOME PHYSICAL FEATURES AND UPON MAIZE PRODUCTION IN S.D.TIMIȘOARA

DRĂGOI G., TONEA CORNELIA, POPA D., LĂZUREANU D., PILOCA L.
U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

This paperwork presents the influence of working method in maize crop upon physical features and on the obtained yield. We used two tillage systems: the classical system and the unconventional one (conservative). Experiments were performed under the pedoclimatic conditions specific to the Banat's Field at the Banat's University of Agricultural Sciences and Veterinary Medicine Timișoara – the Didactic Station, during 2004-2005. Taking into account the necessity to eliminate the conventional system's disadvantages, the elaboration of some alternative soil working technologies to assure the preservation and maintenance of its productive capacity, and also the decrease of energy intake, represents now a necessity in order to develop and strengthen a durable agriculture.

THE INFLUENCE OF SOIL TILLAGE UPON SOME PHYSICAL FEATURES AND UPON WHEAT PRODUCTION IN S.D.TIMIȘOARA

TONEA CORNELIA, DRĂGOI G., POPA D., LĂZUREANU A., PILOCA L.
U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

This paperwork presents the influence of working method on physical features and on yield in wheat crop. We used two tillage systems: the classical system and the unconventional one (conservative). Experiments were performed under the pedoclimatic conditions specific to the Banat's Field at the Banat's University of Agricultural Sciences and Veterinary Medicine Timișoara – the Didactic Station, during 2004-2005. Taking into account the necessity to eliminate the conventional system's disadvantages, the elaboration of some alternative soil working technologies to assure the preservation and maintenance of its productive capacity, and also the decrease of energy intake, represents now a necessity in order to develop and strengthen a durable agriculture.

THE LEGISLATIVE EVOLUTION CONCERNING HORTICULTURAL SECTOR IN THE EUROPEAN UNION

STANCIU S.*, STANCIU ALINA, CÂNDEA ADRIANA BEATRICE*****
**U.S.A.M.V.B. Timisoara, Facultatea de Management Agricol, **Primaria
Municipiului Timisoara, ***Univeristatea Eminescu*

Abstract

Horticulture is the science or art of cultivating fruits, vegetables, flowers or ornamental plants. Wether it's growing, eating or trading the European Union (EU) is a major player in world horticulture. Across the EU there are wide regional variations in the pytes of produce grown, from the cabbages and turnips of northern Europe to the citrus fruits of Greece. The EU is also leading importer an exporter of fruit and vegetables.

LEGISLATIVE MEASURES REGARDING OENOLOGICAL PRACTICES QUALITY AND LABELING

STANCIU S.

U.S.A.M.V.B. Timisoara, Facultatea de Management Agricol

Abstract

As already indicted, the common organization of the market in wine has already dealt with a number of technical and commercial questions which generally do not fall within the scope of Community legislation in the other common merket organizations. The individual arrangements, which are the outcome of difficult compromises taking account of long-standind practices and sometimes conflicting interests, must be analyzed against the relevant background and in the light of the general equilibrium achived.

EU PESTICIDE LEGISLATION – FRIEND OR FOE FOR DEVELOPING COUNTRIES

STANCIU S.

U.S.A.M.V.B. Timisoara, Facultatea de Management Agricol

Abstract

The trade in fresh fruits and vegetable from developing to developed countries is growing rapidly and is becoming an increasingly important source of income and foreign exchange. However, agronomic factors combined with high cosmetic quality standards in Northern markets mean that pesticide use on exported fruits and vegetables tends to be particularly high compared to other crops, with concomitant risks of resistance build-up operator and consumer health risks and environmental impact.

