**Articole reviste BDI**

1. Bădărău Carmen Liliana, Chiru Sorin Claudian, Damșa Florentina, Mărculescu Angela *„Behavior of several potato varieties with different starch content to potato tuber necrotic ringspot disease (preliminary studies).* Bulletin of Transilvania University Brasov, Series II: Forestry • Wood Industry • Agricultural Food Engineering, ISSN 2065-2135 (Print), ISSN 2065-2143, 2015, Vol. 8(57) No.1, pag 43-51
http://webbut.unitbv.ro/BU2015/Series%20II/BULETIN%20I%20PDF/06_BADARAU.pdf

**Abstract:** The goal of this research was to evaluate the behavior of 10 potato varieties (with different starch content) after mechanical inoculation with a $PVY^{NTN}$ isolate. Excepting the varieties Christian, Riviera and Bellarosa, which were very resistent and resistent to this pathogen, all the other varieties presented 62.5-100% infected plants. After 5 months from harvesting, the frequency of tubers with necrotic symptoms was between 2.2-27.4% for varieties Bellarosa, Jelly, Roclas and 62.6-97.8% for Desiree, Productiv, Red Lady, Carrera and Hermes. The tubers from samples with significantly higher starch content (varieties Riviera and Christian), after harvest and storage, didn't have visible tuber necrotic disease symptoms.
**Key words:** potato virus Y, starch content,varieties, necrotic strain

2. Damşa Florentina, Woinaroschy Alexandru, Olteanu Gheorghe, Bădărău Carmen Liliana, Mărculescu Angela "*Total Monomeric Anthocyanin and Total Flavonoid Content of Processed Purple Potato*". International Journal of Engineering Research and Applications (IJERA), ISSN: 2248-9622, 2016, Vol. 6, Issue 1, (Part -5), pag. 75-82
http://ijera.com/pages/v6no1(v5).html

**Abstract** It is well known that processing change physical and chemical composition of foods, thus affecting the content in bioactive substances. Potatoes are almost always consumed after processing (baked, fried or boiled) making it critical to understand the effect of such processing techniques on the containing in bioactive compounds. In order to determine the influence of processing on the content of anthocyanin pigments and flavonoids was achieved the extraction of these compounds from boiled and baked purple potato tuber (Albastru-Violet de Galanesti variety). Also, in order to obtain the maximum amount of anthocyanin pigments and flavonoids from processed potatoes was applied ultrasonic extraction (20 kHz) and was performed the mathematical modeling (central composite design) using SigmaXL software. The total anthocyanins content were determined spectrophotometrically by the pH differential method and the total flavonoids content were determine colorimetric by AlCl3 method. This study proves that the potato processing decreases the content of anthocyanin pigments and flavonoids.
**Key words:** purple potato, anthocyanin pigments, flavonoid, processed potato

3. Cojocaru Nicolae, Carmen Liliana Bădărău, Florentina Stroe. *"Preliminary studies regarding the potato virus Y (necrotic strains) extraction and purification"* Analele Universităţii din Oradea-Fascicula Biologie", ISSN 1224-5119, Noiembrie 2016, TOM XXIII Vol. 2, pag. 88-91
http://www.bioresearch.ro/bioresearch/2016-2.html

**Abstract:** The objective of this research was to study if the frozen material could be used to obtain a PVY suspension with a proper concentration for antisera preparation. The virus

extraction and purification was achieved from frozen leaves and fresh tobacco leaves (cv. 'Samsun' and 'White Burley') mechanically inoculated with a PVYN infected material (cv. 'Record' secondary infection with this pathogen). The experiment followed a schema used in other virology laboratories with some modifications particulary quantitative. Results of this preliminary studies indicated that frozen PVYN infected material is not advisible for the preparation of a virus suspension solution to be used for antisera production.
**Key words**: potato virus Y, necrotic strains, purified preparation

4. Bădărău Carmen Liliana, Rakosy Elena, Aurori Adriana, Chiru Sorin Claudian, Olteanu Gheorghe, Stefan Maria, Ghinea Adrian "*The incidence of potato virus Y (necrotic strains) in seed potato grown in several Romanian counties (preliminary studies)*". Annals of the University of Craiova–Agriculture, Montanology, Cadastre Series ISSN 1841-8317, 2016, Vol 46(1), pag.7-15
http://anale.agro-craiova.ro/index.php/aamc/issue/view/7/showToc

