

## CONTENTS

### VOLUME 1

#### List of papers presented

#### Alphabetical List of Authors

#### Alphabetical List of Participants

#### Preface

### SECTION I: INTRODUCTORY REPORTS

Greenhouses in the Mediterranean regions : problems and tendencies.  
M. Grafiadellis

Conditions and perspectives for the development of vegetable production in the Republic of Macedonia.  
M. Ćirkova-Gjorgievska

Situation and prospects of vegetable growing and breeding in Hungary.  
A. Moor

Vegetable and potato production in Yugoslavia.  
Br. Lazić, D. Stevanović and Z. Vasiljević

### SECTION II: ORAL PRESENTATION : VEGETABLES

Nutritive value and role of vegetable in the prevention of non-communicable diseases.  
E. Monarov

Characteristics of vegetable consumption in Yugoslavia.  
D. Bozidarević and B. Vlahović

Plant genetic resources in vegetables and their use in plant breeding.  
L. Krusteva

(\*) The use of genetic markers for identification and estimation of vegetable plant species.  
M. Zlokolica, M. Milošević, Z. Nicolić, M. Graovac

Biological control of whitefly, *Trialeurodes vaporariorum* W. in Yugoslavia.  
P. Perić, N. Dimić, S. Krnjajić, M. Vukša and M. Cvetković

Information aspects in function of vegetable production.  
T. Stamenković and B. Radenović

The influence of fertilization on yield of different carrot varieties.  
M. Zdravković, M. Damjanović and D. Ćorokalo

The influence of the new technique of soil cultivation and sowing on the effects of mechanized carrot harvesting.

A. Bajkin, P. Žigmanov and V. Manojlović

The effects from pollination and usage of bees on seed number and onion seed quality.

Gj. Martinovski and R. Agič

Genetic, phenotypic variability and correlation analysis in some cabbage cultivars.

G. Šurlan-Momirović, V. Bjelić, V. Rakonjac, T. Živanović and G. Todorović.

Biological control of cabbage pests.

S. Krnjajić, N. Dimić, P. Perić, M. Vukša and M. Cvetković

The overwintering abilities and quality of lettuce varieties grown outdoors and green houses.

M. Damjanović, J. Zdravković and R. Đorđević

The effect of heavy metals on total soil microbiological activity in lettuce.

N. Milošević, M. Govedarica, M. Jarak and N. Petrović

The effect on nitrogen fertilizer on the content of dry matter and mineral elements in radish.

M. Đurovka, V. Markivić and Ž. Ilin

Modelling the effect of some factors on the biomass and nitrogen content of spinach.

V. Vancheva and I. Ivanova

Correlation between the morphological characteristics and the biochemical components of tomato fruit quality.

Ž. Marković, J. Zdravković and M. Damjanović

New tomato hybrids suitable for different production trends.

Z. Danailov and L. Russanov

The effect of seedling quality on tomato yield, plant and fruit characteristics.

V. Marković, M. Djurovka and Ž. Ilin

Tomato fruit set under three different greenhouse heating conditions.

E. Traka-Mavrona, F. Blestos, M. Grafiadellis and G. Spanomitsios

Qualitative characteristics of foreign varieties of tomato and pickling peppers controlled conditions in Greece conditions, cultivations.

N. Laiopoulou

The effect of NPK, Mg and B on the yield, morphological characteristics and quality characteristics of industrial tomatoes.

Gj.V. Kocevski, N.D. Jakimov, M.M. Jekić, and R. Koleva

The influence of pollination duration on yield and quality of tomato hybrid seed.

