

CHRONICA HORTICULTURAE

VOLUME 46 - NUMBER 3 - 2006

A PUBLICATION OF THE INTERNATIONAL SOCIETY FOR HORTICULTURAL SCIENCE



Horticultural Highlights

IHC2006 and ISHS General Assembly

Conserving Plant Genetic Resources • Global Conservation Strategy for Strawberry Genetic Resources • Control of Growth and Cropping of Temperate Fruit Trees • Diversifying the Intensive Cereal Cropping Systems of the Indo-Ganges through Horticulture • Walnut Germplasm in Kyrgyzstan

Symposia and Workshops

Labiatae • Loquat • Date Palm • Rubus and Ribes • Greenhouse Cooling • Soil and Soilless Cultivation under Protected Environment • Organic Apple and Pear

Chronica Horticulturae® ISBN: 90 6605 559 6 (Volume 46 - Number 3; September 2006); ISSN: 0578-039X.

Published quarterly by the International Society for Horticultural Science, Leuven, Belgium. Lay-out and printing by Drukkerij Geers, Gent, Belgium. ISHS® 2006. All rights reserved. No part of this magazine may be reproduced and/or published in any form, photocopy, microfilm or any other means without written permission from the publisher. All previous issues are also available online at www.ishs.org/chronica. Contact the ISHS Secretariat for details on full colour advertisements (1/1, 1/2, 1/4 page) and/or mailing lists options.

Editorial Office and Contact Address:

ISHS Secretariat, PO Box 500, B-3001 Leuven 1, Belgium. Phone: (+32)16229427, fax: (+32)16229450, e-mail: info@ishs.org, web: www.ishs.org or www.actahort.org.

Editorial Staff

Jules Janick, Science Editor, janick@purdue.edu

Jozef Van Assche, Managing Editor, jozef@ishs.org

Kelly Van Dijck, Assistant Editor, kelly.vandijck@ishs.org

Peter Vanderborght, Associate Editor - Production & Circulation, peter.vanderborght@ishs.org

Editorial Advisory Committee

Jules Janick, Purdue University, USA, Chair of the Editorial Advisory Committee

Tony Biggs, Australian Society of Horticultural Science, Australia

Isabel Ferreira, Instituto Superior de Agronomia, Lisbon, Portugal

Kim Hummer, USDA ARS NCGR, Corvallis, USA

Byung-Dong Kim, Seoul National University, Korea

Robert K. Prange, Agriculture and Agri-Food Canada, Kentville, Canada

Membership and Orders of Chronica Horticulturae

Chronica Horticulturae is provided to the Membership for free: Individual Membership 50 EUR annually (special rate for Individual Members from selected developing countries: 50 EUR for 2 years), Student Membership 20 EUR per year. For all details on ISHS membership categories and membership advantages, including a membership application form, refer to the ISHS membership pages at www.ishs.org/members.

Payments

All major Credit Cards accepted. Always quote your name and invoice or membership number. Make checks payable to ISHS Secretariat. Money transfers: ISHS main bank account number is 230-0019444-64. Bank details: Fortis Bank, Branch "Heverlee Arenberg", Naamsesteenweg 173/175, B-3001 Leuven 1, Belgium. BIC (SWIFT code): GEBABEBB08A, IBAN: BE29230001944464. Please arrange for all bank costs to be taken from your account assuring that ISHS receives the net amount. Prices listed are in euro (EUR) but ISHS accepts payments in USD as well.

Acta Horticulturae

Acta Horticulturae is the series of proceedings of ISHS Scientific Meetings, Symposia or Congresses (ISSN: 0567-7572). ISHS Members are entitled to a substantial discount on the price of Acta Horticulturae. For an updated list of available titles, go to www.ishs.org/acta. A complete and accurate record of the entire Acta Horticulturae collection, including all abstracts and full text articles is available online at www.actahort.org. ISHS Individual membership includes credits to download 10 full text Acta Horticulturae articles. All Acta Horticulturae titles - including those no longer available in print format - are available in the **ActaHort CD-ROM** format.

Scripta Horticulturae

Scripta Horticulturae is a new series from ISHS devoted to specific horticultural issues such as position papers, crop or technology monographs and special workshops or conferences.

