Oral Presentations

Oral presentations are grouped by society and topic – refer to the concurrent session list to find the number for your talk. The presenter name is underlined. Student presentations for competition are designated by an asterisk.

MONDAY AFTERNOON Concurrent Session 1

Meeting Room 1		**CSPB-I Plant Reproduction** *Chair: Teagen Quilichini*
1:15	*O1	A CELL ATLAS OF MALE AND FEMALE REPRODUCTIVE STRUCTURES IN POPULUS REPRESENTING MULTIOME DATA; Oscar Felipe Nunez-Martinez, Stefan Heinen, Raju Soolanayakanahally, and Katharina Bräutigam
1:30	O2	WITHDRAWN
1:45	O3	A FUNCTIONALLY REDUNDANT MAPK PATHWAY CONTROLS STIGMA RECEPTIVITY IN ARABIDOPSIS; Muhammad Jamshed, Subramanian Sankaranarayanan, Kumar Abhinandan, and Marcus A. Samuel
2:00	*O4	CHARACTERIZING THE ROLES OF MECHANOSENSITIVE ION CHANNEL GENES MSL7 AND MSL8 IN THE BASAL COMPATIBLE POLLEN RESPONSE IN A. THALIANA; Paula Beronilla and Daphne R. Goring
2:15	O5	SHOWCASING THE POWER OF SYNCHROTRON X-RAY IMAGING TOOLS FOR CROP SEED RESEARCH; Paula Ashe, Kaiyang Tu, Jarvis A. Stobbs, Jay Dynes, Miranda Vu, Hamid Shaterian, Sateesh Kagale, Karen K. Tanino, Janitha P.D. Wanasundara, Chithra Karunakaran, and Teagen D. Quilichini
2:30	O6	FLOWER OPENING; ARF2-MYB6 MODULE MEDIATES AUXIN-REGULATED PETAL EXPANSION IN ROSA HYBRIDA; Nisar Hussain, Changxi Chen, Xiaoming Sun, and Junping Gao
Meeting Room 15		**CSA-I Breeding and Genetics (Graduate Students)** *Chairs: Jamie Larsen and Simranjeet Kaur*
1:15	*O7	NESTED ASSOCIATION MAPPING TO IDENTIFY STRIPE RUST RESISTANCE LOCI AND THEIR MARKERS IN SPRING WHEAT; Simranjeet Kaur, Raman Dhariwal, Gurcharn Singh Brar, and Harpinder Singh Randhawa
1:30	*O8	GENOMIC PREDICTION FOR IMPROVING WINTER HARDINESS AND FUSARIUM HEAD BLIGHT RESISTANCE IN WINTER DURUM WHEAT; Ritesh K. Yadav, Raja Ragupathy, Gavin Humphreys, Demissew S. Desta, André Laroche, Harmeet S. Chawla, Marcos Cordeiro, Akshaya Vasudevan, Harpinder S. Randhawa, and Curt A. McCartney
1:45	*O9	ENHANCEMENT OF TOTAL SHOOT LIPID CONTENT (TSLC) IN PERENNIAL LEGUME FORAGES USING CHEMICAL MUTAGENESIS; Mohammed Musthafa Mukthar, Tharangani Somarathna, Bin Shan, Guanqun (Gavin) Chen, Stacy Singer, and Hari Poudel
2:00	*O10	IDENTIFYING KEY PHENOTYPIC AND GENOTYPIC TRAITS LINKED TO TRANSPIRATION EFFICIENCY AGAINST INDIVIDUAL AND COMBINED HEAT AND DROUGHT STRESSES IN CONTRASTING WHEAT GENOTYPES; Abdul Halim, Raju Soolanayakanahally, and Karen Tanino

Meeting Room 3		**CAPB/CSPB-II Abiotic Stress #1 Resilience to Climate Extremes** *Chair: Jean-Benoit Charron*
