
XIth Eucarpia Cucurbitaceae 2016

July 24-28, 2016, Warsaw, Poland

Sunday, July 24

16.00 – 20.00 Registration Open
Posters mounting

19.00 – 21.00 Welcome Reception

Monday, July 25

8.00 – 19.30 Registration Open

8.00 – 15.00 Posters mounting

9.00 – 9.15 **Conference Opening**
Welcome address from the organizers and local authorities

9.15 – 10.20 **Session I: History and Breeding**
Chair: Todd C. Wehner

9.15 – 9.40 **[L1] History of Cucumber Breeding in Poland**
Elżbieta U. Kozik
Research Institute of Horticulture, Skierniewice, Poland

9.40 – 10.00 **[L2] Emergence of the Sweet Dessert Watermelon, *Citrullus lanatus*, in Mediterranean Lands During the Roman Era**
Harry S. Paris
Agricultural Research Organization, Newe Ya'ar Research Center, Ramat Yishay, Israel

10.00 – 10.20 **[L3] Status of Cucurbit Breeding at AVRDC – The World Vegetable Center**
***Narinder P.S. Dhillon*¹, *Supannika Sanguansil*¹, *Supornpun Srimat*¹, *Hsin-chun Cheng*², *Chung-cheng Lin*³, *Ramasamy Srinivasan*⁴, *Lawrence Kenyon*⁵, *Roland Schafleitner*⁶, *Ray-yu Yang*⁷, and *Peter Hanson*²**

¹AVRDC – The World Vegetable Center, East and Southeast Asia, Kasetsart University, Kamphaeng Saen, Nakhon Pathom 73140, Thailand

²Breeding, AVRDC – The World Vegetable Center, P.O. Box 42, Shanhua, Tainan 741, Taiwan

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⁴Entomology, AVRDC – The World Vegetable Center, P.O. Box 42, Shanhua, Tainan 741, Taiwan

⁵Virology, AVRDC – The World Vegetable Center, P.O. Box 42, Shanhua, Tainan 741, Taiwan

⁶Biotechnology, AVRDC – The World Vegetable Center, P.O. Box 42, Shanhua, Tainan 741, Taiwan

⁷Nutrition, AVRDC – The World Vegetable Center, P.O. Box 42, Shanhua, Tainan 741, Taiwan

10.20 – 10.50 Coffee break

10.50 – 12.30 **Session II: Breeding and Genetic Resources 1**

Co-Chairs: *Katarzyna Niemirowicz-Szczytt and Harry S. Paris*

10.50 – 11.10 [L4] **Superfruiter (sf): A New Melon Type with Multiple Small Seedless Fruits and Increased Yield**

Ya'akov Tadmor, Ido Oz, Uzi Sa'ar, Ayala Meir, Fabian Baumkoler, Nurit Katzir, Efraim Lewinsohn, Vitaly Portnoy, Galil Tzuri, Arthur A. Schaffer, and Joseph Burger

Center for the Genetic Improvement of Cucurbit Fruit Quality, Agricultural Research Organization, Neve Ya'ar Research Center, Ramat Yishay, Israel

11.10 – 11.30 [L5] **The Andromonoecious Allele of *CitACS4* Reduces Seed and Fruit Set in Watermelon**

Encarnación Aguado, Susana Manzano, Alicia García, and Manuel Jamilena

University of Almería, Almería, Spain

11.30 – 11.50 [L6] **The Rhizosphere and Seed Microbiomes of Oil Pumpkin Breeding Lines, Hybrids, and a Population Cultivar**

Eveline Adam¹, Maria Bernhart², Henry Müller¹, Johanna Winkler², Gabriele Berg¹

¹Graz University of Technology, Graz, Austria

²Saatzucht Gleisdorf GmbH, Gleisdorf, Austria

11.50 – 12.10 [L7] **Inheritance of Rind Pattern in Watermelon**

Todd C. Wehner and Lingli Lou

North Carolina State University, Raleigh, NC, U.S.A.

12.10 – 12.30 [L8] **Significant Reciprocal-Cross Differences in Cucumber**

Jia Shen¹, Rob Dirks², and Michael J. Havey³

¹College of Horticulture, Nanjing Agricultural University, Nanjing, China

²Rijk Zwaan BV, Eerste Kruisweg 9, 4793 RS Fijnaart, The Netherlands

³USDA-ARS and University of Wisconsin, Madison, WI, U.S.A.