Cover photograph: Traditional cultivars such as Cuoire di Bue (Ox Heart), still popular in Italian markets, are also conserved in germplasm banks. See article p. 16

A publication of the International Society for Horticultural Science, a society of individuals, organizations, and governmental agencies devoted to horticultural research, education, industry, and human well-being.



CONTENTS

■ News from the Board

- 3 An Exercise in Strategic Planning, *N.E. Looney*
- 4 The New Board of the ISHS
- 8 New Chair- and Vice-Chairpersons of Sections and Commissions Elected, *I. Warrington*
- 9 The ISHS General Assembly in Seoul, *N.E. Looney*
- 15 CTA and ISHS Sign Major Accord, *N.E. Looney and H. Neun*

■ Issues

- 16 Conserving Plant Genetic Resources: Imperative and Opportunity, *C. Fowler*
- 19 Global Conservation Strategy for Strawberry Genetic Resources, *K. Hummer*

■ Horticultural Science Focus

- 20 Control of Growth and Cropping of Temperate Fruit Trees, *T. Webster*

■ Horticultural Science News

- 27 Diversifying the Intensive Cereal Cropping Systems of the Indo-Ganges through Horticulture, *M.L. Jat, R.K. Gupta, O. Erenstein and R. Ortiz*

■ The World of Horticulture

- 31 Walnut Germplasm in Kyrgyzstan, *D. Mamadjanov*
- 34 New Books, Websites
- 37 Courses and Meetings
- 38 Opportunities

■ Symposia and Workshops

- 38 Int'l Symposium on the Labiatae: Advances in Production, Biotechnology and Utilization
- 40 11th Int'l Symposium on Loquat
- 42 11th Int'l Date Palm Conference
- 43 19th Int'l Rubus and Ribes Symposium
- 45 Int'l Symposium on Greenhouse Cooling: Methods, Technologies, and Plant Response
- 47 1st Int'l Symposium on Advances in Soil and Soilless Cultivation under Protected Environment
- 49 1st Int'l Organic Apple and Pear Symposium

■ News from the ISHS Secretariat

- 51 New ISHS Members
- 52 In Memoriam
- 54 Calendar of ISHS Events
- 56 Available Issues of Acta Horticulturae



1850-1854, and their Forgeries. His colleagues, students and friends in the floriculture industry remember an enthusiastic, friendly, and ebullient professor, who contributed substantially in teaching, research, and outreach.

Heiner Lieth and Michael Reid, Department of Plant Sciences, University of California, Davis CA 95616, USA

DOUGLAS C. SANDERS

Douglas C. Sanders, Professor of Horticultural Science at North Carolina State University, passed away on Monday, April 17, 2006 after a brief illness.

Since 1970, Doug had a long and distinguished career as a NCSU researcher, extension specialist and teacher. Doug's work was recognized internationally as he provided leadership in many facets of the vegetable industry. Doug was a tireless worker with a passion for horticultural science, traveling, and seemed to possess boundless energy.

He will be greatly missed.

Doug is survived by his wife, Ellen and sister, Mary Sanders, Las Vegas, NV.

GERMAN IVANOVICH TARAKANOV

Professor Dr. German Tarakanov died on 24 May 2006 in Moscow at the age of 82. ISHS members will remember him for his contributions as a representative of USSR/Russia in the Council of ISHS from 1966 to 1994 and also as a member of the Section Vegetables.

German Tarakanov studied agricultural sciences at Timiryazev Agricultural Academy in Moscow and graduated Ph.D./Dr.agr. His entire professional career in horticultural teaching and research was dedicated to that Academy where he began as professor at the Department of Vegetable Crops. He was appointed Dean of the Horticultural Faculty from 1959 to 1964, and Head of Department of Vegetable Crops of Moscow Timiryazev Agricultural Academy from 1969 to 1989, in this position succeeding to his teacher Prof. V.I. Edelstein, well-known as the father of horticultural science in Russia. The outstanding scientist also was a member of the Russian Academy of Agricultural Sciences since 1978.

As a highly engaged and enthusiastic teacher and researcher at the Department of Vegetable Crops Tarakanov supervised more than 60 Ph.D. students, among them as many as 10 from foreign countries, and the number of his scientific publications exceeded 300. He was full of new ideas and plans just until his death.