1:15	*O13	A SINGLE NUCLEUS ATLAS OF TRANSCRIPTIONAL RESPONSES TO GROWTH-ALTERING STRESS: DROUGHT, SALINITY, AND FLOODING; Sean Robertson and Olivia Wilkins
1:30	*O14	COMBINED EXPOSURE TO LOW PHOSPHATE AND SALT ELICITS DIFFERENT PHENOTYPIC AND TRANSCRIPTIONAL RESPONSES FOR TWO EXTREMOPHILE ECOTYPES; Haoran Jia, Solmaz Irani, Isabel Johnson, Maheshi Dassanayake and Elizabeth Weretilnyk
1:45	O15	DISSOCIATED FLOWERING AND COLD ACCLIMATION IN BRACHYPODIUM HYBRIDUM PROVIDE INSIGHTS INTO THE ADAPTIVE RESPONSES TO LOW TEMPERATURES IN CEREALS; Jean-Benoit Charron, Luc Ouellette, and Boris Mayer
2:00	*O16	TRANSCRIPTIONAL REPRESSION OF *MSWOX13-2* IN ALFALFA ENHANCES TOLERANCE TO WATERLOGGING STRESS; Udaya Subedi, Kimberley Burton Hughes, Madeline Lehmann, Gaganpreet Dhariwal, Guanqun(Gavin) Chen, Surya Acharya, and Stacy Singer
2:15	*O17	PLANT GROWTH-PROMOTING PHYTOMICROBIOME BACTERIA: ENHANCED CROP PERFORMANCE UNDER SALINITY STRESS AND FOR GREENHOUSE GAS MANAGEMENT; Rania Alrasheed, Sowmyalakshmi Subramanian, Michael Fefer, and Donald L. Smith
Meeting Room 4		**CSPB-III Molecular Host-Pathogen Interaction #1** *Chair: David Chiasson*
1:15	*O18	*TETRANYCHUS URTICAE* METABOLIC RESPONSES TO *ARABIDOPSIS THALIANA* DEFENSIVE PHENYLPROPANOIDS; A. Harrison, C. Sharma, K. Bruinsma, J. Maglov, M. Bernards, and V. Grbic
1:30	*O19	THE IMPACT OF ELEVATED TEMPERATURE ON NPR1 PROTEIN REGULATION IN PIPECOLIC ACID-MEDIATED IMMUNITY IN ARABIDOPSIS THALIANA; Spencer Tout and Christian Danve M. Castroverde
1:45	*O20	FER KINASE AND CELL WALL SENSORS LRX1/2 REGULATE MICROBIOME IN A PHOSPHATE-DEPENDENT MANNER; Siyu Song, Keegan J. McDonald, Melissa Y. Chen, Zayda Morales Moreira, and Cara H. Haney
2:00	*O21	DISTINCT PLANT IMMUNE RESILIENCE MECHANISMS IN DIVERSE ACCESSIONS OF *ARABIDOPSIS THALIANA*; Christina AM. Rossi, Dhrasti N Patel, and Christian Danve M. Castroverde
2:15	*O22	AGE-RELATED RESISTANCE REQUIRES SALICYLIC ACID SIGNALING VIA NPR PROTEINS AND RESULTS IN THE MODEST ACCUMULATION OF N-HYDROXYPIPECOLIC ACID IN LEAVES; G.M. Nunn, Jacob Lund, Natalie Belu, Rowan Brookman, and R.K. Cameron
Meeting Rooms 7+8		**CSHS-I / CPS-J1 Cannabis** *Chair: Dr. Youbin Zheng, University of Guelph*
1:15	O23	BOTTOM COOLING DURING CULTURE INITIATION INCREASES SURVIVAL AND REDUCES HYPERHYDRICITY IN MICROPROPAGATED CANNABIS PLANTS; Rambod Abiri, Declan O'Reilly, and Andrew Maxwell Phineas Jones

1:30	*O24	OPTIMIZING *EX-VITRO* ONE-STEP RUBY-EQUIPPED HAIRY ROOT TRANSFORMATION IN DRUG- AND HEMP-TYPE CANNABIS; Ladan Ajdanian, Mohsen Niazian, and Davoud Torkamaneh