12.30 – 12.50 **Group photo**

12.50 – 14.00 **Lunch**

14.00 – 15.00 **Session III: Breeding and Genetic Resources 2**

Co-Chairs: *Nebahat Sari and Narinder P.S. Dhillon*

14.00 – 14.20 [L9] **Isolation and Characterization of Three Recessive Andromonoecious Mutants of *Cucurbita pepo***

Alicia García¹, Susana Manzano¹, Encarnación Aguado¹, Zoraida Megías¹, Cecilia Martínez¹, Dolores Garrido², and Manuel Jamilena¹

¹University of Almería, Almería, Spain

²University of Granada, Granada, Spain

14.20 – 14.40 **[L10] Genome-Wide Association Study of Powdery Mildew Resistance in a Worldwide Collection of Melon (*Cucumis melo* L.) Germplasm**

Qianglong Zhu¹, Chuan Wu¹, Sikandar Amanullah¹, Shi Liu^{1,2}, Peng Gao^{1,2}, Xuezheng Wang^{1,2}, Hongyan Ma^{1,2}, Zicheng Zhu^{1,2}, and Feishi Luan^{1,2}

¹Horticulture College, Northeast Agricultural University, Heilongjiang Province, China

²Key Laboratory of Biology and Genetic Improvement of Horticultural Crops (Northeast Region), Ministry of Agriculture, Heilongjiang Province, China

14.40 – 15.00 **[L11] *cmv1* Encodes a Vacuolar Protein Sorting 41 Involved in Transport of Cucumber Mosaic Virus in Melon**

Ana Giner, Laura Pascual, Gabor Gyetvai, Michael Bourgeois, Jordi Garcia-Mas, Ana Montserrat Martin-Hernández

IRTA, Centre for Research in Agricultural Genomics CSIC-IRTA-UAB-UB (CRAG), C/ Vall de Moronta, Edifici CRAG, Campus UAB, Bellaterra (Cerdanyola del Vallès), Barcelona, Spain.

15.00 – 17.00 Coffee break and Poster Session

17.00 – 18.00 Session IV: Breeding and Genetic Resources 3

Co-Chairs: Jos Suelmann and Michael J. Havey

17.00 – 17.20 **[L12] Genome Sequence of the Bottle Gourd [*Lagenaria siceraria* (Mol.) Standl.] and Applications to the Study of Hetero-Graft-Conferred Cold Tolerance**

Pei Xu^{1,2}, Nailin Xin³, Xiaohua Wu¹, Xinyi Wu¹, Ye Tao⁴, Yunping Huang³, Baogen Wang¹, Yaowen Hu¹, Zhongfu Lu¹, Yuhong Wang³, and Guojing Li^{1,2}

¹Institute of Vegetables, Zhejiang Academy of Agricultural Sciences, Hangzhou, China

²State Key Laboratory Breeding Base for Sustainable Control of Plant Pest and Disease, Zhejiang Academy of Agricultural Sciences, Hangzhou, China

³Institute of Vegetables, Ningbo Academy of Agricultural Sciences, Ningbo, China

⁴Lingen Biotechnology Co., Ltd, Shanghai, China

17.20 – 17.40 **[L13] New Sources of Resistance to CYSDV in Melon**

James D. McCreight¹, William M. Wintermantel¹, and Eric T. Natwick²

¹U.S. Department of Agriculture, Agricultural Research Service, Agricultural Research Station, Salinas, California, U.S.A.

²University of California ANR, Cooperative Extension Imperial County, Holtville, CA, U.S.A.

17.40 – 18.00 **[L14] Salt Stress Affects the Chloroplast Ultrastructure of Different Ploidy Watermelon Leaves**

Hong-ju Zhu, Wen-ge Liu, Sheng-jie Zhao, Zhi-hong Yan, Xu-qiang Lu, Nan He, and Ping-li Yuan

Zhengzhou Fruit Research Institute, Chinese Academy of Agricultural Sciences, Zhengzhou, Henan, China