His research was focused on the investigations on vegetable biology to provide the basis for optimal modern growing techniques, but also investigations into new plant breeding

methods. His comprehensive research and consulting programme included tests with plastic films used under the climatic conditions of Siberia as well as investigations to create an "ecological and technological passport" for varieties. His breeding work produced as many as 50 new vegetable varieties (e.g. cucumber, tomatoes, onions, etc.) and induced hybrid seed production in the USSR. His passionate engagement for research and teaching in the field of horticultural science and practice owe gratitude and respect.

Last but not least to mention is his engagement as a member of the ISHS Section Vegetables to make people of his broad radius of action in his country acquainted with the ideas of the ISHS about international work and collaboration.

German Tarakanov's international reputation was appreciated, for example, by Budapest Horticultural University bestowing him Dr. honoris causa (1978). He was a member of EUCARPIA and of the Japanese Society for Horticultural Science. It always was a pleasure to meet that good colleague at international events where he found many friends among the ISHS. They will remember him for his civil, co-operative and friendly personality.

German Tarakanov is survived by his two children, four grandchildren and one great grandchild.

Prof. Dr. D. Fritz, ISHS President 1978-1982

FIKRAT ABDULLAEV



Fikrat Abdullaev

Dr. Fikrat Abdullaev passed away on the 17th of July, at the age of 62, in Mexico City. His death was sudden and unexpected.

He was an innovative and free-minded scientist who has been an example for a growing cohort of researchers interested in plant-based biopharmaceuticals and nutraceuticals. For many scientists, Dr. Abdullaev's ideas, honesty, and enthusiasm, are inspiring. He was a truly

Science 'lover', as he stated: "Science is just like a woman, you must desire it".

Fikrat Abdullaev, born on 18 October 1943 in Baku, Azerbaijan, son of Ilias Abdullaev and Fatma M. Jafarova. He studied a Bachelor in Science at the Faculty of Chemistry of the Baku State University, gaining his degree in 1965. Fikrat Abdullaev focused his interest in the areas of biochemistry and molecular biology. In 1970 he obtained a Ph.D. from the Institute of Botany at the Azerbaijan Academy of Sciences, and a Doctorate in Biological Sciences from the Ukrainian Academy of Sciences in Kiev in 1989.

His first professional and scientific period was carried out in the former Soviet Union, firstly in the Institutes of Genetics (1966-1970) and Botany (1970-1973) of the Azerbaijan Academy of Sciences (Baku), and then in the Institute of Molecular Biology of the USSR Academy of Sciences in Moscow (1973-1976). From 1976 to 1986 he was Associate Professor and Head of the Molecular Enzymology Laboratory in the Institute of Physics of the Academy. In 1986 he became Head of the Genome Biochemistry Laboratory in the Institute of Botany at Baku.

He was visiting scientist in the Department of Biochemistry of the Stockholm University (1979) and the Institute of Biochemistry of the Munchen University (1982).

In 1990, as a result of an exchange program between the Academics of Sciences in the United States and the former Soviet Union, Fikrat Abdullaev travelled to Rutgers University in New Jersey to further his research. He joined with Gerald Frenkel and his team at the Department of Biological Sciences. Then, they published three pioneer papers that together with those of S.C. Nair and co-workers in India also in the early 1990's, firstly described the antitumour effects of saffron extracts. These works started a rapid search for the saffron compounds responsible of such effects, the study of the mechanism of action, the specificity on different cell lines, and the in vivo effects on animal models, that became a productive research subject (about 40 experimental and review articles) for various teams in Greece, Spain, Hungary, India, Iran, Japan, Azerbaijan, Mexico, USA and other countries.

In 1995 he moved to Mexico as researcher of the Department of Research and Postgraduate in Food Science, Faculty of Chemistry, Autonomous University of Querétaro. Since 1997 he was head and founder of the Experimental Oncology Laboratory at the National Institute of Paediatrics in Mexico City. Immediately, Dr. Abdullaev ensembled a team of young and excellent Mexican researchers and soon they obtained grants from the CONACyT (National Council of Science and Technology, Mexico) and other international institutions.

At the Institute of Botany in Baku during the 1980's, Fikrat Abdullaev conducted several

experiments with saffron extract. His interest has been the promising strategy of chemoprevention, it means, the use of natural or synthetic substances, alone or in combination, to prevent the development of diseases such as cancer. In Mexico he conducted his research on the fields of nucleic acid and protein biochemistry: Selenium & saffron biochemistry; chemical toxicity and cytotoxicity in vivo and in vitro; and mechanism of antitumour effects of chemical and naturally occurring agents.