1:45	*O25	SPECTRUM MATTERS: THE IMPACT OF RED LIGHT ON MORPHOLOGY, POTENCY, AND PHOTOBLEACHING IN *CANNABIS SATIVA*; Karine Jarzecki and Susan J. Murch
2:00	*O26	FUNGAL, OOMYCETE AND BACTERIAL MICROBIOME COMMUNITIES IN ROOTS OF GREENHOUSE CULTIVATED *CANNABIS SATIVA* ARE INFLUENCED BY GROWTH SUBSTRATE, HOST GENOTYPE, AND PLANT GROWTH STAGE; Heather H Tso and Zamir K Punja
2:15	*O27	CHARACTERIZATION OF INDIGENOUS POPULATIONS OF CANNABIS IN IRAN: A MORPHOLOGICAL AND PHENOLOGICAL STUDY; Mehdi Babaei and Davoud Torkamaneh
2:30	*O28	PROFILING THE TRANSCRIPTOMIC AND CELLULAR RESPONSE OF *CANNABIS SATIVA* TO INFECTION BY *SCLEROTINIA SCLEROTIORUM* THROUGH SPACE AND TIME; Natalie L. Cale, Rylee E. Swiderek, and Mark F. Belmonte
Meeting Rooms 9+10		**CBA-I General Botany** *Chair: Jenny McCune*
1:15	O29	RADIOMETRIC INVESTIGATION DUE TO NATURALLY OCCURRING RADIONUCLIDES IN SOILS OF IGBOKODA, A COASTAL AREA IN ONDO STATE, NIGERIA. A; Funmilola Mabel Ojo, Abiola Olawale Ilori and Kayode Olayele Karigidi
1:30	O30	PLANT AND SOIL COMMUNITIES GIVEN NITROGEN DEPOSITION, WARMING, HARVESTING AND SOIL CONDITIONS; Laura Super
1:45	*O31	PREVALENCE AND CONSEQUENCES OF INTERSPECIFIC POLLEN TRANSFER IN A MONTANE COMMUNITY; Jacalyn Grey and Anne Worley
2:00	*O32	EVOLUTIONARY ANALYSIS OF INDIAN & SRI LANKAN WOODY TREES; Harsimran Kaur, Sachin Medigeshi Harish, Semini Nawalage, and Selvadurai Dayanandan
2:15	O33	ECOLOGICAL PROCESSES DETERMINING WEED SPECIES DISTRIBUTION ACROSS NOVA SCOTIAN WILD BLUEBERRY FIELDS; Andrew McKenzie-Gopsill, Hugh Lyu, Scott White, and Sheldon Hann
Meeting Rooms 11+12		**CPS-I Advances in Plant Pathology 1** *Chair: Dr. Tom Hsiang (U of Guelph) & Dr. Lone Buchwaldt (AAFC Saskatoon)*
1:15	O34	CONTRIBUTIONS OF METABARCODING AND POPULATION GENETICS TO FUSARIUM HEAD BLIGHT EPIDEMIOLOGY; Toan Bao Hung Nguyen, Marie Foulongne-Oriol, Amandine Henri-Sanvoisin, Sylvie Treguer, Gaétan Le Floch, and Adeline Picot
1:30	O35	ADVANCED MOLECULAR DIAGNOSTICS REVEAL SHIFTS IN *FUSARIUM* POPULATIONS ASSOCIATED WITH WHEAT IN WESTERN CANADA: A FIVE-YEAR STUDY; Mohamed Hafez, Nicola Schatz, Khouloud Ayari, Rhodesia Celoy, Mouldi Zid, Ryan Gourlie, Dianevys GonzalezPenaFundora, Thomas Kelly Turkington, and Reem Aboulhaddour
1:45	O36	GENOME MINING OF PHYTOPATHOGENIC FUNGI FOR PHARMACOLOGICAL PRODUCTS; Tom Hsiang, Xueting Liu, Jingyu Zhang, Lixin Zhang, Lan Jiang, Xinye Wang, and Guoliang Zhu