D. Jankulovski, M. Čirkova-Gjorgievska, Gj. Martinovski and J. Krskov

- Estimation of combining ability for yield and components of yield in pepper (*Capsicum annuum* L.).  
D. Števanović, B. Zečević and S. Brkić
- Sweet pepper response to the application of plant growth regulator atonic.  
N. Panajotov
- New pepper lines selected for resistance to Tobacco Mosaic Virus.  
M. Mijatović
- The susceptibility of Greek eggplant varieties to *Verticillium* wilt.  
F. Blestos, C. Thanassouloupoulos and D. Roupakias
- Characteristic of the bulgarian national collection of cucumber cultivars (*Cucumis sativus* L.) in relation to breeding.  
S. Neykov and M. Alexandrova
- The effect of intensive organo-mineral fertilization on the yield of greenhouse cucumbers and mineralization of nitrogen-containing organic compounds in soil.  
N. Alexiev and V. Rankov
- The effect of heavy metals on nodulation and microbial activity in the Rhizosphere of the pea.  
M. Jarak, M. Govedarica, N. Milošević, N. Petrović and M. Ubavić
- The interdependence of morphological characters in Yugoslavian bean varieties (*Phaseolus vulgaris* L.).  
M. Vasić, J. Gvozdanović-Varga and J. Červenski
- Correlation between nitrate content and some quantitative characters in the green bean collection.  
L. Krusteva, M. Sabeva and I. Lazonov
- Investigation of possibilities for French bean seed production in the agro-ecological conditions of Zaječar.  
S. Milutinović, Ž. Đukić and R. Petrović
- Role of bean seed in transmitting bean Common Mosaic Virus and Cucumber Mosaic Virus.  
M. Babović, A. Bulajić, G. Delibašić, S. Mililić and D. Todorović
- The effects of different sowing periods on the agronomic characteristics of Mungbean (*Vigna radiata* L./ Wilczek) in the ecological conditions of Tokat / Turkey.  
N. Geboloğlu, A. Ece and A. Yazgan
- SECTION III: ORAL PRESENTATION : POTATOES**
- Inheritance and heritability in F<sub>1</sub> generation of potato hybrids.  
Ž. Bugarčić, B. Jovanović, A. Đjokić and S. Prodanović
- New Dutch potato variety study in agro-ecological conditions of Dragačevo - Kaona.  
A. Đokić, S. Šušić, Z. Vasiljević, R. Đjekić and R. Dimitrijević

The effect of monoculture and potato fertilization on chemical changes in soil.  
B. Stoilković, R. Dimitrijević, S. Babić and S. Šušić

Effects of liming and the application of various phosphorous fertilizers on potato yield on pseudogley type soil in the Dragačevo region.  
Z. Bročić, D. Stevanović, M. Mišović, N. Momirović and D. Kovačević

Effect of organic mulch application on the yield of potato seed crop.  
N. Momirović, M. Mišović and Z. Bročić

Potato yield depending on evapotranspiration in the Vojvodina province.  
Đ. Bošnjak, B. Pejić and S. Dragović

Effects of fertility and irrigation on sugar content in potato tubers.  
Ž. Ilin, M. Đurovka and V. Marković

An Alternative technical-technological tillage of soil for potatoes production.  
L. Ružičić, D. Kovačević, M. Đokić, Đ. Glamočlija and V. Oljača

The relation between sucrose and cytokinins in the regulation of growth and branching in potato cv. Désirée shoot cultures.  
D. Vinterhalter, Br. Vinterhalter and M. Calović

Laser Light as a biostimulator into the potato production.  
G. Vasilevski and D. Bošev

Scanning Electron Microscopic (SEM) characteristics of spermoderm in some potato cultivars.  
D. Terziisky and A. Stefanova

One natural alternative pest control *Leptinotarsa decemlineata* say on potato.  
A. Mateeva-Radeva

The occurrence of *Polyscitalum pustulans* on potato in Yugoslavia.  
I. Vico, Br. Krstić and G. Stojanović

Pathogenic differentiation of soft Rot *Erwinia* potato parasites.  
A. Obradović and M. Arsenijević

Aucuba Mosaic Virus on potatoes in Yugoslavia.  
B. Todorović, M. Tošić and S. Nešković

Health status and recovery of potato cv. Early Rose.  
M. Ranković, Đ. Ružić and S. Paunović

Herbicide combination efficacy and potato yield in agro-ecological conditions of Dragačevo.  
M. Mišović, Z. Bročić, N. Momirović and B. Šinžar.

New aspects in foliar dressing and plant protection in potato.  
N. Shaaban, I. Manolov and B. Velev.

Several years of investigations on the efficacy of fungicides on the causer of Potato Late Blight (*Phytophthora infestans*).  
D. Matijević, Sn. Rajković, D. Milošević, V. Čarakević and T. Bošković.

Problems in controlling potato crop against the Colorado Potato Beetle in Eastern Serbia and choice of insecticides.  
R. Petrović, S. Milijić and D. Đorđević

Ovicidal effect on insecticides used in control of (*Leptinotarsa decemlineata* Say).  
D. Inđić, Z. Klokočar-Šmit, B., Orbović, M. Šestović and I. Perić

Susceptibility of the Colorado Potato Beetle (*Leptinotarsa decemlineata* Say, *Coleoptera* : *Chrysomelidae*) to applied insecticides in the republic of Serbia.  
A. Zabel, M. Kostić, D. Inđić, I. Sivčev and M. Draganić

Trends in the regional development of potato production in the republic of Serbia.  
J. Simić, V. Ranđelović and R. Stefanović

Economic significance, trends and problems in potato production in highlands of Central Serbia.  
S. Petrović and B. Zornić

## VOLUME II

### SECTION IV: POSTER PRESENTATION : VEGETABLES

Biological farms and vegetable production in Bulgaria. D. Dimitrov	433
Old populations and wild growing vegetable species at Kosovo and Metohija. Z. Ilić, Z. Krivošej, L. Amidžić and D. Milinčić	439
Optical and electrical properties of some vegetable seeds. A. Aladjadjian	445
The level of essential elements and microbial activity in the soil of seedling. D. Bogdanović, M. Čuvardić	453
The soil fertility in vegetable gardens in the vicinity of Novi Sad. M. Čuvardić, M. Ubavić and D. Bogdanović	459
The maintance of an optimal soil moisture in agricultural production. J. Sabo and Đ. Šević	467
Results of the effect of the LASER light on some vegetables. G. Vasilevski and D. Bošev	473
The application of electromotor driven hoes in greenhouses and allotments. A. Bajkin, P. Žigmanov and S. Deže	477
Comparative investigations of some Tobacco Mosaic Virus isolates from different host plants. Br. Krstić, G. Stojanović, I. Vico, M. Barać and B. Malinarić	483
Rapid identification of phytopathogenic bacteria originated from vegetables by the biolog system. J. Balaž, I. Kiryakov, V. Kiryakov and M. Vasić	491
Activity of Pyridaben on restistant glasshouse population of <i>Tetranychus</i> <i>Urticae</i> koch. D. Marčić	497
Optimizing the Rodenticide application in vegetable fields. M. Vukša, N. Dimić, P. Perić, Š. Krnjajić M. Cvetković and J.Šešić,	503
Determining the adhesion of pesticide solutions. E. Mihaylova, V. Gueorguiev, Z. Zaprianov and K. Mihov	511
Determination of manganese with thiozolylblue tetrazolium bromide in some vegetable crops. M. Kamburova	517
Determination of chromium with nitroblau tetrazolium chloride in the products of some vegetables. M. Kamburova	523

New trends in fresh vegetable packing. J. Gvozdrenović, V. Lazić and M. Curaković.	529
Computer program for dispersion analysis of two factors complexes and comparative analyses. T. Mokreva and G. Murgova.	537
Concentration of uranium in root-crops, bulbous and tuberous plants. M. Sarić, M. Stojanović, M. Babić, Lj. Čonkić and I. Bikit.	543
Phytopharmacologic value of herbicides in carrot production. G. Malidža, D. Glušac and A. Takač	549
Agrobiological study of short-day onion cultivars in the conditions of South Bulgaria. T. Barikov, V. Gueorguiev and R. Meranzova	553
Interdependence of morphologic characters of onion bulbs ( <i>Allium cepa</i> L.). J. Gvozdrenović-Varga, J. Panajotović and M. Vasić	557
Dynamic of losses during bulbs storage from semi-acrid onion cultivars. R. Agič, M. Čircova-Gjorgievska and Gj. Martinovski	565
Pendimethalin residues in onion. S. Lazić	571
Agrobiologic characteristics of rare onions <i>A. Fistulosum</i> , <i>A. Nutans</i> and <i>A. Schoenoprasum</i> L. . Br. Lazić, N. Cupurdija, M. Tomčić and J. Gvozdrenović-Varga	577
Phenotypic variability of quantitative characters in cabbage. ( <i>Brassica oleracea</i> var <i>capita</i> L.). J. Červenski and D. Bugarski.	585
The effects of paraquat on cabbage ( <i>Brassica Oleracea</i> var. <i>capitata</i> L.) cultured <i>in vitro</i> . T. Sretenović-Rajičić, Br. Vinterhalter and D. Vinterhalter.	589
The effect of nitrogen rates and application dates on Cabbage (cv. Bijeljinski) yield. D. Lopandić and D. Zarić	595
New solutions for field production of super early head cabbage (by pre wintering planting of seedlings) in the conditions of Bulgaria. K. Mihov	599
Parametric argumentation concerning a white cabbage harvester under conditions of parametric instability. Z. Zaprjanov, I. Ivanov and K. Mihov	607
Determining chromium with Iodnitrotetrazolium chloride in early headed cabbage. M. Kamburova	611

The influence of nitrogen quantities on Cauliflower development and yields. V. Bjelić	617
Creating new high yielding tomato varieties. T. Tudzarov	623
A study on the possibilities for increasing the adaptability in tomatoes ( <i>L. esculentum</i> Mill.). Z. Danailov and L. Rusanov	627
Yield components and total yield of tomato sorts and hybrids. S. Milutinović and Ž. Đukić	633
Inheritance mode and gene effects on the yield of various tomato genotypes. J. Zdravković and Ž. Marković.	637
Effects of two nutrient solutions at different conductivities on some growth parameters of tomato plants. K. Miliev and N. Alexiev	641
Intensive greenhouse tomato production through interplanting. K. Miliev and N. Alexiev	649
The influence of the type of substrate on growth and development of tomato transplants. J. Petrevska and G. Popsimonova	659
The breakeven point of production in Greek tomato industries. N. Laiopoulou, D. Božidarević	663
Problems in control of early blight in tomato. Zl. Klokočar-Šmit, D. Inđjić, R. Jakovljević, F. N-Dzi and P. Mitrović.	667
Susceptibility of new indeterminate lines of tomato to <i>Alternaria solani</i> in field conditions. A. Takać, Zl. Klokočar-Šmit, Đ. Gvozdrenović, R. Jakovljević and F. N-Dzi	673
<i>Pseudomonas viridiflava</i> : the cause of pathogenic changes in tomato fruits. S. Mitrev	679
The effect of intensive organo-mineral fertilizers on the yield of tomatoes, grown in plastic greenhouses, and on biological soil activities. N. Alexiev and V. Rankov	687
New early tomato cultivar for open field. A.S. Vlasov and T.G. Vlasova	693
Genetic analysis of earliness in pepper hybrids ( <i>Capsicum Annuum</i> L.). B. Zečević, D. Stevanović and D. Savić	697
Correlation between vegetative and productive characteristics of some pepper populations. D. Jankulovski, C. Stojkovski, S. Maznevska and G. Popsimonova	705



Compatibility between some pepper lines and varieties. G. Popsimonova and D. Jankulovski	709
Characteristic of new sweet spice pepper genotypes. M. Starčević, Ž. Miladinović and D. Stevanović	713
The production and technological characteristics of some lines of pepper variety Kurtovska Kapija in the region of Strumica. M. Gjeorgijevski, V. Kocevski, D. Jakimov and R. Koleva	717
Some morphological and biological characteristics of pepper produced under <i>in vitro</i> conditions. R. Koleva and M. Spasenoski	721
Diazotrophs and their activity in pepper. M. Govedarica, N. Milošević, M. Jarak D. Milošev and S. Đjurić	725
Influence of soil mulching on soil compression with pepper. A. Đjikić, Z. Ilić and S. Barać	733
Pathophysiological changes in pepper plants infected with Tobacco Mosaic Virus. D. Savić and M. Rakočević, L. Stanković	737
The response of local black pepper ( <i>Capsicum Annuum</i> L. var. <i>conicum</i> ) from different areas in Bulgaria to <i>Verticillium dahliae</i> Kleb. T. Todorova, G. Neshev and I. Ivanova	743
Mačvanka and Župska Rana - pepper cultivars tolerant to TMV and CMV. Ž. Miladinović, B. Milić and D. Stevanović	747
Chemical control through sprinkler irrigation of pepper blight caused by <i>Phytophthora capsici</i> Leonian. G. Neshev	751
The effect of plant growth regulator atonic on the yield and quality of the reproduced seeds of sweet pepper. N. Panajotov	757
Response of different eggplant cultivars to <i>Verticillium</i> Wilt ( <i>Verticillium Dahliae</i> Kleb. ). G. Neshev, I. Ivanova and L. Krusteva	763
Genetic analysis of yield and combining abilities in cucumber female lines. L. Stanković, N. Nevenkić and Z. Marković	769
Reproduction methods of cucumber accessions for conservation and exchange in the genebank. S. Neykov	773
The effect of the Helium-Neon laser irradiation of cucumber seeds on the physiological characters of plants grown under water stress conditions. D. Cholakov, N. Uzunov and R. Meranzova	777

The influence of pre-sowing laser and gamma irradiation upon the yield and quality of cucumber seeds. D. Cholakov, N. Uzunow and R. Meranzova	783
The response of introduced and local cucumber cultivars to the causal agent of powdery mildew <i>Sphaerotheca Fuliginea</i> . St. Masheva, M. Alexandrova, St. Neykov and D. Dobrev	787
The influence of the distance from the Northern and Southern forest belts on the yield and quality of two dry bean cultivars. T. Tonev and M. Stoyanova	793
Biological removal of N, P <sub>2</sub> O <sub>5</sub> and K <sub>2</sub> O with vegetable marrow yield under conditions mineral fertilizer application. M. Doikova, I. Belichki and H. Boteva	801
Opportunities for enlarging of germplasm in spring peas. M. Mihov, A. Mehandjiev and M. Stojanova	809
Influence of Afla “af af” gene on height peas plant ( <i>Pisum sativum</i> L.). R. Đorđević, M. Zdravković and D. Čorokalo	813
Influence of combine moving speed on harvest quality of different cultivars of peas in agroecological conditions of kosmet (yugoslavia). S. Barać, B. Jačinac, Z. Ilić, A. Đjikić and M. Biberdžić	819
Possibility of Nitrogen fixation in <i>Pisum sativum</i> L. and <i>Triticum Aestivum</i> . D. Mićanović, Z. Sarić, V. Raičević	823
New snap beans varieties. D. Čorokalo, Ž. Miladinović and M. Zdravković	829
Applying different statistical methods for evaluation of some beans ( <i>Phaseolus vulgaris</i> L.) mutation lines. D. Dimova and D. Svetleva	835
Study of some quantitative breeding characters in <i>Phaseolus</i> collection. M. Stoyanova and E. Penchev	843
Investigation of some biological characteristics of white beans ( <i>Phaseolus vulgaris</i> L. ) in different ecological conditions. S. Stamenković-Jovanović	847
The influence of the suspension fertiliser Lactofol on the soil and epiphyte microflora in French bean grown under plastic greenhouse conditions. K. Sapundijeva, J. Kuzmanova and N. Shaaban	851
Nodule formation ability of common bean ( <i>Phaseolus vulgaris</i> L.) cultivars. G. Milev and D. Genchev	857
Classification of cultivars of <i>Phaseolus vulgaris</i> according to their SDS-page protein patterns. M. Stoyanova	863

The dependence of leaf area size and dry matter of bean on plant density. M. Božić, N. Nenadić, D. Zarić, S. Vučković and M. Rakočević	869
Effect of virus diseases on some major production characteristics of bean cv. improved Gradištanac. M. Babović, S. Milijić, S. Milutinović, G. Delibašić and A. Bulajić	875
Dry bean harvesting. D. Georgiev	881
Effect of growing method and lettuce fertilization on changes of nitrate content in leaf. R. Pavlović, D. Stevanović and M. Kresović	885
Influence of substrates on fructification on Oyster mushroom ( <i>Pleurotus ostreatus</i> ) strain NS-16. D. Bugarski and Đ. Gvozdenović, A. Takač and D. Jovićević	891
Eliksir F <sub>1</sub> - The new sweet corn hybrid ( <i>Zea mays</i> var. <i>Saccharata sturt.</i> ). R. Đorđević, V. Pešić, A. Đjokić and T. Sretenović-Rajičić	895
A biochemical characterization of some local garden green beans accessions. M. Sabeva and L. Krusteva	899
<b>SECTION V: POSTER PRESENTATION: POTATOES</b>	
<i>In vitro</i> regeneration and propagation of potato and its genetic homogeneity determination by means of protein polymorphism of tubers. D. Merja and A. Stasa	909
Mode of potato peeling as a parameter for selector. N. Ružičić, V. Bjelić, S. Pavlekić and M. Gavrilović	917
Phenotype values, variability and productive properties in Dutch potato varieties under different agro-ecological conditions. Ž. Bugarčić, Z. Vasiljević, S. Šušić and A. Đokić	921
Distribution of potato viruses in Yugoslavia. M. Gavran	929
Effect of planting density and size of potato seed-minitubers on their yielding capacity. D. Georgakis, D. Karafyllidis, N. Stavropoulos, E. Nianiou and J. Vezyroglou,	935
Effect of planting density and size of potato seed-minitubers on their yielding capacity. D. Karafyllidis, J. Vezyroglou, D. Georgakis, N. Stavropoulos and E. Nianiou	943
Cinematic and dynamic characteristics and parameters of potato digger with oscillatory ploughshare. P. Ružičić,	951
<i>In vitro</i> propagation of potato ( <i>Solanum tuberosum</i> L.). D. Ružić, M. Milinković and D. Milošević	959

<i>Alternaria alternata</i> (Fries.) Keissle (sin. <i>A. tenuis</i> ness., sin. <i>A. longipens</i> (Ell. and Ev.) Meison), potatoes parasiet in Yugoslavia. V. Carakević and T. Bošković	965
Relation between initial and final population density of <i>Globodera rostochiensis</i> Well. on susceptible and resistant potato cultivars. H. Samaliev, R. Andreev and A. Samalieva	973
Exobacillin - A potential control agent for the Colorado Potato Beetle. J. Kuzmanova and K. Sapundijeva	977
Insecticide susceptibility of the Colorado Potato Beetle in the vicinity of Belgrade, Yugoslavia. I. Perić, N. Miloševski and P. Kljajić	983
Application of Imidacloprid through the leaf and potato tubers in the control of the <i>Leptinotarsa decemlineata</i> Say. M. Injac, S. Radosavljević, N. Kurjak, Lj. Epifanić and S. Ilinčić.	991
A study of Aphids flight activity ( <i>Homoptera, Aphididea</i> ) potential vectors of potato viruses. D. Milošević and O. Petrović	999
Specificity of <i>B. thuringiensis</i> subsp. <i>tenebrionis</i> effect and application. I. Sivčev, A. Zabel, B. Manojlović and M. Kostić	1007
Organogenesis of algorithm in potato. S. Jevtić, N. Mičić, G. Đurić and R. Cerović	1015
Model of ecological functions of growth and development in potato. S. Jevtić, N. Mičić, G. Đurić and R. Cerović	1019
Changes in potato production, consumption, economic position of potato growers in Yugoslavia. P. Munćan, D. Živković and S. Jevtić,	1025