STUDY CONCERNING THE DETERMINATION OF THE RHIZOSPHERIC MICROFLORA STRUCTURE AT THE TRANSGENIC SOY PLANTS

PRUNAR SILVIA*, ȘUMĂLAN RENATA**

**U.S.A.M.V.B. Timisoara, Facultatea de Agricultura, **Facultatea de Horticultura*

Abstract

*The present paper deals with the study of the rhizospheric microflora structures at transgenic soybean plants (*Glycine max* L.). The following soybean varieties have been used: stein 2254RR and Perla. The experiment was carried out in the laboratory and after a month the number and the culture character of the microorganism colonies was determined. The transgenic plants develop in the rhizosphere a greater number of microorganism than the non transgenic ones but plants show in the rhizosphere less microorganisms variety.*

**CORRELATION COEFFICIENTS BETWEEN PRODUCTION (YS, YP) AND
DROUGHT TOLERANCE INDICES IN SOME BARLEY
CULTIVARS (*Hordeum vulgare*)**

VELICEVICI GIANCARLA, NEDELEA G.
U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

Today's plants are products of plants responses to environmental changes. Among this environmental factors, water availability is the most important. Water stress, in a broad sens, includes both drought and salt stress. It is probably not an exaggeration that some researches stated related to this topic> water stress signaling has in large part shaped the flora on Earth. Based on the yield potential (Yp) and stress yield (Ys) quantitative criteria of drought tolerance such as: mean productivity (MP), tolerance index (TOL), geometric mean productivity (GMP), stress susceptibility index (SSI), and stress tolerance index (STI) were calculated. The results obtained exhibited highly significant differences between the lines for Yp, Ys, indicating the presence of genetic variation.

**THE INFLUENCE OF THE GRAFTING TIME UPON THE TOTAL BIOMASS
ACCUMULATED IN KG/HA FOR APPLE AND APRICOT TREES AT
S.C.D.P.BIHOR NURSERY**

VENIG-UNGUR AURORA
Universitatea Oradea

Abstract

The results obtained refers to the influence of the dofferent grafting times studied, which constituted the varieties of the experiences (August 10th, August 20th and AugustTH) upon the total acxcumulated biomass (branches and leaves) in kg/ha for apple and appricot species at SCDP Bihor Nursery. Based on the registered data, the analyses made and the results obtained, values superior to the total accumulated biomass as compared to control variant are registred in case of apple species grafting time August 10th and results superior to control variant, the average of the apricot tree no significant differences as compared to control variant are registered, in the presence of the total biomass accumulated during the three grafting times.

**THE INFLUENCE OF THE CRAFTING TIME UPON THE PRODUCTION OF
CRAFTED TREES FOR APPLE AND APRICOT TREES SPECIES AT
S.C.D.P. BIHOR NURSERY**

VENIG-UNGUR AURORA

Universitatea Oradea

Abstract

The results obtained to the influence of the 3 moments of grafting – August 10th, August 20th and August 30th upon the production of grafted apple and apricot trees at SCDP Bihor Nursery. Based on the registered data, analyses and results obtained, the best grafting time in case of apple species is August 10th, and in case apricot the best grafting time is August 20th.

GERMAN PLANT NAMES AND GEOGRAPHICAL ONES

ZEHAN RODICA LIANA

U.S.A.M.V.B. Timisoara, Facultatea de Agricultura

Abstract

The present paper tries to show that many German plant names are derived from names of countries and towns. As concerning the plant names having as a compound names of countries it must be said that these names are used attributively. Plant names derived from cities either contain the name in the plant names or the name of the town is used attributively.

**THE STUDY OF THE COMBINATION ABILITY FOR THE GRAIN NUMBER
IN THE MAIN SPIKE IN F₁ HYBRIDS**

LAZAROV SEBASTIANA MIHAELA, NEDELEA G.

U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

The biological material taken into study comprised 7 local foreign autumn wheat varieties that were regarded as parental forms. The hybrids resulted from crosses using partial diallel crossing. The differences between F₁ hybrids regarding the grain number in the main spike are due to general combining ability as well as to specific combining ability of the parental forms. The gene expression for the considered character is given by gene dominance or epistatic effect. In the present paper, in order to point out the combining ability, we used Griffing model II (1956) that refers to parents and F₁ hybrids. The selection of the most appropriate crossing method depends mainly on the parent's ability to recombine characters in a new cultivar. The combining ability refers to the possibilities of one parent to cross with another and to give rise to progenies that prove to be superior to parents.