18.15 – 19.30 **Meeting of Cucurbit and Cucurbit Powdery Mildew Experts**

Chair: Aleš Lebeda

Tuesday, July 26

8.00 – 18.30 Full day trip (*Lunch provided*)
Accompanying persons are invited

Wednesday, July 27

9.00 – 10.20 Session V: Genomics 1

Co-Chairs: Yuling Bai and Jordi Garcia-Mas

9.00 – 9.20 **[L15] Progress in Assembling the Cucumber (*Cucumis sativus*) Borszczagowski B10 Line Genome Using Long Single Molecule, Real-Time Reads**
Paweł Osipowski¹, Michał Wojcieszek¹, Magdalena Pawełkowicz¹, Agnieszka Skarzyńska¹, Sergey Koren², Alex Lomsadze³, Rafał Wóycicki⁴, Wojciech Pląder¹, Kohei Yagi¹, Mark Borodovsky³, Stefan Malepszy¹, and Zbigniew Przybecki¹

¹Warsaw University of Life Sciences, Warsaw, Poland

²National Human Genome Research Institute, U.S.A.

³The Wallace H. Coulter Department of Biomedical Engineering, Georgia Institute of Technology, U.S.A.

⁴Institute of Cell Biology, University of Bern, Switzerland

9.20 – 9.40 **[L16] Progress in Cucumber Molecular Breeding**
Xingfang Gu, Shengping Zhang, Han Miao, and Ye Wang

Institute of Vegetables and Flowers, Chinese Academy of Agricultural Sciences, Beijing, China

9.40 – 10.00 **[L17] The Plant Breeders' Dream Come True: Editing Non-Transgenic Cucumber for Broad Virus Resistance Using CRISPR/Cas9 Technology**
Dalia Wolf¹, Jeyabharathy Chandrasekaran², Marina Brumin², Diana Leibman², Chen Klap², Mali Pearlsman², and Amit Gal-On²

¹Department of Vegetable Research, ARO, Volcani Center, Bet Dagan, Israel

²Departments of Plant Pathology and Weed Science, ARO, Volcani Center, Bet Dagan 50250, Israel

10.00 – 10.20 **[L18] QTL Mapping of Cucumber Parthenocarpy by QTL-Seq**
Min He, Qianya Liu, Xiaohua Qi, Qiang Xu, and Xuehao Chen
School of Horticulture and Plant Protection, Yangzhou University, China

10.20 – 10.50 Coffee break

10.50 – 12.30 Session VI: Genomics 2

Co-Chairs: Manuel Jamilena and Grzegorz Bartoszewski

10.50 – 11.10 **[L19] A Chromosome Translocation Leads to Gynoecy in Watermelon**
Jie Zhang, Gaojie Ji, Hong Zhao, Honghe Sun, Shouwei Tian, Guoyi Gong, Jianting Shi, Shaogui Guo, Yi Ren, Haiying Zhang, and Yong Xu
Beijing Vegetable Research Center, National Engineering Research Center for Vegetables, Beijing Academy of Agriculture and Forestry Sciences, Beijing, P.R. China

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- 11.10 – 11.30 **[L20] S-Gene and R-Gene Candidates for Disease Resistance in Watermelon**
Henk J. Schouten, Jeroen A. Berg, and Yuling Bai
 Wageningen UR Plant Breeding, Wageningen University & Research Centre,
 Wageningen, The Netherlands
- 11.30 – 11.50 **[L21] Dissection of Climacteric and Non-Climacteric Ripening in Melon by Using Genetic, Analytic and Genomic Resources**
Lara Pereira, Sergi Pérez, Pablo Rios, Konstantinos Alexiou, Marta Pujol, Michael Phillips, and Jordi Garcia-Mas
 Centre for Research in Agricultural Genomics CSIC-IRTA-UAB-UB, Spain
- 11.50 – 12.10 **[L22] Utilizing Genetic Diversity in the Desert Watermelon *Citrullus colocynthis* for Enhancing Watermelon Cultivars for Resistance to Biotic and Abiotic Stress**
Amnon Levi¹, Alvin Simmons¹, Kai-shu Ling¹, Ya'acov Tadmor², Padma Nimmakayala³, and Umesh K. Reddy³
¹USDA, Agricultural Research Service, U.S. Vegetable Laboratory, Charleston, SC, U.S.A.
²Agricultural Research Organization (ARO), Newe Ya'ar Research Center, Ramat Yishay, Israel
³West Virginia State University, WV, U.S.A.
- 12.10 – 12.30 **[L23] Inheritance and QTL Mapping of Resistance to Gummy Stem Blight in Cucumber (*Cucumis sativus* L.)**
Shengping Zhang, Shulin Liu, Han Miao, Min Wang, Yanxia Shi, Ye Wang, Baoju Li, and Xingfang Gu
 Institute of Vegetables and Flowers, Chinese Academy of Agricultural Sciences, Beijing, China