Fikrat Abdullaev planned the creation of a new scientific discipline that he called 'saffronology'. He was a tireless proponent of the virtues of saffron as a chemopreventive element of the diet and one of the engines of saffron research all around the world. In the sort time he visited us in our laboratory of the University of Castilla-La Mancha in Albacete three years ago, he delighted us with his scientific sharpness, experience, kindness and excellent sense of humour.

Dr. Abdullaev co-chaired the 1st International Symposium on Saffron Biology and Biotechnology, held in Albacete, Spain in

October 2003; and was also co-chair of the second meeting to be celebrated in Mashhad, Iran in October 2006 under the auspices of the ISHS. He was the author of this so far successful idea; such is to ensemble the scientific community involved in saffron research as well as the business sector in periodic meetings.

Fikrat Abdullaev was author of over 120 scientific papers and abstracts, and several patents. He was fluent in many languages (Azeri, Russian, German, English, and Spanish), contributing to his skills as team leader. He was member of the Mexican Academy of Science, Sistema Nacional de Investigadores de Mexico, Mexican Society for Biochemistry, American Association for the Advancement of Science, New York Academy of Science, American Association for Cancer Research, Asociación Médica del Instituto Nacional de Pediatría, Institutional Scientific Committee (Institute of Botany, Azerbaijan Academy of Science, Baku), Azerbaijan Society for Genetics, Azerbaijan Society for Biochemistry, New York Academy of Sciences, Board Directors of the Azerbaijan

Scientific Association, Board Editors of Journal of Food, Agriculture & Environment, and International Panel of Reviewers of Journal Medical Science Monitor.

Dr. Abdullaev married Zemfira Nagieva (a petrol chemist) on 17 February 1968. They had two daughters, Kalima (medical dentist living in Denmark) and Aynur (economist living in Germany) and four grand-children, three boys and one girl. He was a loving husband, caring father and grand-father, and an excellent human being, full of compression and tolerance. He put the same strength and enthusiasm in all the aspects of his life; as such determination was incredibly contagious.

Those who had the privilege of being his friends are devastated by his lost.

"Allah rahmat lasin" (May God rest his soul)

Jose-Antonio Fernandez,
University of Castilla-La Mancha, Spain



● Pat Bowen and husband Carl Bogdanoff, receiving the first ISHS scarf from the ISHS President at an evening reception of the ISHS Strategic Planning meeting, May 2006.

Calendar of ISHS Events

For updates and more logon to www.ishs.org/calendar. Do always mention your ISHS membership number or attach copy of your ISHS membership card when registering. A reduced ISHS members registration fee applies.

YEAR 2006

■ October 28-30, 2006, Mashhad (Iran): **II International Symposium on Saffron Biology and Technology - ISSBT**. Info: Prof. Dr. A. Koocheki, CESC, Faculty of Agriculture, Ferdowsi University of Mashhad, PO Box 91775-1163, Mashhad, Iran. Phone: (98)5117610760 or (98)5118788494, Fax: (98)5118787430, email: akooch@ferdowsi.um.ac.ir or saffron-ir@ferdowsi.um.ac.ir web: saffron-ir.um.ac.ir

■ October 29 - November 2, 2006, Wageningen (Netherlands): **Models for Plant Growth, Environmental Control & Farm Management in Protected Cultivation - HortiModel2006**. Info: Dr. Ep Heuvelink, Horticultural Productions Chains Group, Wageningen University, Marijkeweg 22, 6709 PG Wageningen, Netherlands. Phone: (31)317483679, Fax: (31)317484709, email: programme@hortimodel2006.nl web: www.hortimodel2006.nl

■ November 27-30, 2006, Chiang Mai (Thailand): **International Workshop on Tropical and Subtropical Fruits** (at Royal Flora Ratchaphruek 2006 International Horticultural Exposition for H.M. the King of Thailand). Info: Peyanoot Naka, Horticulture Research Institute, Department of Agriculture, Chatuchak, Bangkok 10900, Thailand, Phone: (66)25798553, Fax: (66)25614667, email:

