
TABLE OF CONTENTS

KEYNOTE PRESENTATION

Fusarium Head Blight Outbreak Frequency under a Changing Climate Environment. J.M. Fernandes, W. Pavan and E.M. Del Ponte	3
---	---

SESSION 1: FOOD SAFETY, TOXICOLOGY AND UTILIZATION OF MYCOTOXIN-CONTAMINATED GRAIN

Quantification of the <i>Tri5</i> gene, Expression and Deoxynivalenol Production during the Malting of Barley. Anuradha Boddeda, Paul Schwarz and Charlene E. Wolf-Hall	Poster #1	9
High-Throughput Homogenization of Grain Samples for DON Testing. D.M. Reaver and D.G. Schmale III	Poster #2	10
Analysis of Deoxynivalenol, Masked Deoxynivalenol and <i>Fusarium graminearum</i> Pigment in Grain Cultures using a New LC-UV/MS Method. Sasanya, J.J, Hall, C. and Wolf-Hall, C.	Poster #3	11
Production and Purification of Deoxynivalenol from Rice Culture and Analysis using Liquid Chromatography-Ultraviolet-Mass Spectrometry. Sasanya, J.J, Hall, C and Wolf-Hall, C.	Poster #4	12
Deoxynivalenol Measurement: Sources of Error and Sampling Recommendations. Paul Schwarz, Yanhong Dong and Ruth Dill-Macky	Invited Talk	13
Development of a Multiplex Real-Time PCR Assay for Rapid Detection and Quantification of <i>Fusarium</i> spp. in Barley. D.J. Tobias, A. Vashisht, A. Boddeda, C.E. Wolf-Hall and P.B. Schwarz	Poster # 5	14
Ozone as an Antimycotic Agent in Malting Barley. Tobias D.J., C. Wolf-Hall and P.B, Schwarz	Poster #6	15
Economic Perspectives of Growers Facing the Challenges of FHB and DON. Felicia Wu	Plenary Talk	16
Sex Differences in Apparent Adaptation to Immunotoxicity of Deoxynivalenol. Xianai Wu, Marian Kohut, Joan Cunnick and Suzanne Hendrich	Poster #7	17
Doehlert Matrix Design for Optimization of the Determination of Bound Deoxynivalenol in Barley Grain with TFA. Bing Zhou, Yin Li, James Gillespie, Richard Horsley and Paul Schwarz	Poster #8	18
Effect of Enzyme Pretreatments on the Determination of Deoxynivalenol in Barley. Bing Zhou, James Gillespie, Richard Horsley and Paul Schwarz	Poster #9	19