**Abstract:** Protective measures of culture against Potato Virus Y necrotic strains (PVYN) infections, diagnosis and control of this pathogen play an important role in potato seed production technology and multiplication. Also, the choice of resistant varieties to the PVYN infection could be one of the measures recommended for farmers and producers. Surveys during 2 years (2014, 2015), in five main seed potato growing areas of Romania (Brasov, Covasna, Harghita, Cluj, Suceava), for 10 varieties (Christian, Roclas., Riviera, Carrera, Bellarosa, Jelly, Desiree, Red Fantasy, Hermes and Red Lady), revelead significant differences in PVYN incidence.The tests confirmed the PVYN presence in all the regions, with high prevalence of this virus especially for the cultivars Hermes and Carrera and very low spread for for the cultivars the cultivars the cultivars the cultivars the cultivars the cultivars Riviera and Christian.

5. Bădărău Carmen Liliana, Ștefan Maria, Bărăscu Nina. *"Studies regarding the transmission of potato virus Y (PVY) trough several mechanical means"* Annals of the University of Craiova–Agriculture, Montanology, Cadastre Series ISSN 1841-8317, 2016, Vol XLVI/1, pag. 16-21
http://anale.agro-craiova.ro/index.php/aamc/issue/view/7/showToc

**Abstract:** The aim of this studies was to investigate the transmission of PVY strains PVYo, PVYN, PVYNTN, via tuber cutting and plant treated in susceptible cultivars. For the tuber cutting experiment, after one infected tuber was cut with a knife, four uninfected tubers were cut sequentially with the same instrument without disinfecting it between the cuts. In the other experiments, the virus transmission from infected to healthy plants was made by bouncing, brushing, hammering, squeezing and carborundum rubbing treatments. These treatments allowed exchange of sap between the healthy and infected material. Results revelead that seed cutting did not transmit the pathogen, whereas the other plant treatments caused varying level of PVY transmission, depending on the experiments variant. Plant bouncing was the least effective whereas hammering was the most effective variant.

6. Bărăscu Nina, Ștefan Maria, Hermeziu Radu, Bădărău Carmen Liliana *"Study on the culinary and technological quality appreciation of new varieties of potato obtained at NIRDPSB Brasov"* Annals of the University of Craiova–Agriculture, Montanology, Cadastre Series ISSN 1841-8317, 2016, Vol XLVI/1, pag. 22-30

http://anale.agro-craiova.ro/index.php/aamc/issue/view/7/showToc

**Abstract:** This study, conducted during 2015-2016 at NIRDPSB Brasov, was initiated in need of acquiring information on new potato varieties created in the institute and pursued their culinary and technological quality appreciation. The biological material analyzed is represented by potato varieties with improved genetic characteristics, both in terms of cultural qualities as well as resistance to diseases and pests.The culinary and technological quality of a potato variety must satisfy the requirements necessary to obtain raw material suitable for the purpose of use. The culinary quality was established by assessing the traits of overall appearance of tubers boiled, taste, crushing on boiling, pulp consistency, mealiness, pulp moisture, structure of starch granules, pulp color, tuber after-cooking darkening. The technological quality was determined by measuring the tuber starch content and establishing the suitability for processing into chips.

7. Bădărău Carmen Liliana, Chiru Sorin Claudian, Rakosy-Tican Elena, Aurori Adriana, Olteanu Gheorghe, Ghinea Adrian, Tican Andreea, Cioloca Mihaela. *"Preliminary studies regarding the incidence of potato virus Y in seed potatoes in Romania (for several cultivars)"* Revista: USAMV "Ion Ionescu de la Brad" Iaşi Lucrări Ştiinţifice Seria Agronomie – PRINT ISSN: 1454-7414, Editura "Ion Ionescu de la Brad" Iaşi, 2016, Vol. 59, nr. 1, pag. 43-49
http://www.revagrois.ro/index.php?lang=ro&pagina=pagini/revista_2016_1.html

**Abstract:** The farmers income is affected strongly by potato virus diseases. Potato Virus Y has become in the last years one of the most damaging pathogen of potato crop. It can cause serious reduced yield, stand loss and decrease of the tuber's quality. The necrotic and recombinant strains PVY play an important rol in the spreading of thisvirus. Elimination of this pathogen from potato supply is essential for seed production and the choice of resistant varieties to the infection with this virus could be one of the measures recommended for farmers and producers. The results of this preliminary study show that varieties resistant to necrotic strains PVY in our study (samples taken from theregionsBraşov, Covasna, Harghita, Cluj, Suceava, in 2014) were the following: Riviera, Bellarosa, Jelly, Roclas, Christian.
**Key words**: potato virus Y, necrotic strains, potato ringspot, necrotic tuber disease

8. Aurori Adriana, Bădărău Carmen Liliana, Rakosy-Tican Elena. *"Detection and identification challenges of potato virus Y, important pathogen of potato"*. Studia Universitatis LXI, BIOLOGIA, Nr. 1/2016, pag.177-196
http://studia.ubbcluj.ro/download/pdf/1022.pdf

**Abstract:** Potato virus Y (PVY) has become one of the most important pathogens of potato. Being a RNA virus, one of the main characteristic it's the great genetic variability. Several well characterized strains exists but the continues emergence of new forms, the fast spreading of the existent ones and the shifting toward the increased prevalence of the recombinant necrotic variants (PVYN-Wi and PVYNTN) raised a huge interest in finding ways for reducing the propagation of the disease. Two important strategies were adopted for concurring to the same outcome, the reduction of PVY incidence. The first one, consists in improving the genetic background of potato and creating the cultivars in which the integration of resistance genes to

pathogens, to PVY including, to be a priority. The second one, and this will be the subject of this review, relies on the finding of suitable methods for PVY detection which has to be fast and economical competitive for being applied to a large scale. The seed certification represents the most important step for multiannual and/ or interregional or international PVY spread prevention. There is no tolerance for necrotic PVY strains in seed, especially in the case of those batches that are obtained by biotechnology, and therefore, the screening for PVY became part of the protocol for potato seed certification.
**Key words:** bioassay, molecular detection, ELISA, PVYNTN, PVYN-Wi

9. Motica R, Nemes Z, Mike L., Baciu A. *"Results concerning the virotic and physiological degeneration of the seed potato during the years 2013-2015 at Târgu Secuiesc"*. Journal of Horticulture, Forestry and Biotechnology, ISSN 2066-1797, 2016, Vol. 20(4) pag. 83-87
http://www.journal-hfb.usab-tm.ro/2016/Vol%2020(4)%20PDF/16Motica%20Robert%20BUN.pdf

**Abstract:** Production and multiplication of seed potatoes in Romania passed in recent decades through a difficult period in terms of cultivated areas and quality of potatoes produced in the traditional closed areas. Planting material quality is a key factor for potatoes, being more important compared to other cultivated plants. It determines the quality and quantity of the crops, being widely recognized that potato production is more than 50% determined by the quality of plant material. Nowadays it is widely accepted throughout the world that the decreasing quality of seed potato is caused by potato degeneration. Depreciation of biological production potential is the consequence of two major causes, infection by viruses and decrease in the growth vigor due to physiological age.
**Key words**: potato, degeneration, quality, virus.

10. Ștefan Floriana Maria., Hermeziu Manuela, Hermeziu Radu, Bărăscu Nina *"Researches regarding the obtaining of new potato varieties by identifying of valuable breeding lines at NIRDPSB Brasov*". Journal of Horticulture, Forestry and Biotechnology, ISSN 2066-1797, 2016, Vol. 20(4) pag. 116-119
http://www.journal-hfb.usab-tm.ro/2016/Vol%2020(4)%20PDF/22Stefan%20Maria.pdf

**Abstract:** In the context of continuous change of consumer demands, evolution of crop technologies and the accentuated variability of climate conditions is necessary to create new potato varieties that contribute at the raise of quality standards. The researches undertaken in the 2012-2016 period are covered by the breeding program of NIRDPSB Brasov and runs through the gathering of information concerning the existing and available genetic resources and led at the identification of new genotypes with improved genetic traits. The biological material is represented by 3 breeding lines and was obtained by sexual hybridization and subjected to the process of clonal selection. During the breeding process, the perspective lines were assessed in terms of morphological characteristics, production and resistance to late blight, viruses and wart disease, culinary quality and earliness, evaluation criteria required at the proposal for testing in the ISTIS network.
**Key words:** potato, clonal selection, breeding lines, varieties