12.30 – 14.00 Lunch

14.00 – 15.20 **Session VII: Biotic Stresses 1**

Co-Chairs: **James D. McCreight and Mohammad Babadoost**

- 14.00 – 14.20 **[L24] Global Occurrence of the A2 Mating Type of *Pseudoperonospora cubensis*, the Causal Agent of Cucurbit Downy Mildew**
Yigal Cohen¹, Avia E. Rubin¹, Lidan Falach¹, Mariana Galperin¹, and Fabian Runge²
¹Bar-Ilan University, Ramat Gan, Israel
²Biodiversity and Climate Research Centre (BiK-F) at the Senckenberg Gesellschaft für Naturforschung, Frankfurt am Main, Germany
- 14.20 – 14.40 **[L25] Genetic Structure of *Pseudoperonospora cubensis* Populations Infecting Commercial and Non-Commercial Hosts in North Carolina**
Emma C. Wallace and Lina M. Quesada-Ocampo
 North Carolina State University, Raleigh, NC, U.S.A.

14.40 – 15.00 [L26] Interactions of *Cucumis melo* and *Cucurbita* spp. Accessions with *Pseudoperonospora cubensis* Are Race- (Pathotype-) Specific

**Aleš Lebeda¹, Eva Křístková¹, Jana Štěpánková¹, Božena Sedláková¹,
Jana Roháčková¹, Harry S. Paris², and Mark P. Widrechner³**

¹Palacký University in Olomouc, Olomouc-Holice, Czech Republic

²Newe Ya'ar Research Center, Agricultural Research Organization, Ramat Yishay, Israel

³Iowa State University, Ames, Iowa, U.S.A.

15.00 – 15.20 [L27] Cellular and Biochemical Mechanisms of Cucumber Resistance Against *Pseudoperonospora cubensis*

**Marcin Nowicki, Urszula Kłosińska, Wojciech Szczechura, Monika Markiewicz,
Iwona Sowik, Lech Michalczuk, and Elżbieta U. Kozik**

Research Institute of Horticulture, Skierniewice, Poland

15.20 – 15.50 Coffee break

15.50 – 17.30 **Session VIII: Biotic Stresses 2**

Co-Chairs: *Linda Wessel-Beaver and Stefan Malepszy*

15.50 – 16.10 [L28] Loss-of-Function Mutations in a Cucumber *MLO* Gene Lead to Hypocotyl Resistance to Powdery Mildew

Jeroen A. Berg, Yuling Bai, and Henk J. Schouten

Wageningen UR Plant Breeding, Wageningen University & Research Centre,
Wageningen, The Netherlands

16.10 – 16.30 [L29] Expression Analysis on Melon *MLO* Family Genes and Identification of *CmMLO2* Mutants Resistant to Powdery Mildew

Hong Cheng¹, Wei-ping Kong¹, Hong-zhong Yue¹, and Jun-Feng Lü²

¹Institute of Vegetables, Gansu Academy of Agricultural Science, Lanzhou, China

²Gansu Agricultural University, Lanzhou, China

16.30 – 16.50 [L30] Sensitivity to Fungicides in *Podosphaera xanthii* and Impact on Managing Cucurbit Powdery Mildew in New York, USA

Margaret T. McGrath

Cornell University, Riverhead, NY, U.S.A.

16.50 – 17.10 [L31] Initiative for International Cooperation of Researchers and Breeders Related to Determination and Denomination of Cucurbit Powdery Mildew Races

Aleš Lebeda¹, Eva Křístková¹, Božena Sedláková¹, and James D. McCreight²

¹Palacký University, Olomouc-Holice, Czech Republic

²U.S. Department of Agriculture, Agricultural Research Service, Salinas, CA, U.S.A.

17.10 – 17.30 [L32] Survival of *Xanthomonas cucurbitae*, Cause of Bacterial Spot of Cucurbits, in the Field

Sita Thapa and Mohammad Babadoost

University of Illinois, Urbana, IL, U.S.A.

