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РЕЗЮМЕТА
НА НАУЧНИТЕ ПУБЛИКАЦИИ И ТРУДОВЕ

на гл. ас. д-р Катя Спасова Узунджалиева
представени за участие в конкурс за заемане на академичната длъжност „доцент" по научна специалност 04.01.05 (Селекция и семепроизводство на културните растения), обявен от Институт по Растителни генетични ресурси - Садово, в ДВ, брой 17/28.02.2014г.

1.1

Аграрен университет - Пловдив, Научни трудове, том XLVI, кн. 4, 2001 г.
Юбилейна научна сесия "80 години висше агрономическо образование в България"
Agricultural University-Plovdiv, Bulgaria, Scientific Works, vol. XLVI, book 4, 2001.
Jubilee Scientific Session "80th Anniversary of the Higher Agricultural Education in Bulgaria"

Върху анатомичното устройство на лист на Crocus veluchensis Herb.

Мария Тодорова Попова
Катя Спасова Узунджалиева

Leaf anatomy of Crocus veluchensis Herb.

Maria Tododrova Popova
Katia Spassova Uzundzhalieva

Abstract

An investigation on the anatomic structure of the leaf of Crocus veluchensis Herb. was done, in the context of the detailed biosistematic investigation of the genus Crocus L. in Bulgaria. Special features of the epidermal type, keel, location of the tissues in the leaf and the number of the bundles were analyzed.

Направено е проучване за изясняване на анатомичната структура на листа при Crocus veluchensis Herb. Във връзка със започнатото цялостно биосистематично проучване на род Crocus L. в България. Анализирани са типа на епидермата особеностите на кила, разположението на тъканите в листната петура, и броят на устицата.

1.2

Научни трудове на Съюза на учените-Пловдив, серия Б. Естествени и хуманитарни науки, т.III. Научна сесия **"Естествени и хуманитарни** науки", 8. ноември 2002, * **Scientific researches of the Union of Scientists-Plovdiv**, series B. **Natural Sciences and the Humanities, Vol.III. Scientific Session "Natural Sciences and the Humanities"**, 8 November 2002

Анатомично устройство на лист при три вида от род Crocus L.в България

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Anatomical structure of the leaf of three species from the genus Crocus L. in Bulgaria

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Agricultural University – Plovdiv, Higher school "Agricultural college" - Plovdiv

Abstract

The current publication includes data obtained from the investigation on the anatomic structure of the leaf of the yellow spring flowering species from the genus Crocus L. : *Crocus flavus* Weston, *Crocus chrysanthus* Herb., *Crocus olivieri* J. Gay. High and width of the keel and width of the leaf petiole are described. The number of the bundels is determined.

1.3

Annuaire de l'Université de Sofia "St. Kliment Ohridski"
2004, volume 96, livre 4, pp 99–102
10 ème session scientifique, Sofia' 03

MORPPHOLOGY OF THE SEEDS OF THE SPECIES FROM THE GENUS *CROCUS* L., IRIDACEAE IN BULGARIA

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Key words: seed morphology, shape,size,colour of the seeds.

Abstract: The morphology of the species of the nine Bulgarian species from the genus *Crocus L.* – *Crocus veluchensis Herb., Crocus aureus Herb., Crocus chrysanthus Herb., Crocus olivieri Gay., Crocus reticulatus M.B., Crocus tommasinianus Herb., Crocus biflorus Mill., Crocus palasmaus Herb. and Crocus pulchellus Herb.*- have been studied. The most useful features for this study were the size of the seeds, their color, seed-coat ornamentation and inner structure of the seeds.

2.1. http://botanica.ovo.bg/_ld/0/70_s6paper50.pdf

Аграрен университет - Пловдив, Научни трудове, т. L, кн. 6, 2005 г.
Юбилейна научна конференция "Състояние и проблеми на аграрната наука и образование"
Agricultural University - Plovdiv, Scientific Works, vol. L, book 6, 2005
Jubilee scientific conference "State-of-the-art and problems of agricultural science and education"

СРАВНИТЕЛЕН АНАЛИЗ НА ВИДОВЕТЕ ОТ РОД *CROCUS L.*, РАЗПРОСТРАНЕНИ В БЪЛГАРИЯ

КАТЯ УЗУНДЖАЛИЕВА, ИРЕНА ИВАНОВА
АГРАРЕН УНИВЕРСИТЕТ – ПЛОВДИВ

COMPARATIVE ANALYSES OF THE SPECIES FROM THE GENUS *CROCUS L.* IN BULGARIA

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ABSTRACT

The aim of the current study is to make comparative analyses of the species from the genus Crocus L. in Bulgaria, based on the results from morphological, anatomical and cluster analyses. The results show identity in the arrangement of the species in groups between morphological study and the cluster analyses, while the results from the anatomical investigation show much different arrangement in groups.

2.2

Аграрен университет – Пловдив, Научни трудове, т. L, кн. 1, 2005 г.
Седма научнопрактическа конференция "Екологични проблеми на земеделието" Агроеко 2005
Agricultural University – Plovdiv, Scientific Works, vol. L, book 1, 2005
Seven Scientific Practical Conference "Ecological Problems of Agriculture" Agroeco 2005

ГРУПИРАНЕ НА БАЗАТА НА КЛАСТЕР-АНАЛИЗ НА ВИДОВЕТЕ ОТ РОД CROCUS L. (МИНЗУХАР), РАЗПРОСТРАНЕНИ В БЪЛГАРИЯ

ИРЕНА ИВАНОВА, КАТЯ УЗУНДЖАЛИЕВА
АГРАРЕН УНИВЕРСИТЕТ – ПЛОВДИВ

GROUPPING ON THE BASE OF CLUSTER ANALYSES OF THE SPECIES FROM THE GENUS *CROCUS L.* IN BULGARIA

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ABSTRACT

In Bulgaria are distributed nine species from the genus *Crocus L.* - *C. flavus Weston*, *C. velachensis Herbert*, *C. chrysanthus Herbert*, *C. olivieri J. Gay*, *C. biflorus Miller*, *C. tommasinianus Herbert*, *C. reticulatus Steven ex Adams*, *C. pallasii Goldb.* and *C. pulchellus Herbert*.

The aim of the current study is to classify the species from the genus in clusters on the base of the degree of identity between them.

The species are divided into groups on the base of 29 indexes. As a criterion of identity is used the squared Euclidean distance between groups. The clusters are presented graphically with dendrograms where the succession of grouping of the species can be seen.

The results show that the species from the genus can be divided into two main clusters – the first contains 5 species and the second – 4 of them.

Key words: *Crocus L.*, cluster analisys

2.3.

Научни трудове на Съюза на учените в България-Пловдив, серия Б. Естествени и хуманитарни науки, т.VIII. Научна сесия „Техника и технологии, естествени и хуманитарни науки", 26.X.2006, Scientific Researches of the Union of Scientists in Bulgaria-Plovdiv, series B. Natural Sciences and the Humanities, vol. VIII., ISSN 1311-9192, Technics, Technologies, Natural Sciences and Humanities Session, 26 October 2006

Възможности за използване на видове от род *Crocus L.* (Минзухар) в практиката

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Use of some species from the genus *Crocus L.* in practice

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Abstract

The species from the genus *Crocus L.* have some morphological and phonological characteristics which make them suitable for use in practice. They come out very early in spring and late in the autumn – periods when other plants are dormant.

However the introduction of these species is still very limited in Bulgaria, while they are widely spread in the gardens in West Europe. Some of them, like *C. vernus Hill.*, *C. flavus Weston*, *C. pallasii Goldb*, *C. chrysanthus Herbert*, *C. olivieri J.Gawl.*, *C. tommasinianus Herbert* can be successfully used in hybridization and introduction.

The cultivation of *C. sativus L.* for saffron is of great interest.

2.4

Scientific Research of the Union of Scientists in Bulgaria – Plovdiv, series B. Natural Sciences and Humanities, Vol. XII, ISSN 1311-9192, International Conference of Young Scientists, 18 – 19 June 2009, Plovdiv

РАЗПРОСТРАНЕНИЕ НА ВИДОВЕТЕ ОТ РОД CRATAEGUS L. (ROSACEAE) В РАЙОНА НА ГР. КАРЛОВО

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SPREDING OF THE SPECIES FROM THE GENUS CRATAEGUS L. (ROSACEAE) IN KARLOVO REGION

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Abstract

The genus Crataegus L. comprises a great variety of species from Rosaceae family. They are buzhes and small trees, up to 10-15 meters high. In Bulgarian flora the genus Crataegus L. is represented by the following species: C. monogyna Jacq., C. microphylla C. Koch., C. rhipidophylla Gand. (C. curvisepala), C. pentagyna Waldst & Kit. ex Willd., C. orientalis Pallas ex Bieb. (C. laciniata) , C. heldreichii Boiss. The aim of the current investigation is to make taxonomical evaluation of the species from the genus Crataegus L. in Karlovo region, on the territory of Voinlagovo, Mihilei, Pesnopoi and Bania in particular. The investigation established that the following species from the genus Crataegus L. can be found in these regions: C. pentagyna Waldst & Kit. ex Wil; C. orientalis Pallas ex Bieb., C. monogyna Jacq. with the subspecies: C. monogyna f. dissecta Borkh., C. monogyna var. azarella Grieseb., C. monogyna var. splendens K. Koch., C. monogyna var kyrtostyla Finerh.

2.5

СДРУЖЕНИЕ С НЕСТОПАНСКА ЦЕЛ „ТЕРИТОРИАЛНА ОРГАНИЗАЦИЯ НА НАУЧНО-ТЕХНИЧЕСКИТЕ СЪЮЗИ С ДОМ НА НАУКАТА И ТЕХНИКАТА – ПЛОВДИВ"
СБОРНИК НА ДОКЛАДИТЕ ОТ ТРЕТИЯ МЕЖДУНАРОДЕН СИМПОЗИУМ
"ЕКОЛОГИЧНИ ПОДХОДИ ПРИ ПРОИЗВОДСТВОТО НА БЕЗОПАСНИ ХРАНИ", 2009
NON-BUSINESS ASSOCIATION "TERRITORIAL ORGANIZATION SCIENCE AND TECHNOLOGY UNIONS AND HOUSE OF SCIENCE AND TECHNIQUE – PLOVDIV"
THIRD INTERNATIONAL SYMPOSIUM
"ECOLOGICAL APPROACHES TOWARDS THE PRODUCTION OF SAFETY FOOD", 2009

ВЛИЯНИЕ НА ЛИСТНОТО ПОДХРАНВАНЕ С „ХУМУСТИМ" ВЪРХУ ПРОДУКТИВНОСТТА И КАЧЕСТВОТО НА САЛАТА /LACTUCA SATIVA L./

Стефан Нейков, Петър Чавдаров, Катя Узунджалиева, Николая Велчева, Николай Нейков*
Институт по растителни генетични ресурси "К. Малков" – Садово
***Аграрен Университет – Пловдив**

INFLUENCE OF THE LEAF NUTRITION WITH "HUMUSTIM" ON THE PRODUCTIVITY AND QUALITY OF LETTUCE /LACTUCA SATIVA L./

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Abstract

The investigation is made on *Lactuca sativa var. romana* and *Lactuca sativa var.capitata* for early greenhouse and field production. During the vegetation /from the beginning of the technological ripeness/ two treatments are done in the period of 8 days with 40 ml/dka Humustim. Nontreated plants, with the same scheme, are used as a control. In the greenhouse 25 l/dka were used, and in the field conditions – 20 l/dka.

After twice treatment with Humustim of *Lactuca sativa* varieties in greenhouse during the vegetation the productivity is increased with 36.5% to 44.0% and in field conditions - with 35.0% to 38.0% for *var. romana* and *var. capitata* respectively. The vegetation period is shorter, the technical ripeness is longer, plants make arrows later, the resistance to plant disease increases, ecological production is received and there is nearly no use of chemical substances for plant protection.

Key words: plant protection, leaf nutrition, Humustim, lettuce

2.6

СДРУЖЕНИЕ С НЕСТОПАНСКА ЦЕЛ „ТЕРИТОРИАЛНА ОРГАНИЗАЦИЯ НА НАУЧНО-ТЕХНИЧЕСКИТЕ СЪЮЗИ С ДОМ НА НАУКАТА И ТЕХНИКАТА – ПЛОВДИВ"
СБОРНИК НА ДОКЛАДИТЕ ОТ ТРЕТИЯ МЕЖДУНАРОДЕН СИМПОЗИУМ
"ЕКОЛОГИЧНИ ПОДХОДИ ПРИ ПРОИЗВОДСТВОТО НА БЕЗОПАСНИ ХРАНИ", 2009
NON-BUSINESS ASSOCIATION "TERRITORIAL ORGANIZATION SCIENCE AND TECHNOLOGY UNIONS AND HOUSE OF SCIENCE AND TECHNIQUE – PLOVDIV"
THIRD INTERNATIONAL SYMPOSIUM
"ECOLOGICAL APPROACHES TOWARDS THE PRODUCTION OF SAFETY FOOD", 2009

ОЦЕНКА И УПРАВЛЕНИЕ НА ГЕНЕТИЧНИ РЕСУРСИ ОТ САЛАТА *(LACTUCA SATIVA L.)* И СПАНАК *(SPINACA OLERACEAE L.)*

Стефан Нейков, Николая Велчева, Катя Узунджалиева, Мария Събева, Николай Нейков*

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EVALUATION AND MANAGEMENT OF THE GENETIC RESOURCES OF LETTUCE *(LACTUCA SATIVA L.)* AND SPINACH *(SPINACA OLERACEAE L.)*

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Abstract

A rich collection of 796 *Lactuca sativa L.* and 196 *Spinaca oleraceae L.* accessions is maintained in the IPGR-Sadovo. These are local forms and lines, as well as varieties, introduced from The Netherlands, England, Germany, Czech Republic, Russia, Italy, France, USA, etc. The collection is a subject of many morphologo-biological and economical investigations. There are many accessions which are very suitable for spring production in field, because of their leaves mass, short vegetation period, solid heads, hard arrow making, without bitter taste, resistible to low and extremely high temperatures and chemical compound, as follows: *Lactuca sativa var. capitata* - accessions №6958, 6564, 6567, 6582, 6596, 14169, 14170, 14726, 14727, 16941 and *Lactuca sativa var. romana* - accessions №26, 46, 57, 59, 6596, 16911. They exceed the controls according to other economical indices also. There are some perspective lines for selection needs. From the *Spinaca oleraceae* collection more mass and with curled leaves are the varieties A3607, A3609, A3621, A3634, A3640, A3645, introduced mainly from The Netherlands.