11. Bădărău Carmen Liliana, Andreea Tican, Maria Ștefan, Nicoleta Chiru *Evaluation of vitamin C content in samples from ten potato cultivars inoculated with potato virus Y (necrotic strains)* University of Agronomic Sciences and Veterinary Medicine of Bucharest Faculty of Agriculture. Scientific Papers. Series A. Agronomy, ISSN 2285-5785, 2017, Vol. 60, pag. 197-202
http://agronomyjournal.usamv.ro/index.php/scientific-papers/current?id=710

**Abstract:** Providing basic nutrition to many people, being a staple food, potato tubers with higher levels of bioactive compounds (as vitamin C) could have a positive impact on the people health. This study aimed to evaluate the behaviour of 10 potato varieties with different L ascorbic acid content after inoculation with potato virus Y necrotic strains ($PVY^N$). Another goal of this research work was to elucidate the biochemical basis responsible for different reaction to infection with potato virus Y among several varieties which differ in their susceptibility or resistance to this pathogen. The potato cultivars evaluated were: Christian, Roclas, Red Lady, Marvis, Castrum, Brasovia, Hermes, Sante, Riviera and Carrera. The vitamin C content was estimated in the flesh matter only, using an enzymatic method. Significant differences in total ascorbic acid content were observed across the varieties before and after virus inoculation, the variety Hermes showing the highest content (746 $mg.kg^{-1}$ DW) in tubers after inoculation. Excepting the cultivars Christian, Riviera and Sante, which were very resistant and resistant to mechanical inoculation, all the other samples tested presented 48.6 - 100% infected plants.

12. Bădărău Carmen Liliana, Mike Luiza, Stefan Floriana Maria, Canja Cristina Maria., Lupu, Mirabela Ioana. "*Total Carotenoids Content in 20 Potato Cultivars Grown in Romania"* Bulletin of Transilvania University Brasov, Series II: Forestry • Wood Industry • Agricultural Food Engineering, ISSN 2065-2135 (Print), ISSN 2065-2143, 2017 Vol. 10 (59) No.1 pag. 71-78
http://webbut.unitbv.ro/Bulletin/Series%20II/2017/BULETIN%20I%20PDF/08_Badarau.pdf

**Abstract**: Potato tubers with higher levels of naturally developed vitamins, could have a positive impact on the human health. In this study, ten Romanian cultivars and ten commercial potato (very appreciated by the consumers and producers), planted in two sites in Romania were evaluated for total carotenoids (pro-vitamin A) content. Significant differences in carotenoids content were observed across sites and across genotypes. This study provides information on level of important micronutrients in several potato cultivars with improved nutritional quality.
**Key words:** potato, L ascorbic acid, carotenoids.

13. Bădărău Carmen Liliana, Bărăscu Nina, Ștefan Floriana Maria, Hermeziu Radu (2017). *Before and after potato virus Y necrotic strains ($PVY^N$) inoculation.* Journal of Hygienic Engineering and Design, 2017, Vol. 19, pag. 58-63
http://www.jhed.mk/filemanager/JHED%20Vol.%2019/03.%20FPP/04.%20Full%20paper%20-%20Liliana%20Carmen%20B%C4%83d%C4%83r%C4%83u.pdf

**Abstract**: Being a staple food crop, the potato provide basic nutrition to many people and offer several nutritional benefits. Despite valued as carbohydrate source, tubers with higher levels of bioactive compounds (as vitamin C) could have a positive impact on the people health. The goal of this research was to evaluate the behavior of 10 potato varieties with different L ascorbic acid content after inoculation with potato virus Y necrotic strains ($PVY^N$). Another goal of this study was to elucidate the biochemical basis responsible for different reaction to infection with potato virus Y among several varieties which differ in their susceptibility or resistance to this pathogen.

The potato varieties, including new Romanian and commercial cultivars evaluated for L ascorbic acid content, were the following: Christian, Roclas, Red Lady, Marvis, Castrum, Brasovia, Hermes, Sante, Riviera and Carrera. The vitamin C content was estimated using an enzymatic method (L-ascorbic test kit, Megazyme Ltd., Bioreba). The L ascorbic acid content was analyzed in the flesh only, with variety Hermes showing the highest content (746 mg/kg$^{-1}$ DW) in tubers after inoculation. Significant differences in vitamin C content were observed across the cultivars before and after virus inoculation. Excepting the cultivars Christian, Riviera and Sante, which were very resistant and resistant to mechanical inoculation, all the other varieties presented 48.6 - 100% infected plants. After 3 months from harvesting, the frequency of tubers with symptoms was between 8.2 - 34.7% for varieties Roclas, Marvis, Castrum, Brasovia and for Red Lady, Carrera, Hermes varieties this percentage was higher (69.2-98.2%).This study provides information on level of important micronutrients as L ascorbic acid in a range of several health **Key words**: Potato, L ascorbic acid, Potato Virus Y, Necrotic strains. and PVY$^{N}$ infected potato cultivars.

14 Tican Andreea, Chiru Nicoleta, Cioloca Mihaela, Bădărău Carmen. *Obtaining minitubers by applying method of culture on substrates industrial.* Scientific Bulletin. Series F. Biotechnologies, 2017, Vol. 21, ISSN 2285-1364, pag. 66-71

http://biotechnologyjournal.usamv.ro/index.php/scientific-papers/current?id=344

**Abstract:** National Institute of Research and Development for Potato and Sugar Beet Brasov in 2016 INCDCSZ investigated two hydroponic systems to see the behavior of different potato Romanian varieties (Braşovia, Castrum, Marvis and Sarmis) regarding the following parameters: the number of minitubers/plant and weight of minitubers/plant. As hydroponic systems it was used one with circulating nutrient solution and another one with static layer of nutrient solution and for both cases the substrate used was perlite. Regarding the average weight of minitubers/plant, the plants culture on circulating nutrient solution had a beneficial influence comparative with culture on static stratum of nutrient solution, which recorded a highly significant difference in minituber weight compared to the first mentioned, statistically assured. Analyzing the number of minitubers using the hydroponic culture, relative to control variety (Brasovia with 5.10 minitub./pl.) shows that the Castrum variety gets the best results with a positive significant distinct difference (+5.90 minitub./pl.) followed by variety Marvis with a positive significant difference (+5.10 minitub./pl.). Varieties influence on weight mintub./pl. shows that the difference is very significant positive for Marvis variety (+42.49 g), compared to control variety and insignificant for the other varieties. From the obtained data we recommend using hydroponic system with nutrient solution circulating.

15. Baciu Anca, Mike Luiza, Tican Andreea, Cioloca Mihaela, Serac Ioan. *Results regarding the determination of certain culinary quality and nutritional indicators for some potato varieties cultivated at Station of research and development for potato culture Târgu Secuiesc*, Journal of Horticulture, Forestry and Biotechnology, 2017, Volume 21(1), pag. 32-36

http://www.journal-hfb.usab-tm.ro/2017/Cuprins_vol.21(2).pdf

**Abstract:** The nutritional value of potato tubers is in close connection to their chemical composition. The composition and amount of nutrients in potato tubers depend on the growth conditions - temperatureand precipitates, soil and nutrients from soil and genetic material [**6**]. From total weight, the tuber contains 65-87% water, the rest of 13-35% being dry matter, from which the starch has the highest weight. Thestarch content varies between 8.0-25%, representing 63-84% from the dry matter. The rest of 1637% from the dry matter is represented by proteins (0.7-4.6%), soluble glucides (0.01-8.0%), fats (0.04-0.1%), crude cellulose (0.2-3.5%), mineral salts or ash (0.4-1.9%), vitamins, etc. [**7**]. Culinary quality of potato tubers is determined by appreciating their behavior at boiling. Culinary quality is givenby qualitative indices which show characteristics regarding the general aspect of boiled tubers, the taste, crushing at boiling, pulp consistency, mealiness, moisture, structure of the starch granules, pulp color, blackening after boiling. The purpose of these studies was to determine the main culinary and nutritional indicators from potato tubers of some potato tubers cultivate at Station of Research and Development for Potato Culture Targu Secuiesc.The main antioxidants identified in the chemical composition of the potato tubers (especially those with peel/red or blue pulp are: polyphenols (especially anthocyanins), L ascorbic acid, carotenoids, tocopherols, lipoic acid and selenium.
**Key words:** culinaryquality, nutritional indicators, potato.

16. Hermeziu Radu, Ștefan Floriana Maria, Prodan Delia, Bărăscu Nina, Hermeziu Manuela, Bădărău Carmen "*SEVASTIA – A new potato variety created at NIRDPSB Brasov*" Journal of Horticulture, Forestry and Biotechnology, 2017, Volume 21(2), pag. 38-41
http://www.journal-hfb.usab-tm.ro/2017/Cuprins_vol.21(2).pdf

**Abstract:** In the context of climatic change, increasing demands on the potato market, incidence of pests and diseases, new challenges are opened for potato breeding, called to create new varieties. New potato variety Sevastia aligns market demands, corresponds in terms of production capacity, resistance to pests and diseases and suitability for the industrial processing. Sevastia is a new medium-early potato variety, suitable for agricultural crop in all traditionally areas, obtained by sexual hybridization followed by clonal selection. After testing for three years at the State Institute for Variety Testing and Registration (ISTIS) in 2014-2016 years, has been approved and registered officially in the current catalog for varieties of crop plants in Romania (2017), the variety is currently patent pending.
**Key words:** potato breeding, variety description.

## Articole ISI acceptate pentru publicare

1. Bădărău Carmen Liliana & Donescu Daniela, Chiru Sorin Claudian, Donescu Victor *Incidence of potato virus Y and aphid flights in potato (Brașov 2014 - 2016)* Romanian Agricultural Research, Vol. 35, 2018

2. Tican Andreea, Chiru Nicoleta, Cioloca Mihaela, Bădărău Carmen Liliana *Obtaining mini tubers by applying hydroponic culture* Romanian Agricultural Research, Vol. 35, 2018

## Articole popularizare

1. Bădărău Carmen Liliana, Damșa Florentina, Olteanu Ghe., Chiru S. *„Tulpinile necrotice ale virusului Y al cartofului – o permanentă provocare pentru fermieri și producători”.* In: Cartoful in România” Vol. 24(1) 2015, pag. 70-73

2. Bădărău Carmen Liliana, Chiru Sorin Claudian, Sigmond Simona. „*Tulpinile necrotice ale virusului Y al cartofului (PVY) – o amenințare prezentă deocamdată pentru venitul producătorilor de cartof pentru sămânță”*. In: Horti magazin octombrie 2015, pag.15

3. Bădărău Carmen Liliana, Damșa Florentina, Olteanu Ghe., Chiru S. *„Tulpinile necrotice ale virusului Y al cartofului (PVY) – o provocare pentru cercetători și o amenințare pentru producătorii de cartof pentru sămânță”*. In: Revista Hortus nr. 14, 2015, pag. 133-138

4 Bădărău Carmen Liliana, Damșa Florentina, Olteanu Ghe., Chiru S.. *„Virusul Y al cartofului– o permanentă amenințare pentru producătorii de cartof pentru sămânță”* In: Cartoful in România” Vol. 25, 2016, pag. 73-75

5. Bădărău Carmen Liliana, Daniela Donescu, Sorin Chiru, Maria Florentina Stefan. „*Măsuri necesare pentru scăderea nivelului de infecție cu virusul Y (tulpini necrotice) în loturile de cartof”*. In: Cartoful in România Vol. 26, 2017, pag. 61-62

6. Donescu Daniela, Donescu Victor, Bădărău Carmen Liliana. „*Mai sunt fermierii interesați în monitirozarea populațiilor de afide din culturile de cartof pentru sămânță?”* In: „Cartoful in România” Vol. 26, 2017, pag. 63-68

## Carte

*„Tulpinile necrotice ale virusului Y al cartofului prezentare sintetică, repere documentare”,* Bădărău Carmen Liliana, Rakosy Tican Elena, Aurori Adriana, Chiru Sorin Claudian, Editura ArtSoleil Brașov, 2016, ISBN 978-606-94153-6-8, 165 pagini

## Capitole carte

*“Challenges in medicine, food control and environmental”,* Editori Floroian Laura, Badea Mihaela, Editura Universității Transilvania din Brașov, 2015, ISBN 978-606-19-0591-1 (CD, editura acreditata CNCSIS)

1.Bădărău Carmen Liliana, Damșa Florentina, Nistor Andreea . “*Effects of some combined treatments of PVY infected potato plantlets cv. Roclas* “. Capitolul 11, pag. 160-188

2.Bădărău Carmen Liliana, Damșa Florentina, Olteanu Ghe., Mărculescu A. “*Total ascorbic acid content in 10 varieties of potato different resistent to PVY necrotic strains*“.Capitolul 12, pag. 189-203

## Broșuri

1.„*Norme metodologice pentru organizarea producerii, multiplicării, prelucrării și comercializării cartofului pentru sămânță și eliminarea riscului de contaminare cu organisme de carantină”* (20 pagini)

*2.”Ghid tehnic. Măsuri suplimentare de producție și control în situația confirmării prezenței unor patogeni dăunători pentru cartof”* (17 pagini)