19.00 – 23.00 Gala Dinner

Thursday, July 28

9.00 – 10.20 Session IX: Biotic Stresses 3

Co-Chairs: *Amnon Levi and Aleš Lebeda*

- 9.00 – 9.20 **[L33] Molecular Characterization of the P1 Protein the *Zucchini Yellow Mosaic Virus* in Turkey**

Serife Topkaya¹ and Filiz Ertunc²

¹Gaziosmanpasa University, Tokat, Turkey

²Ankara University, Ankara, Turkey

- 9.20 – 9.40 **[L34] Sensitivity of *Phytophthora capsici* Isolates from Illinois to Fungicides *Jose R. de Souza¹, Tiyo N.H. Rebouças¹, Yiwen Xiang², and Mohammad Babadoost²***

¹Southwest Bahia University State, Vitória da Conquist, Brazil,

²University of Illinois, Urbana, IL, U.S.A.

- 9.40 – 10.00 **[L35] A Point Mutation of the Coat Protein of *Cucumber Green Mottle Mosaic Virus* Alters the Symptoms from Mosaic to Yellow Spots**

Liming Liu, Bin Peng, and Qinsheng Gu

Henan Provincial Key Laboratory of Fruit and Cucurbit Biology, Zhengzhou Fruit Research Institute, Chinese Academy of Agricultural Sciences, Zhengzhou, Henan, China

- 10.00 - 10.20 **[L36] Sources of Variation in ELISA Tests Used to Quantify ZYMV and PRSV Resistance in *Cucurbita moschata***

Linda Wessel-Beaver¹ and Jose Carlos V. Rodrigues²

¹University of Puerto Rico, Mayagüez, Puerto Rico, U.S.A.

²Agricultural Experiment Station, University of Puerto Rico, San Juan, Puerto Rico, U.S.A.

10.20 – 10.50 Coffee break

10.50 – 12.10 Session X: Quality Fruit

Co-Chairs: *Maria Belén Pico and Ya'akov Tadmor*

- 10.50 – 11.10 **[L37] Metabolomic Plasticity of Cucumber Fruit Peel - Effects of Developmental Stage and Market Class**

Ben N. Mansfeld and Rebecca Grumet

Michigan State University, East Lansing, MI, U.S.A.

- 11.10 – 11.30 **[L38] Towards Whole-Genome Association Mapping of Multiple Fruit Quality Traits in Melon and Squash**

Amit Gur¹, Harry S. Paris¹, Galil Tzuri¹, Ayala Meir¹, Nurit Katzir¹, Vitaly Portnoy¹, Efraim Lewinsohn¹, Arthur A. Schaffer², Joseph Burger¹, and Ya'akov Tadmor¹

¹Center for the Genetic Improvement of Cucurbit Fruit Quality, Agricultural Research Organization, Neve Ya'ar Research Center, Ramat Yishay, Israel

²Agricultural Research Organization, Volcani Center, Bet Dagan, Israel

11.30 – 11.50 **[L39] Mapping the Major Genes Related with Lycopene Content and Flesh Color Traits in Watermelon (*Citrullus lanatus*)**

***Shi Liu*^{1,2}, *Qianglong Zhu*^{1,2}, *Wu Chuan*^{1,2}, *Sikandar Amanullah*^{1,2}, *Peng Gao*^{1,2}, *Xuezheng Wang*^{1,2}, *Hongyan Ma*^{1,2}, *Zicheng Zhu*^{1,2}, *Feishi Luan*^{1,2}, and *Angela R. Davis*³**

¹Horticulture College, Northeast Agricultural University, No. 59 Mucai Street Harbin, Heilongjiang Province, 150030, China

²Key laboratory of Biology and Genetic Improvement of Horticultural Crops (Northeast Region), Ministry of Agriculture, No. 59 Mucai Street Harbin, Heilongjiang Province, 150030, China

³South Central Agricultural Research Laboratory, Agricultural Research Service, the U.S. Department of Agriculture. Current address: HM Clause, 9241 Mace Blvd, Davis, CA 95618, U.S.A.