Key words: genetic resources, evaluation, management, lettuce, spinach

2.7.
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Statistical analyses of some quantity indexes in *Lactuca sativa* L. accessions in connection with breeding needs

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ABSTRACT. In the period 1980-2008, 788 lettuce accessions were introduced and studied at the Institute of Plant Genetic Resources in Sadovo, Bulgaria. Among them, 70% were of *var. capitata*, originating mainly from Holland and England as well as from Germany, Czech Republic, Russia, Italy, USA, Romania, etc. The investigation was made at several stages and the local forms (38) were collected by collecting missions, and lines (80) – obtained through individual and mass selection mainly of cultivars and populations developed by spontaneous intercultivar hybridization. By dispersion analyses the rate of variation of the indexes is established. To prove the correlation between 17 quality indices and their influence on the mass of the head, as well as between them, correlation indexes are calculated. They were used to establish the regression equation for the mass of the head and the indications which influence them by using the step analyses. High variation quality characters of *Lactuca sativa* L. are the mass of the head, height of the flower stem, germination - blossom start and germination - economical ripeness. With lower variation are the diameter, height of the head and the dry substance content. There is a direct correlation between the mass of the head and the height (r=0.47) and the diameter of the rosette (r=0.47), as well as the height and the diameter of the head and length and width of leaves (r=0.29-0.43).

Key words: variability, lettuce, characters, correlation indexes, evaluation.

2.8. http://www.chilepepperinstitute.org/content/files/2010EUCARPIAProc.pdf#page=42

Eds. J. Prohens & A. Rodríguez-Burruezo
Advances in Genetics and Breeding of Capsicum and Eggplant, (2010)
Editorial de la Universitat Politècnica de València, Valencia, Spain

Evaluation of the National collection of eggplant (*Solanum melongena* L.) in Bulgarian conditions

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Abstract

Plant genetic diversity can be efficiently used only if evaluated and improved. The results from the evaluation made by curators, phytopathologists, biochemists and other research scientists are stored in databases. They are of great interest to breeders, growers and genebanks. The objective of the present study, conducted at the IPGR-Sadovo, was to create an evaluation database in eggplants with a view to accelerating the process of breeding and meeting the practical needs. To realize this task, we conducted in the period 1985-2008 an inventory of the eggplant collection available, a study by descriptors and a complex study by breeding-important criteria. Based on computer programs developed previously at the IPGR in Sadovo, statistical treatment was made for all accessions involved in the collection. Using the software packages VISITREND, VIVIPLOT, AIDA /Apple Interactive Data Analysis/ and CCADMS /The Creative Computer Applications Data Management System/, the data for each crop were stored according to international descriptors. Information storage and processing is helpful for specialists in the field of plant resources for giving them full access to data for analysis. Thus, the whole available information is at the disposal of every specialist who shows interest in eggplant genetic resources.

Keywords: plant genetic resources, evaluation, databases, eggplant.

2.9

СДРУЖЕНИЕ С НЕСТОПАНСКА ЦЕЛ "ТЕРИТОРИАЛНА ОРГАНИЗАЦИЯ
НА НАУЧНО-ТЕХНИЧЕСКИ СЪЮЗИ С ДОМ НА НАУКАТА И ТЕХНИКАТА – ПЛОВДИВ"
СБОРНИК НА ДОКЛАДИТЕ ОТ ОСМАТА НАУЧНО-ТЕХНИЧЕСКА КОНФЕРЕНЦИЯ
С МЕЖДУНАРОДНО УЧАСТИЕ ЕКОЛОГИЯ И ЗДРАВЕ 2010
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PROCEEDINGS OF EIGHTH SCIENTIFIC-TECHNICAL CONFERENCE
WITH NTERNATIONAL PARTICIPATION ECOLOGY AND HEALTH 2010

КАРИОЛОГИЧНИ ПРОУЧВАНИЯ НА ВИДОВЕТЕ ОТ РОД *MUSCARI MILL. (LILLIACEAE)*

КАТЯ УЗУНДЖАЛИЕВА
ИНСТИТУТ ПО РАСТИТЕЛНИ ГЕНЕТИЧНИ РЕСУРСИ – САДОВО

CARYIOLOGICAL INVESTIGATIONS OF GENUS *MUSCARI MILL. (LILIACEAE)*

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INSTITUTE OF PLANT GENETIC RESOURCES – SADOVO

Abstract. *Genus Muscari Mill.* has about 30 species distributed in Europe, North and West Africa to Central Asia. Most abundant is in the Mediterranean region, on grassy slopes in the woods. In Bulgaria six species from genus *Muscari* are distributed.. The purpose of this study was to investigate systematically and caryologicallly four species from the genus *Muscari*: *M. racemosum Mill.*; *M. neglectum Guss.*; *M. botryoides Mill.* and *M. vandasii Vel.* Chromosome sets which were found are as followes: two of them are diploid, one is tetraploid, and one is one is pentaploid.

2.10

СДРУЖЕНИЕ С НЕСТОПАНСКА ЦЕЛ "ТЕРИТОРИАЛНА ОРГАНИЗАЦИЯ
НА НАУЧНО-ТЕХНИЧЕСКИ СЪЮЗИ С ДОМ НА НАУКАТА И ТЕХНИКАТА – ПЛОВДИВ"
СБОРНИК НА ДОКЛАДИТЕ ОТ ОСМАТА НАУЧНО-ТЕХНИЧЕСКА КОНФЕРЕНЦИЯ
С МЕЖДУНАРОДНО УЧАСТИЕ ЕКОЛОГИЯ И ЗДРАВЕ 2010
NON-BUSINESS ASSOCIATION "TERRITORIAL ORGANIZATION SCIENCE AND
TECHNOLOGY UNIONS AND HOUSE OF SCIENCE AND TECHNIQUE – PLOVDIV"
PROCEEDINGS OF EIGHTH SCIENTIFIC-TECHNICAL CONFERENCE
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CHARACTERIZATION, EVALUATION AND MAINTENANCE OF THE *BRASSICA SP.* ACCESSIONS

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Abstract

The IRGR, Sadovo maintains 586 accessions of *Brassica oleracea* including 414 of *var. capitata*; 102 from *botrytis*, *gemmifera*, *sabauda* and 64 samples from *Br. pekinensis* and *Raphanus sativus*. The collection of *Brassica* oil crops consists of 695 samples, of them 306 are *B. napus subsp. oleifera*; 105 *B. rapa subsp.oleifera*; 46 *B. juncea*; 25 *B. nigra*, as well as 213 other cruciferous crops. Most of the accessions have been received from Genebank in Wellesbourne, UK, CGN Wageningen–The Netherlands, Russia-St. Petesrburg, Germany and Czech Republic. The collection was evaluated by 36 characters according to International Descriptors /1990/ and Methodology /1980/.