STUDIES REGARDING THE BEHAVIOUR OF SOME SORTS OF PEACH-TREE ACCORDING TO THEIR PLANTING DISTANCE AND WREATH SHAPE

BUCUREAN EVA*, IORDĂNESCU OLIMPIA ALINA, DRĂGĂNESCU E.**,
BLIDARIU AURICA****

** Universitatea Oradea, ** U.S.A.M.V.B. Timisoara, Facultatea de Horticultura*

Abstract

In a peach tree plantation settled in 1998 in Oradea, we have studied the behaviour of Springgold, Redhaven and Fall Gorgeous sorts, planted at a distance of 4 meters between rows, which later was gradually reduced to 3, 2, 1 and 0.5 meters and having tree wreath shapes: vertical, parallel ipsilon to the direction of the row perpendicular ipsilon to the direction of the row. The thickening of the trunk was negatively influenced by the diminishing of the planting distance and the vigour of the trees decreased with 2%, 19% and 38% compared to those planted at 3m. fruit production has a raising tendency according to the diminishing of nutrition area which is superior with 92-160% as the distance reduced 2m, 1m and 0.5m to the trees planted at 4x3m. the superintensive growing of the peach tree is also possible with standard grafting stock sorts. Redhaven with diminished vigour is more suitable for this kind of growing.

THE INFLUENCE OF SLOPE-LANDS UPON THE APRICOT TREE, IN THE AREA ORADEA

BUCUREAN EVA*, IORDĂNESCU OLIMPIA ALINA, DRĂGĂNESCU E.**,
BLIDARIU AURICA****

** Universitatea Oradea, ** U.S.A.M.V.B. Timisoara, Facultatea de Horticultura*

Abstract

In order to observe the behaviour of apricot- tree on the slope-lands an experience has been made, having as variants the wideness of the terrace of 4 and 8 meters, the position of the trees on the terrace surface middle downhill and uphill, as well as the distance between the trees of 4,3,2, and one meter in a row. Five years after the planting the behaviour of apricot trees on the slope hills of Oradea is very good, the thickness of the tree frunks being influenced more by the distances of planting and the number of trees, as well as by wideness of the terrace surface.

**RESEARCH CONCERNING THE GRAPE QUALITY INCREASE IN CASE OF
SOME TABLE GRAPE VARIETIES USING SPECIFIC TECHNOLOGICAL
PRACTICES DURING VEGETATION STAGE**

DOBREI A.

U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

Table grape varieties comparatively with grape wine varieties are extremely demanding concerning the environmental factors and technological practices. In case of table grape varieties the technological practices applied during the vegetation have a major impact on grape yield and mainly on grape quality. These technological practices must be done in terms of characteristics for each variety, soil and climate conditions and last but not least depending on the technological potential of each vineyard. Most of the technological practices are done manually and this implicitly involves many costs and labor and at the same time they must be done on time and differentiated depending on each grape variety. Moreover, it is well-known that leaves are the most important organs for plants and each grape variety have a specific ratio for foliar surface and grape productivity.

**A STUDY OF THE FACTORS FAVOURING THE APPEARANCE OF
DEGRADING PROCESSES OF LANDS AND SOILS IN THE BISTRA
MARULUI DRAINAGE AREA**

DUMITRAȘCU T.

U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

The drainage area of Bistra Marului and its affluents, located on the northern slope of the Carpathian Mountains, is among the territories affected by torrential phenomena and by degrading process in the Banat area. The territory in this geographical area has been researched and analysed for 25 years now with the help of the following methods: literature documentation, monitoring, experimenting and theoretical analysis. Knowing the factors that favour the appearance of degrading process of soil allowed the identification of the causes of degradation and, implicitly, the adoption of a set of improving measures meant to ensure the stopping of lands degraded in the drainage area under study. We have made recommendations concerning forest, pastoral, and tourism activities in the area meant to rationalize these activities with a view to environmental protection. We have identified in the area the three sculptural complexes – Borascu, Rau Ses and Gornovita – that are the most characteristic feature of the Carpathian relief.