11.50 – 12.10 **[L40] Effects of Grafting on Carbohydrate Metabolism in Melon (*Cucumis melo* L.) During Stages of Fruit Development**

***Qiushi Fu*¹, *Xinying Zhang*¹, *Qiusheng Kong*², *Zhilong Bie*², and *Huaisong Wang*¹**

¹Institute of Vegetables and Flowers, Chinese Academy of Agricultural Sciences, Beijing 100081, China

²College of Horticulture and Forestry, Huazhong Agricultural University/Key Laboratory of Horticultural Plant Biology, Ministry of Education, Wuhan 430070, China

12.10 – 13.00 Final Discussion and Closing

POSTER PRESENTATIONS

Monday, July 25, 15.00 – 17.00

[P1] Effective Long-Term Storage Methods for Pollen in Bitter Gourd (*Momordica charantia* L.)

Masako Akutsu

Tokai University, Toroku, Higashiku, Kumamoto, 862-8652, Japan

[P2] Notes on *in vivo* and *in vitro* Tetraploidization of Bottle Gourd (*Lagenaria siceraria*), Citron Watermelon (*Citrullus lanatus* var. *citroides*) and Colocynth (*C. colocynthis*)

Mohamed Dhamir Kombo, Nebahat Sari, Baris Dal, and Ilknur Solmaz

Cukurova University, Adana, Turkey

[P3] Double-Haploid Pure-Line Development in Galia-Type Melons Having a Long Shelf Life

Seher Pamuk¹, Nebahat Sari¹, Ibrahim Mancak², Ilknur Solmaz¹, Baris Dal¹, and Ahmad Alsaleh²

¹University of Cukurova, Saricam-Adana, Turkey

²Manier Seed Company, Adana, Turkey

[P4] Genetic Diversity Analysis of Winter Squash (*Cucurbita maxima* Duchesne) Accessions Using SSR Markers

Karolina Kaźmińska, Krzysztof Sobieszek, Małgorzata Targońska, Aleksandra Korzeniewska, Katarzyna Niemirowicz-Szczytt, and Grzegorz Bartoszewski

Warsaw University of Life Sciences, Warsaw, Poland

[P5] Inheritance of Tolerance to Tomato Leaf Curl New Delhi Virus (ToLCNDV) in Melon

Cristina Sáez¹, María Ferriol², Cecilia Martínez¹, Cristina Esteras¹, Carmelo López¹, and María Belén Picó¹

¹Institute for the Conservation and Breeding of Agricultural Biodiversity (COMAV-UPV), Universitat Politècnica de València, Valencia, Spain

²Instituto Agroforestal Mediterráneo, Universitat Politècnica de València, Valencia, Spain

[P6] Differential Effects of Drought Stress on Germination and Seedling Growth of Cucumber Accessions

Urszula Kłosińska, Elżbieta U. Kozik, Waldemar Treder, and Krzysztof Klamkowski

Research Institute of Horticulture, Skierniewice, Poland

[P7] CucCAP - Developing Genomic Resources for the Cucurbit Community

Rebecca Grumet¹, Zhangjun Fei², Amnon Levi³, James D. McCreight⁴, Michael Mazourek⁵, Marco Palma⁶, Jonathan Schultheis⁷, Yiqun Weng⁸, Mary Hausbeck¹, Shaker Kousik³, Kai-Shu Ling³, Cecilia McGregor⁹, Lina M. Quesada-Ocampo⁷, Angela Linares Ramirez¹⁰, Umesh K. Reddy¹¹, Louis Ribera⁶, Christine Smart⁵, Pat Wechter³, Todd C. Wehner⁷, Linda Wessel-Beaver¹⁰, William M. Wintermantel⁴

¹Michigan State University, East Lansing MI, U.S.A.

²Boyce Thompson Institute, Ithaca NY, U.S.A.

³USDA-ARS, Charleston SC, U.S.A.

⁴USDA-ARS, Salinas CA, U.S.A.

⁵Cornell University, Ithaca NY, U.S.A.

⁶Texas A&M University, College Station TX, U.S.A.

⁷North Carolina State University, Raleigh NC, U.S.A.

⁸USDA-ARS and University of Wisconsin, Madison WI, U.S.A.

⁹University of Georgia, Athens GA, U.S.A.

¹⁰University of Puerto Rico, Mayaguez PR, U.S.A.

¹¹West Virginia State University, Institute WV, U.S.A.