Key words: accession, cabbage, evaluation, diseases, resistance

2.11

65 години

Аграрен университет - Пловдив, Научни трудове, т. LV, кн. 2, 2010 г.
Юбилейна научна конференция с международно участие
Традиции и предизвикателства пред аграрното образование, наука и бизнес
Agricultural University - Plovdiv, Scientific Works, vol. LV, book 2, 2010
Jubilee Scientific Conference with International Participation
Traditions and Challenges of Agricultural Education, Science and Business

СЪБИРАНЕ, ХАРАКТЕРИЗИРАНЕ И ПОДДЪРЖАНЕ НА ОБРАЗЦИ ОТ РОД *ALLIUM L.*

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COLLECTING, CHARACTERIZATION AND MAINTAINS OF ACCESSIONS FROM GENUS *ALLIUM*

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Abstract

The Allium collection held at the Institute of Plant Genetic Resources (IPGR) in Sadovo comprises 711 accessions, including 230 local and 481 introduced. The biggest part of the collection was received from Germany and from the United Kingdom. Most of the accessions (450) have been morphologically, biologically and economically evaluated according to the International and IBPGR Descriptors. For determination of the quantitative characters and establishment of correlation indices were used local forms of garlic. For multiplication needs, 405 accessions have been regenerated and were kept ex-situ and in the genebank. All data were properly documented in uploaded in on-line documentation system. Some perspective lines for selection needs were expected by this evaluation and core collection was made. The 210 Allium accessions were sent for safety – duplication in CGN - Vageningen.

Key words: plant genetic resources, Allium collection, accessions, evaluation, correlation, database

2.12. http://agris.fao.org/agris-search/search.do?f=2010/BG/BG1006.xml;BG2010000280

СЕЛСКОСТОПАНСКА АКАДЕМИЯ
AGRICULTURAL ACADEMY
РАСТЕНИЕВЪДНИ НАУКИ, 47, 178—180
PLANT SCIENCE, 47, 178—180
София, 2010, Sofia

ХАРАКТЕРИСТИКА, ИЗПОЛЗВАНЕ И ОПАЗВАНЕ НА ЕЛЕГАНТНА ГЛУШИНА — VICIA TENUIFOLIA VAR. ELEGANS (GUSS.)

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Резюме: *Целта на проучването е да се характеризира Vicia tenuifolia var. elegans Guss. във връзка с възможностите за практическото използване и опазване. Материалите за изследването са събрани по време на експедиция в региона Калофер.*
Беше направена морфологична и кариологична характеристика на Vicia tenuifolia var. elegans Guss. За кариологичните изследвания растенията са отгледани в саксии. Коренови връхчета са събрани и обработени с колхицин. Направена беше фиксация, след което хидролиза с 1N HCl при 60° в продължение на 13 минути. За оптимално наблюдение на кариотипа е направено оцветяване на хромозомите по Шиф.
Основните заключения са, че си видът е типични морфологични, кариологични и биологични особености. Vicia tenuifolia Var elegans Guss. има диплоиден хромозомен набор 2n = 12, което е различно от тези на V. tenuifolia.
Поради ценните си стопански качества — растението е медоносно, с висока хранителната стойност, както и поради сравнително ниските агротехнически изисквания, Vicia tenuifolia Var elegans Guss може успешно да се използва като фуражна култура.

Ключови думи: *Vicia tenuifolia Var elegans Guss, описание, кариотип, използване, съхраняване, растителни ресурси, фуражни култури*

2.13

СДРУЖЕНИЕ С НЕСТОПАНСКА ЦЕЛ „ТЕРИТОРИАЛНА ОРГАНИЗАЦИЯ НА НАУЧНО-ТЕХНИЧЕСКИТЕ СЪЮЗИ С ДОМ НА НАУКАТА И ТЕХНИКАТА – ПЛОВДИВ"
СБОРНИК НА ДОКЛАДИТЕ ОТ ЧЕТВЪРТИЯ МЕЖДУНАРОДЕН СИМПОЗИУМ
"ЕКОЛОГИЧНИ ПОДХОДИ ПРИ ПРОИЗВОДСТВОТО НА БЕЗОПАСНИ ХРАНИ", 2011
NON-BUSINESS ASSOCIATION "TERRITORIAL ORGANIZATION SCIENCE AND TECHNOLOGY UNIONS AND HOUSE OF SCIENCE AND TECHNIQUE – PLOVDIV"
PROCEEDINGS OF FOURTH INTERNATIONAL SYMPOSIUM
"ECOLOGICAL APPROACHES TOWARDS THE PRODUCTION OF SAFETY FOOD", 2011

СРАВНИТЕЛНО ОПИСАНИЕ НА ДВА ВИДА ОТ РОД *CYNARA L.* (АРТИШОК), ОТГЛЕЖДАНИ В БОТАНИЧЕСКАТА ГРАДИНА НА ИРГР- САДОВО И ТЯХНОТО ПРАКТИЧЕСКО ПРИЛОЖЕНИЕ И ОПАЗВАНЕ

Катя Узунджалиева, Николая Велчева
ИНСТИТУТ ПО РАСТИТЕЛНИ ГЕНЕТИЧНИ РЕСУРСИ – САДОВО

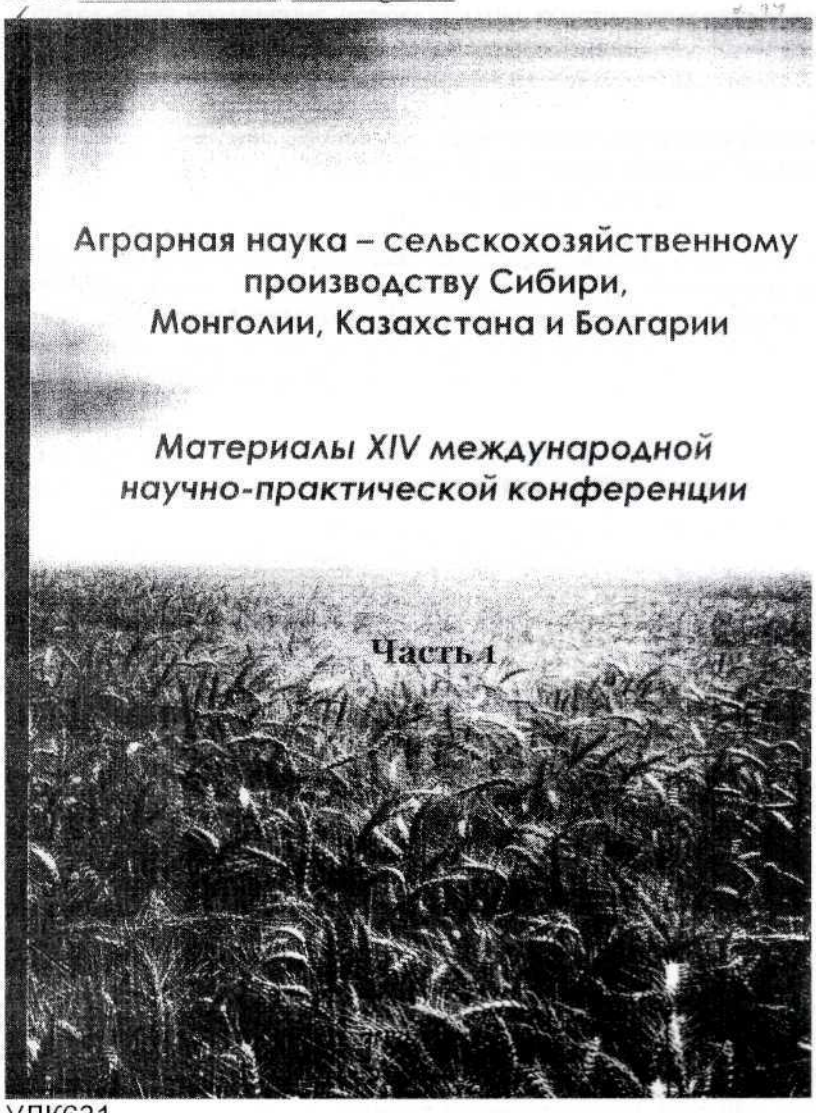
COMPARATIVE DESCRIPTION OF TWO SPECIES OF THE GENUS *CYNARA* L., GROWN IN THE BOTANICAL GARDEN OF IPGR-SADOVO AND THEIR PRACTICAL USE AND CONSERVATION

Katya Uzundzhalieva, Nikolaya Velcheva
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Abstract
Species of the genus *Cynara L.* and their practical use is still poorly known in our country. The artichoke is an excellent source of vitamins, minerals, fiber and tsinarin - a powerful antioxidant that is not contained in any other vegetable. In Bulgaria there are two species of the genus *Cynara L.* - *C. scolymus* and *C. cardunculus*. Material for research was taken from plants of both species grown in the Botanical Garden of IPGR - Sadovo. The aim of this study is a comparative description of two types of artichoke with a view to their practical use as medicinal and vegetable plants and their conservation.

Key words: artichoke, characteristics, comparative description, database, conservation

2.14. www.sorachn.ru, www.kgau.ru



УДК631
ББК40я431
А25
Отв. За выпуск В.Г. Шелепов, чл.-корр.Россельхозакадемии

А25
Аграрнаянаука- сельскохозяйственному производству Сибири, Монголии, Казахстанаи Болгарии: мат-лы
Международ, науч.-практ. конф. (г. Красноярск, 25-28 июля 2011 г.) Ч. 1 / Краснояр. гос. аграр.ун-т. - Красноярск, 2011. - 382 с.
SBN 978-5-94617-236-3 Сборник содержит материалы XIV Международной научно - Практической конференции, которая состоялась в Красноярске 25-28 июля 2011 г. В статьях отражены результаты научных исследований ученых – аграриев Сибири , Казахстана, Монголии и Болгарии.

УДК631
ББК40я431

Электронную версию сборника можно посмотреть на сайтах:
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УДК 631

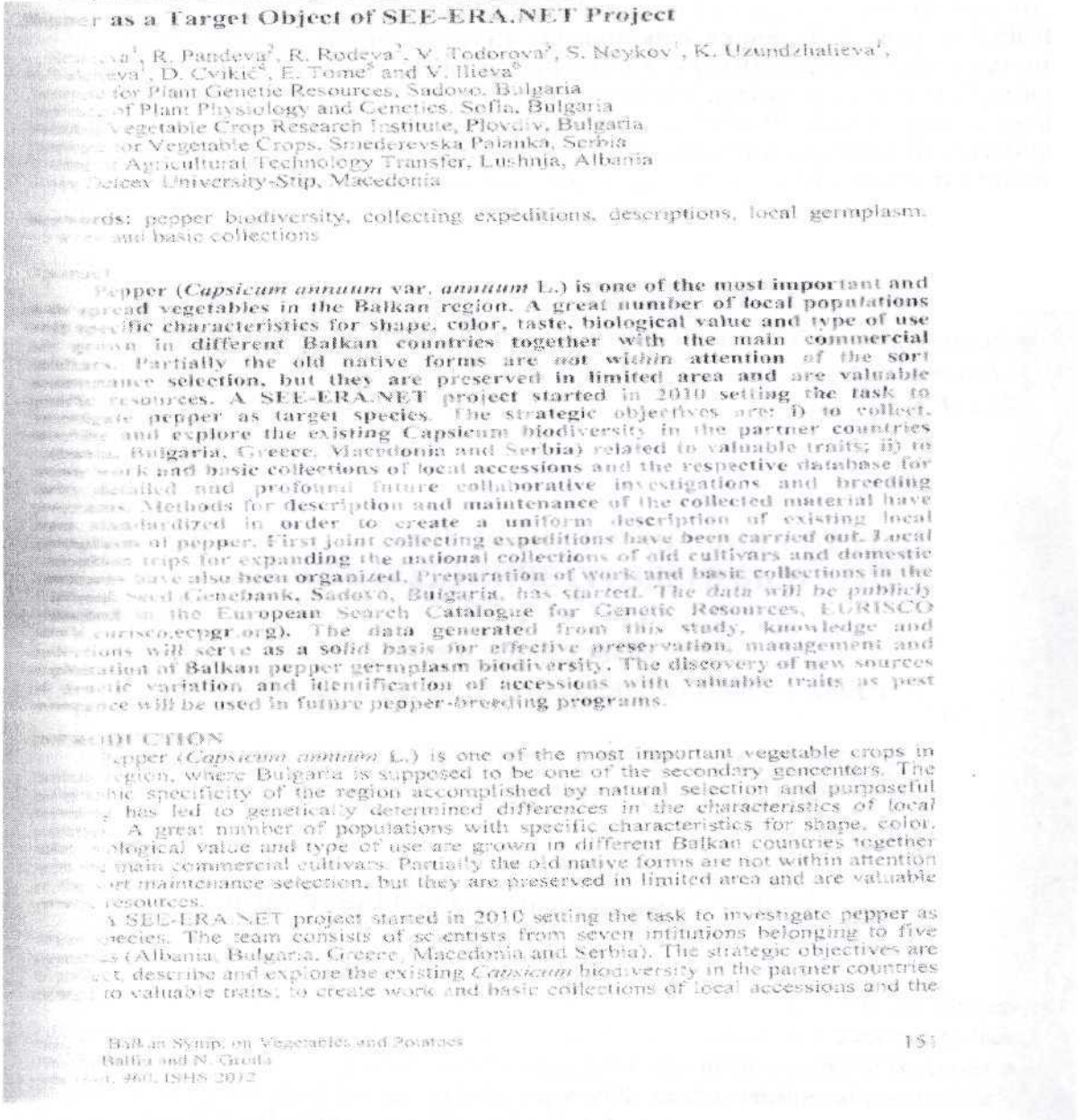
СОХРАНЕНИЕ, УПРАВЛЕНИЕ, ИСПОЛЬЗОВАНИЕ ГЕНЕТИЧЕСКИХ РЕСУРСОВ РАСТЕНИЙ В БОЛГАРИИ

CONSERVATION, MANAGEMENT, USE OF PLANT GENETIC RESOURCES IN BULGARIA

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Plant genetic diversity and its preservation for future generations is a central issue in the activities of the Institute of Plant Genetic Resources in Sadovo, Bulgaria. The purpose of the program focuses on protecting the existing biodiversity of usable geneplasm and establishment of scientifically based strategy for management and conservation of resources. We work on six tasks: enrichment with new geneplasm, evaluative information on Plant Genetic Resources (RGR); RGR maintenance, storage of plant germplasm, documentation of RGR, use of RGR.

2.15 http://www.actahort.org/books/960/960_21.htm



er as a Target Object of SEE-ERA.NET Project

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Vegetable Crop Research Institute, Plovdiv, Bulgaria
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Agricultural Technology Transfer, Lushnja, Albania
Delcev University-Stip, Macedonia

ords: pepper biodiversity, collecting expeditions, descriptions, local germplasm,
and basic collections

Pepper (*Capsicum annuum* var. *annuum* L.) is one of the most important and
ead vegetables in the Balkan region. A great number of local populations
ific characteristics for shape, color, taste, biological value and type of use
grown in different Balkan countries together with the main commercial
ars. Partially the old native forms are not within attention of the sort
ance selection, but they are preserved in limited area and are valuable
resources. A SEE-ERA.NET project started in 2010 setting the task to
gate pepper as target species. The strategic objectives are: i) to collect,
and explore the existing Capsicum biodiversity in the partner countries
Bulgaria, Greece, Macedonia and Serbia) related to valuable traits; ii) to
work and basic collections of local accessions and the respective database for
detailed and profound future collaborative investigations and breeding
. Methods for description and maintenance of the collected material have
standardized in order to create a uniform description of existing local
of pepper. First joint collecting expeditions have been carried out. Local
trips for expanding the national collections of old cultivars and domestic
have also been organized. Preparation of work and basic collections in the
Seed Genebank, Sadovo, Bulgaria, has started. The data will be publicly
in the European Search Catalogue for Genetic Resources, EURISCO
eurisco.ecpgr.org). The data generated from this study, knowledge and
ions will serve as a solid basis for effective preservation, management and
ation of Balkan pepper germplasm biodiversity. The discovery of new sources
genetic variation and identification of accessions with valuable traits as pest
ance will be used in future pepper-breeding programs.

DUCTION
pper (*Capsicum annuum* L.) is one of the most important vegetable crops in
gion, where Bulgaria is supposed to be one of the secondary gencenters. The
ic specificity of the region accomplished by natural selection and purposeful
has led to genetically determined differences in the characteristics of local
A great number of populations with specific characteristics for shape, color,
logical value and type of use are grown in different Balkan countries together
main commercial cultivars. Partially the old native forms are not within attention
rt maintenance selection, but they are preserved in limited area and are valuable
resources.
A SEE-ERA.NET project started in 2010 setting the task to investigate pepper as
pecies. The team consists of scientists from seven institutions belonging to five
s (Albania, Bulgaria, Greece, Macedonia and Serbia). The strategic objectives are
t, describe and explore the existing *Capsicum* biodiversity in the partner countries
to valuable traits; to create work and basic collections of local accessions and the

Balkan Symp. on Vegetables and Potatoes 151
Balliu and N. Grubi
960, ISHS 2012

2.16. http://www.actahort.org/books/966/966_33.htm

Taxonomic Classification of Plum-Apricot Hybrids

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Keywords: *Prunus×domestica*, *Prunus×salicina*, plumcots, classification

Abstract

The paper treats the botanical positions of the new fruit groups of the commercial categories plumcots, pluots and aprium. An appropriate proposal was made for giving concrete taxonomic names and assigning the separate groups of plum-apricot hybrids to concrete systematic ranks. Adopting the results of the analyses by botanists and geneticists will determine and fix the concrete interspecific origin of the hybrids. The phonetically substantiated names of the new botanical species obviously show which of the parent species is positioned as a father parent and which as a mother parent. Thus the plum and the apricot species participating directly in hybridization are specified. It is logical to form the Latin name of each new taxon, rendering an account of the harmonious phonetic sounding, by blending syllables of the mother taxon first, followed by a part of the Latin name of the father taxon, e.g., *Armeniaca* × *Domestica* – *Armestica*.

2.17.

Научни трудове на Съюза на учените в България–Пловдив Серия В. Техника и технологии, том IX., Съюз на учените сесия 10-11 Ноември 2011 Scientific research of the Union of Scientists in Bulgaria-Plovdiv, series C. Technics and Technologies, Vol. IX., Union of Scientists, ISSN 1311-9419, Session 10-11 November 2011

СРАВНИТЕЛНО ПРОУЧВАНЕ НА ДВА ВИДА ОТ РОД *MUSCARI* MILL (КУКУВИЧЕ ГРОЗДЕ) В БЪЛГАРИЯ

Катя Узунджалиева
Институт по растителни генетични ресурси – Садово

COMPARATIVE INVESTIGATION OF TWO SPECIES FROM GENUS *MUSCARI* MILL IN BULGARIA

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Institute of Plant Genetic Resources - Sadovo

Abstract.

Investigation of the morphology and anatomy of *Muscari neglectum* Guss and *Muscari pyramidatum* Velen were carried out. The species can be easily determined according to their morphological and characters. There are no significant differences in the anatomy of the leaves in both species. The investigated species could be successfully used as ornamental plants of early spring as well as for bunch of flowers and honey bearing plants.

2.18. http://hrcak.srce.hr/ojs/index.php/jcea/article/view/1426
Journal of Central European Agriculture, 2012, 13(2), p.361-368 DOI: 10.5513/JCEA01/13.2.1061

POLLEN MORPHOLOGY OF CROCUS L. (IRIDACEAE) IN BULGARIA

МОРФОЛОГИЯ НА ПОЛЕНА НА ВИДОВЕТЕ ОТ РОД CROCUS L.(IRIDACEAE) В БЪЛГАРИЯ

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ABSTRACT
The pollen of the wild species from the genus Crocus L., spread in Bulgaria has been analyzed. The investigations, made by light microscope show that the pollen of these species is spherical in shape and round in outlines, comparatively big. These morphological characteristics of the pollen of the wild Bulgarian Crocuses define it as a primitive one [6]. The Scanning Electron Microscope investigations, made by Beug [1], established two types of pollen morphology. The results of our investigation led to the conclusion that the same types are also presented in Bulgarian species: – *C.biflorus* –type, or syncolpate and *C.vernus* – type, or inaperturate. Eight of the species belong to the first type and only *C. pallasii* belongs to the second. The pollen of *C. reticulatus* is with quite unclear aperture – maybe transition to the inaperturate type.

Keywords: pollen morphology, crocus, bulgaria

РЕЗЮМЕ
Направен е анализ на полена на дивите видове от род Crocus L., разпространени в България. Изследванията, направени от светлинен микроскоп показват, че поленът на тези видове е със сферична форма и кръгло очертание, сравнително голям. Тези морфологични характеристики го определят като полен от примитивен тип [6]. Изследванията, направени от Beug [1], чрез сканиращ електронен микроскоп установяват два типа прашец в зависимост от морфологията. Резултатите от нашето проучване е довело до заключението, че същите типове полен са характерни и за български видове: - *C.biflorus* тип, или *syncolpate* и *C.vernus* - тип, или *inaperturate*. Поленът на осем от видовете,принадлежат към първия тип и само тази на C *pallasii* принадлежи към втория.Поленът на *C.reticulatus* доста неопределен - може би представлява преход към *inaperturate* тип.

2.19. http://www.doisrpska.nub.rs/index.php/agroznanje/article/view/209
Pregledni rad
Review paper
UDK: 582:575.113(497.2)
DOI:

Plant Genetic Resources as a part of the biodiversity

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Summary
The preservation of plant biodiversity of Bulgarian flora is the main priority in scientific activities of IPGR – Sadovo. It is a part of the National Programme on Plant Genetic resources (PGR). Plant accessions in the base collections are evaluated according to the standards of FAO and European programme for PGR. The scientific programme for conservation of germplasm under controlled conditions in the gene bank is prepared according to the FAO requirements. The national collection of PGR in Sadovo includes crops and crop wild relatives- new varieties, selection lines, old varieties, local populations, mutants and wild species. The collection is divided

into 7 main groups: cereals, grain legumes, industrial crops, vegetable crops, forage crops and medical and ornamental plants. The scientific work is carried out in 6 directions: enrichment with new geneplasm; evaluation of PGR; maintenance of PGR; conservation of PGR; documentation of PGR; use of PGR.

Key words: biodiversity, PGR, germplasm, gene bank

Agroznanje, vol. 13, br.1. 2012, 5-14

2.20.

СДРУЖЕНИЕ С НЕСТОПАНСКА ЦЕЛ „ТЕРИТОРИАЛНА ОРГАНИЗАЦИЯ НА НАУЧНО-ТЕХНИЧЕСКИТЕ СЪЮЗИ С ДОМ НА НАУКАТА И ТЕХНИКАТА – ПЛОВДИВ"
СБОРНИК НА ДОКЛАДИТЕ ОТ ДЕВЕТАТА НАУЧНО-ТЕХНИЧЕСКА КОНФЕРЕНЦИЯ С МЕЖДУНАРОДНО УЧАСТИЕ ***ЕКОЛОГИЯ И ЗДРАВЕ 2012***
NON-BUSINESS ASSOCIATION "TERRITORIAL ORGANIZATION SCIENCE AND TECHNOLOGY UNIONS AND HOUSE OF SCIENCE AND TECHNIQUE – PLOVDIV"
PROCEEDINGS OF NINTH SCIENTIFIC-TECHNICAL CONFERENCE WITH INTERNATIONAL PARTICIPATION ***ECOLOGY AND HEALTH 2012***

ЕЛЕМЕНТИ, СВЪРЗАНИ С ПРОДУКТИВНОСТТА, ПРИ МНОГОГОДИШНАТА РЪЖ (*SECALE MONTANUM GUSS.*)

Евгения Вълчинова, Катя Узунджалиева, Николая Велчева

Институт по растителни генетични ресурси „К. Малков" – Садово

CHARACTERS, CONNECTED WITH THE PRODUCTIVITY, OF *SECALE MONTANUM GUSS.*

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Abstract

Secale montanum Guss. belongs to *Poaceae*. It is used mainly as a forage crop because of the low cost of cultivation, thus being the most economically advantageous culture. It is very well adaptive, suitable for the climate change conditions, for organic farming as an energy source, providing green food for the animals, restoration of washout areas, meadows and pastures.

In 2009 in IPGR - Sadovo is set a trial in 4 repetitions in plots of 50 m2 each. Regular field observations are made as well as biometric measurements of 10 pre-marked plants.

The study aims to trace the stability of the yields during 3-year cultivation of *Secale montanum Guss.* at one and the same place.

The investigated species is registered in the National Register of IPGR as introduced from Canada under the international free exchange. It is store in National Genebank in IPGR - Sadovo under long-term storage.

Key words: *Secale montanum Guss.*, yield, evaluation, database, long-term storage

2.21. http://agris.fao.org/agris-search/search.do?recordID=BG2013000542

СЕЛСКОСТОПАНСКА АКАДЕМИЯ
AGRICULTURAL ACADEMY
РАСТЕНИЕВЪДНИ НАУКИ, 50, 95-97
PLANT SCIECE, 50, 95-97
София, 2013, Sofia

МЕТОДИ НА РАЗМНОЖАВАНЕ НА ЧЕРВЕН КАНТАРИОН (*Centaurium erythraea* Rafn.) И РАЗВИТИЕ ПРИ ПОЛСКИ УСЛОВИЯ

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Methods of Propagation of *Centaurium erythraea* Rafn. and Growing in Field Conditions

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Abstract

Centaurium erythraea Rafn. belongs to the family Gentianaceae. Grows on stony, dry, grassy places, fields and meadows up to 1500 meters altitude. *The flowers are small, pinkish-red, gathered in inflorescence on top of branches. Used as a medical herb.* The purpose of this study was to determine the influence of different methods of reproduction on growth and development of the species. Studies were conducted in the laboratory of biotechnology and in the botanical garden of IPGR – Sadovo. The influence of different culture media on germination of seed growth and development of explants was observed. Observations on the adaptation and development of plants under field conditions were made.

Key words: *Centaurium erythraea*, reproduction, growth, adaptation

2.22.

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Mini Review

CONSERVATION AND UTILIZATION OF WILD SPECIES OF GENUS *TRITICUM* FROM THE NATIONAL GENEBANK OF BULGARIA

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Abstract

In recent years, increasingly appreciates the importance of The Plant Genetic Resources for development and success of the plant breeding, agriculture and ecology. Collection of wild wheat species of genus *Triticum*, which supports, study and stored in the IPGR-Sadovo is represented by 45 plant species. It contains 783 accessions of which 160 samples are *Tr. sphaerococcum*, 124 *Tr. turgidum*, 84 *Tr. monococcum*, 73 *Tr. spelta*, 60 *Tr. boeoticum*, 59 *Tr. dicoccon*, 30 *Tr. polonicum*, 22 *Tr. dicoccoides*, 21 *Tr. timopheevi*, 13 *Tr. carthilicum*, 12 *Tr. macha*, 11 *Tr. compactum* and 81 from other species.

The maintained germplasm diversity from wild wheat species is determined by their regions of origin. The largest part of accessions are from Russia (97 pieces), Bulgaria (45 pieces), Germany (38 pieces), Spain (16 pieces), USA (13 pieces), India (12 pieces), etc. Particular attentions should be paid to wheat originating from Bulgaria. These are the accessions that form the category of "original" germplasm, whose identity must be controlled in the process of storage and reproduction. Available gene pool is the basis for successful plant breeding improvement working and maintains original germplasm for research.

Key words: collection, wild wheat species, genus *Triticum*, plant genetic resources.

2.23. http://www.pgrsecure.bham.ac.uk/sites/default/files/documents/newsletters/CWR_Issue_9.pdf#page=34

Status of collections of Aegilops spp. in Bulgaria and opportunities for their use in breeding programmes

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Conservation of plant genetic resources (PGR) of cultivatedand wild flora is a priority worldwide. It is encapsulated in the Convention on Biodiversity (CBD) which Bulgaria ratified in 1996. The Institute of Plant Genetic Resources in Sadovo is the Coordinator of the National PGR Programme and a member of the European Cooperative Programme for Plant Genetic Resources (ECPGR). On the territory of the Institute is located the National Seed Genebank where 57,684 seed samples are preserved (http://eurisco.ecp–
gr.org). The plant species diversity is represented by more than 2670 species of crops and their wild relatives.

Crop wild relative Issue 9 October 2013

2.24. Узунджалиева К., 2012. Морфолого-биологично проучване на декоративния вид Какалия (*Cacalia coccinea* Sims.) с оглед практическото му използване. Растениевъдни наукир (под печат).

Abtract

Cacalia coccinea is an annual plant, that came to Europe from India long ago but still remains an exotic rarity in the gardens of our continent. It withstands high temperatures and humidity. Blooms a long time and can be used for landscaping and as dried flowers. *Cacalia coccinea* is distributed mainly in tropical regions. In our country is still poorly known, but due to its

high drought tolerance could be successfully used as an ornamental plant in changing climatic conditions.

2.25. Journal of central European Agriculture (in press).

Comparative investigation of *Ocinum basilicum* L. accessions from the collection of IPGR – Sadovo, aiming to their classification and practical use

Сравнително проучване на образци босилек (*Ocinum basilicum* L.) от колекцията на ИРГР – Садово с оглед тяхното практическо използване

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Abstract

The importance of The Sweet Basil (*Ocinum basilicum* L.) as medical, ornamentaland spice plant is well known from ancient times. It's origin is in Africa and Assia. In the regions with moderate climate are grown more than 150 varieties. The aim of this study is describing and classifying the basil accessions in the collection of IPGR - Sadovo with the view of their practical use. The experiment is carried out in the experimental field of PGRI - Sadovo during the period 2011-2012. The following biometric indices are reported: plant - height, width, number of branches, stem – length and diameter; branching first order - length and diameter; leaf - length and width; inflorescence - diameter, height and color; type of inflorescence. Phenological observations were made and the following inter-phase periods are recorded: sowing, germination, sprouting, blossoming, flowering period, growing season. The results shows that accessions A7E0284, which is with longest flowering and growing periods, very well-leaved and long inflorescence is very suitable for ornamental purposes and in home gardens. Accession A9E0452, which is with maximum number of branches, consequently with maximum leaf mass is most suitable for spice and medical purposes. Hierarchical cluster analysis based on intergroup connections is used to determine the homogeneous groups was made. Thus the accessions are divided into groups (clusters) based on a study of 16 indices. The comparative cluster analysis of basil accessions in the collection of IPGR - Sadovo shows complete uniformity in the results for the grouping based on morphological parameters and using cluster analysis.

Key words: Ocinum basiliscum, basil, collection, classification, use.

2.26

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Ex Situ and In Vitro Conservation of Glicyrrhiza glabra L. – Crop Wild Relative from Fabaceae

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Abstract. *Glycyrrhiza glabra* L. (Licorice), belongs to the Fabaceae family. The species is included in the Crop Wild relatives list for Bulgaria and is close to beans and peas. Its origin is Southeast Europe, the Mediterranean and Asia, where Bulgaria falls. The roots of the plant contain glycyrrhizin, 30 to 50 times sweetener than the sucrose. As a CWR, as well as due to the high level of glycyrrhizan in the roots, the conservation and maintenance of the species is of interest, although it is not included in the list of threatened plant species yet. In the Institute of Plant Genetic Resources - Sadovo *Glycyrrhiza glabra* is maintained in situ in the Botanical garden. Besides the in situ conservation of the species, *in vitro* techniques are a reliable means of reproduction and long-term storage. After introduction of the raw cuttings from plant species in culture *in vitro*, the process of micropropagation is accomplished by single bud microcuttings in nutrient medium fitted with growth regulators, enabling the development of single-rooted stems with options of repeatedly subcultivating. Along with that the possibility for long term *in vitro* propagation by reduction of the composition of the nutrient medium was tested, where the period for conservation of the cultivated explants reaches 8 months.

Key words: *Glycyrrhiza glabra*, *ex situ* conservation, *in vitro* conservation, Fabaceae

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Conservation And Management Of Plant Genetic Resources From Cultural And Wildlife In Bulgaria

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Abstract: Preservation of plantbiodiversityfromculturalandwildlifeis a priorityactivity of the Institute of PlantGeneticResources , Sadovo . Thisisthefirstscientificagriculturalcenter of Bulgaria, whereitbeganintroduction of newspeciesandvarietiesand todayin IPGR are collectedandstored atherichvariety of speciesand a variety of localandforeigngermplasm. Theaim of thepapers to focusonthepreservation of existingplantwealth of usablegermplasmandestablishment of science-basedstrategyformanagementandconservation of biodiversity .

Key words: biodiversity, PGR, germplasm, in situ, in vitro, on farm

2.28.

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MORPHOLOGICAL AND PHENOLOGICAL INVESTIGATION OF GAZANIA SPLENDENS L. WITH THE VIEW OF ITS ORNAMENTAL QUALITY

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Key words:*Gazania splendens*,biometrical investigations, ampleness, morphology, ornamental quality

Abstract

Gazania splendens L. is annual plant from Asteraceae. The origin is South Africa, where it can be found as a wild plant. In our country it is introduced during the last 10 years. The aim of the current study is to establish the morphological and phenological requirements of *G. splendens* with the view of its ornamental quality. The study is carried out in the experimental field of the IPGR – Sadovo during 2010-2012. A biometrical measurement of 12 accessions has been made. From each accession are measured 20 plants. Phenological observations, ampleness and productivity are observed. As a result of the study the can be made the conclusions that *Gazania splendens* demonstrates stable morphological characters, and thus it is very suitable for ornamental purposes.There is simultaneity in the development of plants, almost simultaneously germination and flowering, as well as relatively long flowering and growing season. Ampleness and productivity of flowering in annual flowers are one of the most important indices that define their ornamental value. These indices show stable and steadily increasing during the vegetation period.

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CONSERVATION AND MANAGEMENT OF PLANT GENETIC RESOURCES FROM CULTURAL AND WILDLIFE IN BULGARIA AND THEIR USE IN THE BREEDING PROGRAM

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Key words: *biodiversity,PGR,germplasm, in situ, in vitro, on farm, selection, hybridization*

Abstract

Preservation of plant biodiversity from cultural and wildlife is a priority activity of the Institute of Plant Genetic Resources, Sadovo. This is the first scientific agricultural center of Bulgaria, where it began introduction of new species and varieties and today in IPGR are collected and stored a rich variety of species and a variety of local and foreign germ plasm. The aim of the paper is to focus on the preservation and use of existing plant wealth of usable germ plasm and establishment of science-based strategy for management and conservation of biodiversity. Using the method of remote hybridization between common winter wheat and durum wheat. The received lines poses genes for resistance to biotic and abiotic stress factors and a better quality of the grain.

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EX - SITU СЪХРАНЕНИЕ НА РЕДКИ И ЕНДЕМИЧНИ ВИДОВЕ В БОТАНИЧЕСКАТА ГРАДИНА НА ИНСТИТУТА ПО РАСТИТЕЛНИ ГЕНЕТИЧНИ РЕСУРСИ – САДОВО

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Abstract

Ex situ опазването на растителните генетични ресурси (РГР) има за цел отглеждане и поддържане на живи растения извън естествената им среда, под формата на цели растения, семена, полен, тъкани или клетъчни култури. Ботанически градини са изключително важни за поддържане на видовете и генетично разнообразие. Те играят важна роля в повишаване на осведомеността на обществото за опазване на биоразнообразието и растителните генетични ресурси. Ботаническата градина към ИРГР - Садово е създадена през 2002г. към програмата по Растителни генетични ресурси. В рамките на Националната стратегия за опазване на биоразнообразието (1994) и Националния план за действие (2000) програмата по РГР. Ботаническата градина съдейства за съхранението и разумното използване на растителните генетични ресурси.

В Ботаническата градина към ИРГР – Садово се поддържат редица ценни, редки и защитени растителни видове и има значителен потенциал да допринесе за опазването на растителни генетични ресурси на България. Налице е нарастващо осъзнаване на екологичното, икономическото и културно значение на дивите растителни видове и тяхната потенциална стойност като източник на генетичен материал. Това важи с най-голяма сила за дивите родственици на културните растения, които представляват ценен източник за селекция на нови сортове, адаптирани към променящите се климатични условия.