THE INFLUENCE OF HORMONAL BALANCE OF IN VITRO CAPSICUM ANNUUM CULTURE

CIOROGA ADRIANA, BOTĂU DORICA, IVAN ALEXANDRA
U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

The biological material was represented by two local population of pepper for pepper meal production: Arad 6 (genotype 1) and Carmen (genotype 2). The explants represented from cotyledons and mesocotyl fragments were inoculated on MS medium with hormones addition to establish their response at the in vitro cultivation conditions, in two cultivation cycle. In vitro response of different explants and the regeneration were established using five medium variants. In these experiments we have followed in vitro response of different explants type, in order to improve the regeneration method, directly but also indirectly. At high concentrations, each hormone, individually administered, usually determines callus formation and organogenesis process inhibition. We have followed callus formation on studied genotype and callus culture maintaining, as tissue source for cellular suspension initiation.

THE INFLUENCE OF PREEMERGENT PLANT OVER MAIZE CULTURE PRODUCTION

MATEI IRINA FLORENTINA, LĂZUREANU A.
U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

The experiments who were made show that Romanian agriculture, crossed through organization and technique changes, rotation also culture of preemergent plant, is still one of the most important methods for to obtain high productions, without negative effects over hardness of the environment and ecological balance. Researches were carried out for the hybrid Florencia, on a slightly sodic saturated vertisol, strongly gleyed at the discipline of Agrotechniques within the Banat's University of Agricultural Sciences and Veterinary Medicine Timisoara – the Didactic Station, during the experimental years 2003-2004. The preemergent plant has an important role over the production of maize, changing it. Soy bean is the best preemergent plant for the culture of maize, with an increment of production by 4.70 q/ha in 2003 year and 6.20 q/ha in 2004 year. The best preemergent plant for wheat is sun flower with an increment of production 1.90 q/ha in 2003 and 0.90 q/ha in 2004. In the experiment can observe the increase of production at maize in rotations of cultures comparative with monoculture.

**STUDEIS REGARDIN POTATO (*SOLANUM TUBEROSUM* L)
REGENERATION USING MERISTEM TIP CULTURE TECHNIQUE**

DANCI OANA MARCELA, NEDELEA G.

U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

Meristem tip culture techniques is one of the used in vitro culture initiation techniques and is most of all used in order to obtain virus free plantlets. In this study, there have been used four Romanian potato cultivars and ten artificial nutritive medium variants in order to establish the best protocol for potato shoots regeneration starting from meristems. The best results have been obtained on PM medium added with 1 mg/l indolyl acetic acid, 1 mg/l indolyl butyric acid and 0,3 mg/l geberelic acdi for the genotype Nicoleta when the meristem was constituted of meristematic dome and four leaf primordia.

**STUDEIS REGARDIN WHEAT CALUS INDUCTION AND PLANTS
REGENERATION FROM ANTERS AND IMATURE EMBRYOS CULTURE**

DANCI M., NEDELEA G., DANCI OANA

U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

Plants initiation and regeneration from cells and tissues cultured in vitro constituie a first stage but also an essential condition in using biotechnologies in order to develop different programs for cultured species breeding. This, callus initiation technique can be use in wheat breeding programs by inducing somaclonal variation generated by in vitro culture (1). In this study we have been used two wheat genotypes and two culture systems that permit callus induction and plants regeneration. The culture systems used differ depending on the explant and artificial nutritive culture media used.

RESEARCHES CONCERNING YIELD STABILITY OF SOME WINTER WHEAT VARIETIES IN DIFFERENT ENVIRONMENTAL CONDITIONS

TODICA F., NEDELEA G.

U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

In the present work, we have studied 20 winter wheat varieties in three different locations from the West part of Romania in the interval 2003-2005. Climatically speaking, the most favorable crop year for all three locations was 2005 and the worst was 2003. Comparing the results with the experience mean for 3 research years, in Timisoara only Dor variety registered highly significant grain yields, the rest of the varieties registered an equivalent yield potential of 90-110 % comparing to the mean. In Peciu Nou, Delia variety achieved high significant yields comparing to experience mean, the rest varieties giving values between 90-115 % to the mean. In Oradea, the studied wheat varieties achieved grain yields between 90-110 % comparing to the experience mean. On the ground of the results obtained for the studied varieties in three different locations in the interval 2003-2005, we have managed to assess the adaptability potential and the grain yield stability using the regression coefficient according to Finlay-Wilkinson. Thus, the most adaptable wheat varieties proved to be Bezostaia, Lovrin 41 and Rapid. The most reduced stability was observed in the following varieties: Expres, Alex, Dor. Generally, high yielding varieties exhibit reduced adaptability for different climate conditions while those low yielding proved the reverse.

RESEARCHES CONCERNING THE ECOLOGICAL PLASTICITY OF SOME AUTUMN WHEAT VARIETIES CULTIVATED IN THE CLIMATE CONDITIONS OF BANAT PLAIN

TODICA F., NEDELEA G.

U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

The present work is focused on testing a collection of 25 autumn wheat varieties grown in the climate conditions specific for Timisoara in the period 2000-2002. In order to evaluate the results for interpretation of the ecovalences, we used the specific methods (ecological valences). Admis confirm the theory relating to negative correlation between yield capacity and adaptability potential of the considered varieties. It may be said that Canon, Fundulea 4, Delia, Bucur and Cadet showed significant plasticity that is statistically covered; growing such varieties will be safe even when climate accidents occur. In case, high grain yields are proposed to be obtained, there are recommended the following varieties: Dor, Flamura 85, Admis; for safe grain yields even in less favorable climate conditions we recommend Canon, Delia, Fundulea 4 wheat varieties.

THE MANAGEMENT OF INTEGRATED CONTROL OF WEEDS FROM MEDICINAL HERBS CROPS IN THE AGRO-ECOLOGICAL AREA OF ARAD

HĂLMĂGEAN L., CRIȘAN SIMONA, CHIȘ S.

Universitatea Aurel Vlaicu Arad

Abstract

The “integrated control” concept involves the development of certain technologies which gather preventing and control methods and which, when applied, will determine an achievement of some efficient results by economical point of view. The Integrated Control of Weeds (ICW) means, as a rule, the application of some “friendly” technologies for the environment, based on both economical and ecological principles, just like the principles of the development of a durable agriculture. The management of ICW system for Arad agro-ecological area consists of consultancy, audit, crops rotation, weeds integrated fighting, the wastes management, biodiversity, economical efficiency and social aspects.

CLIMATE ABILITY OF THE C-V. TEREMIA OF PRODUCING RED WINES

ȚĂRU VIORICA

U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

Wine quality is conditioned by grape quality as raw material, quality expressed by sugar content and acidity and, in the case of red, flavour wines, by antocyan content, i.e. aroma. Ensuring technological features of quality wine grapes is conditioned, in its turn, by the oenologic potential of the cultivar, by cultivation technology, wine obtaining and, last but not least, by climate conditions. If vineyard cultivation technology is available for viticulturists, climate factors cannot be guided, but choosing fruiting vineyard cultivars that ensure efficient grape yields quantitatively and qualitatively can valorise them.