[P8] Germination of Wild *Cucumis* Species and Interspecific Hybrids

Andrés Cáceres, María Belén Pico, and Carmina Gisbert

Universitat Politècnica de València, Camino de Vera, s/n. Valencia, Spain

[P9] Evaluation of a Cucumber RILs Population for Resistance to Angular Leaf Spot

Renata Słomnicka, Helena Olczak-Woltman, Aleksandra Korzeniewska, Katarzyna Niemirowicz-Szczytt, and Grzegorz Bartoszewski

Warsaw University of Life Sciences, Warsaw, Poland

[P10] Utilization of a Strongly Female Mutant in Seed-Pumpkin Germplasm of *Cucurbita maxima* Duchesne for Increased Production and to Facilitate Hybrid Seed Production

Guoyu Zhang, Haizhen Li, Fan Zhang, and Jing Wang

Beijing Vegetable Research Center, BAAFS, Key Laboratory of Biology and Genetic Improvement of Horticultural Crops (North China), Ministry of Agriculture, Beijing Key Laboratory of Vegetable Germplasm Improvement, Beijing, P.R. China

[P11] Searching for Candidate Genes Controlling Flower and Fruit Development in *Cucurbita pepo*

Cecilia Martinez¹, Cristina Esteras¹, Susana Manzano², Manuel Jamilena², and María Belén Pico¹

¹Universitat Politècnica de València, Spain

²Universidad de Almería, Almería, Spain

[P12] Identification and Mapping of a QTL in Cucumber Controlling Resistance to *Pseudoperonospora cubensis*

Wojciech Szczechura, Urszula Kłosińska, Marzena Nowakowska, and Elżbieta U. Kozik

Research Institute of Horticulture, Skierniewice, Poland

[P13] Effects of Some Plant Activators on Yield, Plant, and Fruit Characteristics of Summer and Winter Melons

Ceren A. Bayram¹ and Nebahat Sari²

¹Adiyaman University, Adiyaman, Turkey

²Cukurova University, Adana, Turkey

[P14] Effects of Cadmium Stress on Growth, Reactive Oxygen Metabolism, and Photosynthesis of Melon Seedlings

Yongping Zhang, Youyuan Chen, and Weihong Gu

Shanghai Academy of Agricultural Sciences, Shanghai, China

[P15] Construction of a High-Density DArT-seq SNP-Based Genetic Map in a Population Derived from a Cross Between a Feral and a Cultivated Watermelon

Runsheng Ren¹, Rumiana Ray², Pingfang Li¹, Jinhua Xu¹, Man Zhang¹, Guang Liu¹, Xiefeng Yao¹, Andrzej Kilian³, and Xingping Yang¹

¹Institute of Vegetable Crops, Jiangsu Academy of Agriculture Sciences, Nanjing, China

²University of Nottingham, Loughborough, UK

³DArT P/L, Canberra, Australia

[P16] Effects of Low Night Temperature on Morphological Anatomy Structure of Grafted Watermelon Seedlings

Xingping Yang¹, Xuedan Hu^{1,2}, Man Zhang¹, Jinhua Xu¹, Runsheng Ren¹, Guang Liu¹, Qian Hou¹, Xiefeng Yao¹, Pingfang Li¹, and Xuehao Chen²

¹Jiangsu Academy of Agricultural Sciences, Nanjing, China

²Yangzhou University, Yangzhou, China

[P17] Analysis of Fruit-Flesh Aroma Profile in a Melon Core Collection

Cristina Esteras, José Luis Rambla, Gerardo Sanchez, Antonio Granell, and María Belén Picó

Universitat Politècnica de València, Camino de Vera s/n, Valencia, Spain

[P18] Long-Lasting (2001 to 2009) Variation in Virulence Among Czech Cucurbit Powdery Mildew Populations Screened on Eleven *Cucumis melo* Differential Genotypes

Božena Sedláková, Eva Rušáková, Eva Křístková, and Aleš Lebeda

Palacký University in Olomouc, Olomouc-Holice, Czech Republic

[P19] Comparison of Anatomic Structure and Enzyme Activity of Fruit Rinds in Crack-Resistant and Crack-Prone Watermelons

Meiling Gao¹, Changbao Yu¹, Xiaoming Wei², Jiayi Li¹, Yan Liu¹, and Yu Guo¹

¹Qiqihar University, Qiqihar, Heilongjiang, China

²Qiqihar Vegetable Research Institute, Qiqihar, Heilongjiang, China

[P20] Determination of Salt Tolerance Potential of Turkish Bottle Gourd (*Lagenaria siceraria*) Germplasm

Halit Yetişir¹, Nihal Denli², Atilla Ata¹, Abdullah Ulaş¹, Hasan Pinar¹, Halil Kirnak¹, Mehmet Yamaç¹

¹Department of Horticulture Faculty of Agriculture University of Erciyes Kayseri, Turkey

²Alata Horticultural Research Station, Mersin, Turkey

[P21] Open-Field Survey of Turkish Bottle Gourd Germplasm Reaction to Virus Diseases

Hakan Fidan¹, Nihal Denli², Halit Yetişir³, Pelin K. Ozturk⁴, and Çetin Nacar²

¹Akdeniz University, Antalya, Turkey

²Alata Horticultural Research Station, Erdemli, Mersin, Turkey

³Erciyes University, Kayseri, Turkey

⁴Biological Control Research Institute Direction, Adana, Turkey

[P22] Reaction of Some Melon (*Cucumis melo*) Genotypes to Drought Stress
Muhemet Zeki Karipcin¹, Nebahat Sari², and Ilknur Solmaz²

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[P23] Evaluation of Genetic Relationships Among Hungarian and Turkish Watermelon (*Citrullus lanatus* var. *lanatus*) Accessions by SSR Markers
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[P24] Genome-Wide Association Mapping of Free Glutamic Acid Content Responsible for Umami Taste in Bottle Gourd

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[P25] Use of Wild *Cucumis* as Potential New Rootstocks for Melons

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[P26] Evaluation of Organically Produced Melon Cultivars for Powdery and Downy Mildew Severity in Maryland, U.S.A.

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[P27] Association Analysis of Morphological Traits in Iranian Melon Accessions

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[P28] Identification of Informative ISSR Markers for Morphological Characteristics of Iranian Dudaim Melons (*Cucumis melo* var. *dudaim*)

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[P29] Identification of ISSR Markers Linked to Morphological Traits in Iranian Snake Melons

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[P30] Effect of Melon Rootstocks with Multiple Disease Resistance on Yield and Quality of Melon (*Cucumis melo* L.)

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[P31] Breeding of F₁ Hybrid Melon ‘Greenpower’ with Multiple Disease Resistance as Rootstock for Melon (*Cucumis melo* L.)

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[P32] Comparison of Some Cucumber Cultivars for Open-Field Production Present on the Polish National List

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[P33] Detection of Two QTLs Associated with Resistance to *Cucurbit yellow stunting disorder virus* in Melon Line TGR 1551

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[P34] Mutation in a Conserved Position of 1-Aminocyclopropane-1-Carboxylate Synthase Leads to Andromonoecy in Watermelon

Gaojie Ji, Jie Zhang, Haiying Zhang, Guoyi Gong, Shaogui Guo, Yi Ren, and Yong Xu

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[P35] Breeding of New Watermelon Hybrid ‘Shenmi-968’ with Disease Resistance and High Quality

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[P36] A New Type of Semi-Bush Habit Processing Cucumber (*Cucumis sativus*) for Simplified Fruit Harvest

Aleksandra Korzeniewska, Teresa Gatecka, Ewa Guzowska, and Katarzyna Niemirowicz-Szczytt

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[P37] Plant-Induced Totipotent Stem Cell Factory for the Biotechnological Production of Fine Chemicals

Magdalena Dąbrowska, Katarzyna Białas, Paulina Głowala, Monika Sobel, Wojciech Błacha, Ilona Cisowska, Adrianna Hamera, Małgorzata Sroka, Martyna Żak, Ewa Siedlecka, and Wojciech Burza

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[P38] Fine Mapping and Cloning of the *Pm-2F* Gene Conferring Resistance to Powdery Mildew in Melon (*Cucumis melo* L.)

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[P39] Cloning and Expression Analysis of Transcription Factor CqWRKY1 in Chieh-qua, *Benincasa hispida* (Thunb.) Cogn. var. Chieh-qua How.

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[P40] Transcriptome Analyses of the Cucumber-*Pseudoperonospora cubensis* Pathosystem

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[P41] Preface to Identification of the Genes Involved in Cucumber Flower Morphogenesis

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[P42] Optimization of Testing Methods of Cucumber for Drought Tolerance

Urszula Kłosińska, Elżbieta U. Kozik, Waldemar Treder, and Krzysztof Klamkowski

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[P43] Suitability for Field Cultivation of New Cucumber F₁ Hybrids Bred at the Research Institute of Horticulture

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