SESSION 2: PATHOGEN BIOLOGY AND GENETICS

Quantitative Expression of <i>Fusarium sporotrichioides</i> Genes in the Presence of Xanthotoxin.	
N.J. Alexander and S.P. McCormick	Poster #10 23
Genetic Diversity of <i>Fusarium graminearum</i> Populations from Cereal and Non-cereal Hosts.	
Rishi R. Burlakoti, Shaukat Ali, Gary A. Secor, Stephen M. Neate, Marcia P. McMullen and Tika B. Adhikari	Poster #11 24
Identify and Characterize Genes Regulated by the <i>FMKI</i> MAP Kinase in <i>Fusarium graminearum</i>.	
Sheng-Li Ding, Xiaoying Zhou, H. Corby Kistler and Jin-Rong Xu	Poster #12 25
Diversity in <i>Fusarium graminearum sensu stricto</i> from the U.S.: An Update.	
Liane R. Gale, Stephen A. Harrison, Eugene A. Milus, Jerry E. Ochocki, Kerry O'Donnell, Todd J. Ward and H. Corby Kistler	Poster #13 26
Phenotypic and Molecular Diversity of <i>Fusarium graminearum sensu stricto</i> from the U.S.	
Liane R. Gale and H. Corby Kistler	Invited Talk 27
Structural and Functional Studies of Trichothecene Biosynthetic Enzymes: A Novel Approach to Combating Fusarium Head Blight.	
Garvey, G., S.P. McCormick and I. Rayment	Poster #14 29
Functions of the Sex Pheromones of <i>Gibberella zeae</i>.	
J. Lee, J.F. Leslie and R.L. Bowden	Poster # 15 30
Isolation of Two Xylanase from <i>Fusarium graminearum</i>.	
S.W. Meinhardt, X. Dong and P.B. Schwarz	Poster #16 31
Spore Development and Trichothecene Mutants of <i>Fusarium graminearum</i>.	
Matias Pasquali, Kye-Yong Seong, Jon Menke, Erik Lysøe, Karen Hilburn, Jin-Rong Xu and H. Corby Kistler	Poster #17 32
Structural and Functional Studies of Trichothecene 3-O-Acetyltransferase: Progress towards Development of an Improved Enzyme for Controlling FHB.	
Ivan Rayment	Invited Talk 33
Trichothecene Chemotypes of Isolates of <i>Gibberella zeae</i> Recovered from Wheat in Argentina.	
M.M. Reynoso, M.L Ramirez, J.F. Leslie and S.N. Chulze	Poster #18 34
Trichothecene Mycotoxin Genotypes of <i>Gibberella zeae</i> in Brazilian Wheat.	
L.B. Scoz, P. Astolfi, D.S. Reartes, D.G. Schmale III, M.G. Moraes and E.M. Del Ponte	Poster #19 35
Population of <i>Fusarium graminearum</i> Schwabe associated with Head and Seedling Blight in Slovakia.	
A. Šrobárová and N. Alexander	Poster # 20 36
Life Cycle and Survival of <i>Fusarium graminearum</i>.	
Frances Trail	Invited Talk 40
Update on the Life Cycle of <i>Fusarium graminearum</i>.	
Frances Trail, John C. Guenther, Heather Hallen, Brad Cavinder and Lilly Yu	Poster # 21 41

Trichothecene Chemotype Composition of *Fusarium graminearum* and Related Species in Finland and Russia.

T. Yli-Mattila, K. O'Donnell, T. Ward and T. Gagkaeva Poster #22 42

SESSION 3: GENE DISCOVERY AND ENGINEERING RESISTANCE
Studies on Barley Spikes Treated with the Trichothecene, Deoxynivalenol: Insight into Barley-*Fusarium graminearum* Interaction.

Jayanand Boddu and Gary J Muehlbauer Poster #23 47

Expression of a Truncated Form of Ribosomal Protein L3 in Transgenic Wheat Confers Resistance to Deoxynivalenol and Fusarium Head Blight.

Rong Di, Ann Blechl, Ruth Dill-Macky, Andrew Tortora and Nilgun E. Tumer Invited Talk 48

Inhibition of *Fusarium graminearum* Germling Development caused by Combinatorially Selected Defense Peptides.

N.W. Gross, Z.D. Fang, B. Cooper, F.J. Schmidt and J.T. English Poster #24 49

Transgenic Wheat Expressing Antifungal Plant Defensin MtDef4 is Resistant to Fusarium Head Blight (FHB).

Jagdeep Kaur, Thomas Clemente, Aron Allen and Dilip Shah Poster #25 50

Reducing DON Potential in Virginia Hulless Barley Lines through Genetic Engineering.

P.A. Khatibi, D.G. Schmale III, W.S. Brooks and C.A. Griffey Poster #26 51

Enhancing Fusarium Head Blight Resistance in Wheat by Manipulating Mechanisms Contributing to Host Resistance and Susceptibility.

Ragiba Makandar, Vamsi Nalam, Juliane S. Essig, Melissa A. Schapaugh, Harold Trick, Ruth Dill-Macky and Jyoti Shah Poster #27 52

Engineering Barley with *Gastrodianin* for Improved Resistance to Fusarium Head Blight.

Eng-Hwa Ng, Tilahun Abebe, James E. Jurgenson and Ronald W. Skadsen Poster #28 54

Genes that Confer Resistance to *Fusarium*.

H. Saidasan and M. Lawton Invited Talk 58

Genetic Studies Define Distinct Pathways of Resistance to Fusarium Head Blight.

H. Saidasan and M. Lawton Poster #29 59

Rapid Functional Identification of Genes Contributing to FHB Resistance.

Steven Scofield and Megan Gillespie Invited Talk 60

Engineering Resistance to *Fusarium graminearum* using Antifungal Plant Defensins.

Dilip Shah, Mercy Thokala, Jagdeep Kaur, Tom Clemente and Anita Snyder Invited Talk 61

Engineering Scab Resistance in Wheat with Plant Defense Signaling Genes.

Jyoti Shah, Ragiba Makandar, Vamsi Nalam and Harold N. Trick Invited Talk 62

Transgenic Wheat with Enhanced Resistance to Fusarium Head Blight.

S.H. Shin, J.M. Lewis, C.A. Mackintosh, A. Elakkad, K. Wennberg, S.J. Heinen, R. Dill-Macky and G.J. Muehlbauer Poster #30 63

Comparative Analysis of FHB QTLs in the Mini Mano/Frontana and Frontana/Remus DH Populations.	
A. Szabo-Hever, B. Toth, Sz. Lehoczki-Krsjak, H. Buerstmayr, M. Lemmens and Á. Mesterházy	Poster #31 64
Extra- and Intracellular Targeting of Antifungal Plant Defensins in Transgenic <i>Arabidopsis</i> for Resistance to <i>Fusarium graminearum</i>.	
Mercy Thokala, Aron Allen and Dilip Shah	Poster #32 65

SESSION 4: FHB MANAGEMENT

Effects of Wheat Genotypes and Inoculation Timings on Fusarium Head Blight (FHB) Severity and Deoxynevalenol (DON) Production in the Field.	
Shaukat Ali and Tika B. Adhikari	Poster #33 69
Aerobiology of <i>Gibberella zae</i>: Whence Come the Spores for Fusarium Head Blight?	
Gary C. Bergstrom and David G. Schmale III	Invited Talk 70
2007 Uniform Fungicide Trials on Soft White Winter Wheat in Michigan.	
D.E. Brown-Rytlewski, W.W. Kirk, R. Schafer and L. Liddell	Poster #34 72
Duration of Post-Flowering Moisture and Infection Timing Affect on FHB and DON in Wheat.	
C. Cowger and C. Medina-Mora	Poster #35 73
Effect of Post Inoculation Moisture on Deoxynivalenol Accumulation in <i>Fusarium graminearum</i>-infected Wheat.	
Pravin Gautam and Ruth Dill-Macky	Poster #36 75
Prosaro® – A New Fungicide for Control of <i>Fusarium</i> and Mycotoxins in Cereals.	
I. Haeuser-Hahn, S. Dutzmann, R. Meissner and F. Goehlich	Poster #37 78
Addition of Adjuvant to Improve Coverage and Fungicide Efficacy on Barley, Langdon 2006	
S. Halley, V. Hofman and G. Van Ee	79
Assessment of Air Stream Speed with Two Nozzle Types as a Tool to Improve Deposition of Fungicide for Control of FHB in Wheat.	
S. Halley, V. Hofman and G. Van Ee	82
Characterizing Parameters of Air Delivery Type Spray Systems to Maximize Fungicide Efficacy on Small Grain.	
S. Halley, K. Misek, V. Hofman and G. Van Ee	Poster #38 88
Evaluation of Fungicide for Control of Fusarium Head Blight with Aerial Application Technology.	
S. Halley and V. Hofman	89
Relationships between Yield, Grain Quality Variables, and Fusarium Head Blight Intensity in Winter Wheat.	
John Hernandez Nopsa and Stephen N. Wegulo	Poster #39 93
Outcomes of using Integrated FHB Management Strategies on Malting Barley Cultivars and Germplasm in Minnesota.	
C.R. Hollingsworth, L.G. Skoglund, D.B. Cooper, C.D. Motteberg and L.M. Atkinson	Poster #40 94

Understanding Practical Outcomes from Implementing FHB Management Strategies on Spring Wheat.	
C.R. Hollingsworth, C.D. Motteberg, D.L. Holen and L.M. Atkinson	Poster #41 96
Contribution of within-Field Inoculum Sources to Fusarium Head Blight in Wheat.	
M.D. Keller, K.D. Duttweiler, D.G. Schmale and G.C. Bergstrom	Poster #42 98
Time of Flowering in Wheat for Managing Fusarium Head Blight.	
Gregory S. McMaster	Invited Talk 99
Differential Effects of Infection Timing on Fusarium Head Blight and on DON and DON Derivatives in Three Spring Grains.	
Marcia McMullen, Jim Jordahl and Scott Meyer	Poster #43 100
Effects of Fungicide Timing on Fusarium Head Blight and on DON and DON Derivatives in Three Spring Grains.	
Marcia McMullen, Scott Meyer and Jim Jordahl	Poster #44 101
Experiences in Reducing Disease and DON through Components of FHB Management.	
Marcia McMullen	Invited Talk 102
Comparison of Fungicides and Nozzle Types against FHB in Wheat at Farm Application.	
Á. Mesterházy, A. Szabo-Hever, B. Toth, G. Kaszonyi, and Sz. Lehoczki-Krsjak	Poster #45 104
Field and Laboratory Studies to Monitor Cell Populations, Lipopeptides and Lipopeptide Genes of <i>Bacillus</i> 1BA, a Biocontrol Agent Active against Fusarium Head Blight.	
J. Morgan, B.H. Bleakley and C.A. Dunlap	Poster #46 106
Effects of Solar Radiation on the Viability of <i>Gibberella zeae</i> Ascospores.	
Mizuho Nita, Erick De Wolf and Scott Isard	Poster #47 107
Mechanistic Simulation Models for Fusarium Head Blight and Deoxynivalenol.	
M. Nita, E. De Wolf, L. Madden, P. Paul, G. Shaner, T. Adhikari, S. Ali, J. Stein, L. Osborne and S. Wegulo	Poster #48 108
Spore Load, Disease, and DON: A Four Year Variety by Residue Study for FHB Management.	
Lawrence E. Osborne, Jeffrey M. Stein and Christopher A. Nelson	Poster #49 109
Spore Load, Disease, and DON: An Inoculum Gradient Study using Sister Wheat Lines.	
Lawrence E. Osborne, Jeffrey M. Stein, Karl D. Glover and Christopher A. Nelson	Poster #50 114
A Quantitative Synthesis of the Relative Efficacy of Triazole-based Fungicides for FHB and DON Control in Wheat.	
Pierce Paul, Patrick Lipps, Don Hershman, Marcia McMullen, Martin Draper and Larry Madden	115
An Integrated Approach to Managing FHB and DON in Wheat: Uniform Trials 2007.	
P. Paul, L. Madden, M. McMullen, D. Hershman, L. Sweets, S. Wegulo, W. Bockus, S. Halley and K. Ruden	117
Fungicide Effects on FHB and DON in Wheat across Multiple Locations and Wheat Classes: Uniform Fungicide Trials 2007.	
P. Paul, L. Madden, M. McMullen, D. Hershman, D. Brown-Rytlewski, L. Sweets, E. Adee, C. Bradley, B. Padgett and K. Ruden	123
Influence of SRWW, HRSW, and HRWW Varieties on the Relationship between FHB and DON.	
Pierce A. Paul, Larry V. Madden, Stephen Wegulo, Tika Adhikari, Shaukat Ali and Erick De Wolf	Poster #51 128

DONcast: Seven Years of Predicting DON in Wheat on a Commercial Scale.	
R. Pitblado, D.C. Hooker, I. Nichols, R. Danford and A.W. Schaafsma	Poster #52 129
Effects of Fungicides on FHB Control and Yield of Winter Wheat Cultivars in North Dakota.	
J.K. Ransom, M.P. McMullen and S. Meyer	Poster #53 130
Effects of Fusarium Head Blight on Yield and Quality Parameters of Winter Wheat.	
K. Rehorova, O. Veskrna, P. Horcicka and T. Sedlacek	Poster #54 131
2007 Uniform Fungicide Performance Trials for the Suppression of Fusarium Head Blight in South Dakota.	
K.R. Ruden, B.E. Ruden, K.D. Glover and J.L. Kleinjan	Poster #55 135
2007 Uniform Trials for the Performance of Biological Control Agents in the Suppression of Fusarium Head Blight in South Dakota.	
K.R. Ruden, B.H. Bleakley and B.E. Ruden	Poster #56 136
Characterization of DON Accumulation in SRWW Cultivars with Different Levels of Type II Resistance to FHB.	
Jorge D. Salgado, Gloria Broders, Larry Madden and Pierce Paul	Poster #57 137
Contribution of Local Inoculum Sources to Regional Atmospheric Populations of <i>Gibberella zeae</i>.	
D.G. Schmale III, B.R. Dingus, M.D. Keller and A.K. Wood-Jones	Poster #58 139
Environmental Factors Influencing FHB Severity and DON in Barley.	
J.M. Stein, L.E. Osborne, S. Neate and C. Hollingsworth	Poster #59 140
Differential Sensitivity to Triazole-based Fungicides among Isolates of <i>Fusarium graminearum</i> .	
Matthew Wallhead, Larry Madden and Pierce Paul	Poster #60 141
A Method for Quantifying Trichothecenes and Ergosterol in Single Wheat Florets using Gas Chromatography with Electron Capture Detection.	
K.T. Willyerd, K. Boroczky and G.A. Kuldau	Poster #61 142
Influence of Infection-Timing on Fusarium Head Blight Severity, Wheat Kernel Damage and Deoxynivalenol Accumulation during a 2007 Field Study.	
K.T. Willyerd, M. Nita, E.D. DeWolf and G.A. Kuldau	Poster #62 143
Control of <i>Fusarium</i> Inoculum Production in Corn Residue by Mechanical, Biological, and Chemical Treatments.	
G.Y. Yuen, C.C. Jochum, J.E. Scott and S.Z. Knezevic	Poster #63 144
Effects of Spray Application Methods on Biocontrol Agent Viability.	
G.Y. Yuen, C.C. Jochum, S. Halley, G. Van Ee, V. Hoffman and B.H. Bleakley	Poster #64 149
Results from the 2007 Standardized Evaluation of Biological Agents for the Control of Fusarium Head Blight on Wheat and Barley.	
G.Y. Yuen, C.C. Jochum, K.R. Ruden, J. Morgan, B.H. Bleakley and L.E. Sweets	Poster #65 153

SESSION 5: VARIETY DEVELOPMENT AND HOST RESISTANCE

Air Separation and Digital Photo Analysis as Novel Methods to Measure the Percentage of *Fusarium* Damaged Kernels.

Andres Agostinelli, Anthony Clark and D. Van Sanford

Poster #66 161

Use of MAS for FHB Resistance: Is it working for Wheat Breeders?	
James A. Anderson, Sixin Liu and Shiaoman Chao	Invited Talk 163
Marker-Assisted Transfer of 3BS QTL for FHB Resistance into Hard Winter Wheat.	
G.-H. Bai, P. St. Amand, D.-D. Zhang, A. Ibrahim, S. Baenziger, B. Bockus and A. Fritz	Poster #67 164
Genetic Linkage Mapping with DArT Markers to Detect Scab Resistance QTLs in a 'Sumai-3' Derived Wheat Population.	
Bhoja. R. Basnet, Yang Yen, Shiaoman Chao and Karl D. Glover	Poster #68 165
Using the Affymetrix Array to Discover Single Nucleotide Polymorphisms in Wheat.	
A.N. Bernardo, S.-W. Hu, P.J. Bradbury, R.L. Bowden, E.S. Buckler and G.-H. Bai	Poster #69 166
Enhancing Host Resistance to Fusarium Head Blight: Pyramiding Genes in Spring Wheat.	
W.A. Berzonsky, E.L. Gamotin, G.D. Leach and T. Adhikari	Poster #70 167
QTL associated with Reduced Kernel Damage and Resistance to Fusarium Head Blight in Wheat.	
C.M. Bonin, F.L. Kolb and E.A. Brucker	Poster #71 168
Resistance to Kernel Damage caused by Fusarium Head Blight in an RIL Population.	
C.M. Bonin and F.L. Kolb	Poster #72 169
Barley Chromosome 2(2H) Bin 10 Fusarium Head Blight Resistance QTL: Mapping and Development of Isolines.	
Christine N. Boyd, Richard Horsley and Andris Kleinhofs	Poster #73 170
Haplotyping of Known FHB Resistance QTL in Pacific Northwest Wheat Genotypes.	
Jianli Chen, Juliet Windes, Robert Zemetra and Carl Griffey	Poster #74 173
Validation of Six QTLs associated with Fusarium Head Blight Resistance in Adapted Soft Red Winter Wheat.	
Jianli Chen, Carl Griffey, Shiaoman Chao and Gina Brown-Guedira	Poster #75 174
Development of Scab Resistant Soft Red Winter Wheat Germplasm using Marker- Assisted Selection.	
Jose M. Costa, Leila Al-Tukhaim, Raquel Brown, Neely Gal-Edd, Alice Ku, Erin Wenger, David Van Sanford and Gina Brown-Guedira	Poster #76 175
Applying Single Kernel Sorting Technology to Developing Scab Resistant Lines.	
F.E. Dowell and E.B. Maghirang	Poster #77 176
Tunisian Durum Wheat as New Sources of Resistance to Fusarium Head Blight.	
Farhad Ghavami, Melissa Huhn, Elias Elias and Shahryar Kianian	Poster #78 177
Responding to Fusarium Head Blight for the Northern Rocky Mountains and Western Great Plains.	
W. Grey, A. Dyer and L. Talbert	179
Resistant Germplasm from Susceptible Parents: An Evolutionary Approach.	
Steve Haber and Jeannie Gilbert	Poster #79 182
Resistance of Winter Wheat Lines to Deoxynivalenol and Nivalenol Chemotypes of <i>Fusarium graminearum</i>.	
P. Horevaj, E.A. Milus, L.R. Gale and H.C. Kistler	Poster #80 183
Current Strategies for Breeding Fusarium Head Blight Resistant Wheat in Canada.	
G. Humphreys, D. Somers, S. Fox, D. Brown, H. Voldeng, A. Brule-Babel, F. Eudes and A. Comeau	Invited Talk 188

Effects of Agronomic and Morphological Characters on FHB Severity, Deoxynivalenol and Ergosterol Concentrations in Near-isogenic Line Pairs of Barley.	
Haiyan Jia, Brian J. Steffenson and Gary J. Muehlbauer	Poster #81 189
Fusarium Head Blight (FHB) Resistance into Soft Red Winter Wheat AGS2000.	
Jerry Johnson, Zhenbang Chen, James Buck and Mingli Wang	Poster #82 190
Characterization of Resistance to Deoxynivalenol (DON) Accumulation in Different Wheat Lines.	
L. Kong, Y. Dong and H.W. Ohm	Poster #83 191
Development of CIMMYT's 11th Scab Resistance Screening Nursery.	
J.M. Lewis, T. Ban, R. Ward and E. Duveiller	Poster #84 192
Preliminary Examination of the Influence of Grain Color in FHB Resistance.	
J.M. Lewis, R. Trethowan, T. Ban, E. Duveiller and R. Ward	Poster #85 193
FHB Resistance and DON Contamination in Virginia Barley.	
S. Liu, D. G. Schmale III, W.S. Brooks, P.A. Khatibi and C.A. Griffey	Poster #86 194
Meta-Analyses of QTL associated with Fusarium Head Blight Resistance.	
Shuyu Liu, Carl A. Griffey, Anne L. McKendry and Marla D. Hall	Poster #87 195
Pyramiding FHB Resistance QTL using Marker-Assisted Selection in Wheat.	
S. Y. Liu, C.A. Griffey, J. Chen and G. Brown-Guedira	Poster #88 200
Winter and Spring Wheat Parental Diallel Analysis for Scab Resistance.	
S. Malla, A.M.H. Ibrahim and K. Glover	Poster #89 201
Role of a Plasma Membrane Ca²⁺-ATPase in the Resistance of Potato Cells to <i>Fusarium solani</i>.	
A.M. Manadilova, G.T. Tuleeva and R.M. Kunaeva	Poster #90 202
Prospects for Identifying Fusarium Head Blight Resistance QTL by Association Mapping using Breeding Germplasm.	
Jon Massman and Kevin Smith	Poster #91 203
Breeding for FHB Resistance in Winter Wheat: What's Ahead?	
Anne L. McKendry	Invited Talk 204
Scab Epidemic in Nebraska.	
Neway Mengistu, P. Stephen Baenziger, Stephen Wegulo, Julie Breathnach and Janelle Cousell	Poster #92 205
'Faller': A New Hard Red Spring Wheat Cultivar with High Yield and Quality added to Combat Fusarium Head Blight Disease.	
Mohamed Mergoum, Richard C. Frohberg and Robert W. Stack	206
Putative FHB Resistance Components Resistance to Kernel Infection and Tolerance in the SSRWW Nursery, 2005-2007.	
Á. Mesterházy, A. Szabo-Hever, B. Toth, G. Kaszonyi and Sz. Lehoczki-Krsjak	Poster #93 211
Evaluation of FHB Profiles of Advanced Wheat Breeding Lines Treated with a Fungicide.	
N. Mundell, D. Hershman, Chad Lee and D. Van Sanford	Poster #94 212
The 2006-07 Southern Uniform Winter Wheat Scab Nursery.	
J.P. Murphy and R.A. Navarro	Poster #95 213
Haplotype Structure and Genetic Diversity at Fusarium Head Blight Resistance QTLs in Soft Winter Wheat Germplasm.	
Leandro Perugini, Clay Sneller, Fred Kolb, David VanSanford, Carl Griffey, Herb Ohm and Gina Brown-Guedira	Poster #96 214

Solving the FHB Problem: Growers, Export Market and Wheat Commodity Perspectives.	
Jim Peterson	Plenary Talk 218
Association Mapping of Complex Traits in a Diverse Durum Wheat Population.	
C.J. Pozniak, S. Reimer, D.J. Somers, F.R. Clarke, J.M. Clarke, R.E. Knox, A.K. Singh and T. Fetch	Plenary Talk 220
Molecular Characterization of a Wheat-<i>Leymus</i> Compensating Translocation Line Conferring Resistance to Fusarium Head Blight.	
L.L. Qi, M.O. Pumphrey, B. Friebe, P.D. Chen and B.S. Gill	Poster #97 225
FHB Resistance of Wheat Lines Near-isogenic for Five Different FHB Resistance QTLs.	
Pilar Rojas-Barros, Zachary J. Blankenheim, Karen J. Wennberg, Amar M. Elakkad, Ruth Dill-Macky and David F. Garvin	Poster #98 226
Family Based Mapping of FHB Resistance QTLs in Hexaploid Wheat.	
Rosyara, R.U., Maxson-Stein, K.L., Glover, K.D., Stein, J.M and Gonzalez-Hernandez, J.L.	Poster #99 227
Facing the FHB Challenges to Malting Barley and Brewing through Barley Breeding.	
L.G. Skoglund	Invited Talk 228
Development of Barley Variety Candidate M122 with Enhanced Resistance to FHB.	
Kevin P. Smith, Ed Schiefelbein and Guillermo Velasquez	232
Report on the 2006-07 Northern Uniform Winter Wheat Scab Nurseries (NUWWSN and PNUWWSN).	
C. Sneller, P. Paul, L. Herald, B. Sugerman and A. Johnston	237
Deoxynivalenol Accumulation and Fusarium Head Blight Severity in Winter Wheat after Spray-Inoculation with Mixture or Single Isolates of <i>Fusarium graminearum</i>.	
L. Tamburic-Ilicic and A.W. Schaafsma	243
The Effect of <i>Fusarium solani</i> Metabolites on Peroxidase Activity in Potato.	
A.Sh.Utarbayeva, O.A.Sapko and R.M. Kunaeva	Poster #100 249
Searching for New Sources of FHB Resistance in the Relatives of Wheat.	
S.S. Xu, R.E. Oliver, X. Cai, T.L. Friesen, S. Halley and E.M. Elias	Invited Talk 250
Comparison of Barley Seed Proteomic Profiles associated with Fusarium Head Blight Reaction.	
J. Zantinge, K. Kumar, K. Xi, A. Murray, M. Johns, J.H. Helm and P. Juskiw	Poster #101 251
Novel Fusarium Head Blight Resistance in <i>Triticum aestivum</i> Revealed by Haplotyping with DNA Markers associated with a Known Resistance QTL.	
C. Zila, J.R. Recker, X. Shen, L. Kong and H.W. Ohm	Poster #102 252