**RESEARCHES REGARDING THE EFFICIENCY OF SOME HERBICIDES IN
FIGHTING AGAINST WEEDS IN THE AUTUMN WHEAT CROP, AT THE
DIDACTIC STATION TIMISOARA IN 2005**

LAZUREANU A., CÂRCIU GHE., MANEA D., ALDA S., LĂZUREANU D.
U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

Researches were performed in the experimental field belonging to the discipline of Agrotechnology, located at the Didactic Station Timișoara, in 2005. The experiment was placed on a cambic chernozem, medium levigated, slightly gleyed, clay-loamy, with a humus content of 3.41%, medium provided with mobile phosphor (17.8 ppm), with a high content in assimilable potassium (187.6 ppm) and neuter reaction (pH 6.85) within the arable horizon. In terms of climate, monthly average temperatures and rainfall recorded in 2005 had similar values like the multi-annual means, excepting April, with 154.4 mm. The percentage of weed removal was between 74.28% and respectively 92.15%. Wheat yield oscillated between 41.20 q/ha and 46.58 q/ha. The best results were obtained after the application of the herbicides Lancet 1.25 l/ha and Mustang 0.5 l/ha.

RECONVERSION OF VINEYARDS FROM TIMIȘ COUNTY

TÂRU VIORICA

U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

Romania integration in European Union needs the adoption of a development strategy for community market of vine and wine. An important goal is the viticulture development and the reconversion of vineyards for the increase of their potential and the improvement of the range structure of wine grape varieties. Vineyards reconversion represent the process of adaptation of grape variety structure, the production directions and the wine ranges to European union needs.

**STUDIES CONCERNING THE BEHAVIOR FOR SOME GREEN PEPPER
LOCAL LANDRACES IN THE CLIMATE CONDITIONS OF BANAT'S FIELD**

BERAR V., POȘTA GH., VASIESCU REALTA NINIVE
U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

The biological material taken into our study consists of two different green pepper local land races: Chinejan and De Satu-Mare. In case of Chinejan local land race, the fruit yield mainly depends on the combination of the following factors: pericarp thickness correlated with fruit diameter and fruit length. Comparatively in case of De Satu-Mare local land races, it has been noticed that fruit number/plant was significantly induced by the interaction between fruit weight, fruit length and fruit diameter.

**STUDIES CONCERNING THE BAHAVIOR OF SOME EALY CABBAGE
HYBRIDS IN COMPNARATIVE CULTURES AT DIDACTIC STATION
TIMIȘOARA**

POȘTA GH., BERAR V., VASIESCU REALTA NINIVE
U.S.A.M.V.B. Timisoara, Facultatea de Horticultura

Abstract

The biological material used for study was represented by 4 early cabbage hybrids: Saratoga F₁, Pandion F₁, Winner F₁, Tucana F₁. Tucana and Saratoga hybrids achieved yields over 50 t/ha in case of all four considered planting density variants, while the rest requested a larger nutritional area. From the correlation analysis between the two quantitative indices, mean head weight and mean yield for different planting variants, it could be assessed that in case of plant densities that generated between 57.000 and 66.000 plants/ha, the values are distinctly significant.

CHANGES IN QUALITATIVE ONION INDICATORS IN RESPECT OF NUTRIENT AND WATER SUPPLY

BARNOCZKI A., BARNOCZKINE SZTOILOVA ELENA
Gabonatermesztesi Kutato Kht, Hagymakutato Allomas Mako

Abstract

Genetic characters are fixed in onion varieties but environmental factors also play an important role in the expression of internal and external agronomic traits. Variety comparison trials indicate that irrigation has the greatest influence out of external factors on tested traits. The years effect is determined rather by the distribution precipitans and by missing rain in April and May. Studies on the effect of cultivation methods, the reactions of varieties and alterations of different environmental conditions prove that a reliable production of seed grow onions is only possible under irrigation in Hungary. Analysing the interactions of variety characters and their correlation, a close positive relation was found between yield and soluble solids, mean weight and percent of diseased bulbs. Yield was effected by 78.7% by the above listed three factors. We found a negative correlation when comparing soluble solids percent, refraction percent and percent of small bulbs.

OTDOOR FURINTURE

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Abstract

The garden furniture has to meet all the expectations to spend a quiet and relaxing time in the garden during the hot summer days. Made of wood, wicker, rattan, wrought iron it has to be attractive, easy to handle, comfortable and at an affordable price.