2:00	O37	*EXECUTER1* IS TRIGGERED BY SINGLET OXYGEN AND CONFER RESISTANCE TO *SCLEROTINIA SCLEROTIORUM* VIA PROGRAMMED CELL DEATH IN BOTH CANOLA AND SOYBEAN; Lone Buchwaldt, Helen Lui, Alan Davies, Jonathan Durkin, and Fuyou Fu

2:15	O38	VIRAL DIVERSITY IN A MIXED TREE FRUIT PRODUCTION SYSTEM DETERMINED THROUGH BEE-MEDIATED POLLEN METAGENOMICS; Raj Vansia, Guillaume J. Bilodeau, Stephen F. Pernal, M. Marta Guarna, Michael Rott, and Jonathan S. Griffiths
Meeting Room 13		**CPS-II Advances in Plant Pathology, Surveillance, and Diagnostics (Competition)** *Chairs: Ryan Gourlie (AAFC Lethbridge) & Dr. Nora Foroud (AAFC Lethbridge)*
1:15	*O40	POTENTIAL FOR BEES AND POLLEN AS BIOMONITORS OF AGRICULTURAL PATHOGENS THROUGH A METABARCODING HIGH THROUGHPUT SEQUENCING (HTS) APPROACH; C. M. Hewapathirana, M.E. Rott, M.M. Guarna, S.F. Pernal, J.S. Griffiths, and G.J. Bilodeau
1:30	*O41	IDENTIFICATION AND CHARACTERIZATION OF *PODOSPHAERA APHANIS* CAUSING POWDERY MILDEW ON SALMONBERRY AND THIMBLEBERRY PLANTS IN BRITISH COLUMBIA; Chidrupa Podile, Rishi R. Burlakoti, Amy Novinscak, Miao Liu, Zamir K. Punja, Davis Iritani, and Yoichiro Watanabe
1:45	*O42	ESTIMATING EARLY INFECTION OF ONIONS BY *STEMPHYLIUM VESICARIUM* BASED ON SPORE TRAPPING AND INFECTION OF BARLEY; Julia Scicluna, Bruce D. Gossen, and Mary Ruth McDonald
2:00	*O43	IDENTIFICATION OF NOVEL AND DIVERSE MYCOVIRUSES IN THE PHYTOPATHOGENIC FUNGUS, BOTRYTIS CINEREA; Sarah C. Drury, Naser Poursalavati, Peter Moffett, and Mamadou Lamine Fall
2:15	*O44	COLLECTION AND IDENTIFICATION OF *PLASMODIOPHORA BRASSICAE* PATHOTYPES COLLECTED IN WESTERN CANADA OVER THE LAST TEN FIELD SEASONS (2014-2023); Emilee Storfie, Victor Manolii, Yoann Aigu, Michael Harding, Sheau-Fang Hwang, and Stephen Strelkov
2:30	*O45	UTILITY OF CONTROLLED ENVIRONMENT AGRICULTURE IN THE PRODUCTION OF MEDICINAL FUNGI; Jacqueline Nguyen, Nykole Crevits, Jeff Huber, Mike Dixon, and Thomas Graham
Meeting Room 2		**CPS-III Disease Resistance** *Chair: Dr. Lipu Wang (U of Saskatchewan) & Malini Jayawardana (U of Manitoba)*
1:15	O46	A HIGH THROUGHPUT PHENOTYPING PLATFORM FOR CEREAL RESEARCH AND BREEDING PROGRAMS TO IDENTIFY FUSARIUM DAMAGED KERNELS AND FUSARIUM PRODUCED MYCOTOXINS; Lipu Wang, Deborah Michel, Keyhan Najafian, Mackenzie Hladun, Alejandra M. Oviedo-Ludena, Sheila M P Andrade, Anas El-Aneed, Ruijiao Kang, Yuefeng Ruan, Lingling Jin, Ian Stavness, and Hadley R. Kutcher
1:30	O47	A NEW MODEL: FUNCTIONAL GENES CONTRIBUTING TO ADULT PLANT RESISTANCE FROM CANOLA-BLACKLEG PLAYBOOK; Zhongwei Zou, and W. G. Dilantha Fernando
1:45	O48	CANADIAN DURUM WHEAT CULTIVAR STRONGFIELD EXHIBITS MODERATE SUSCEPTIBILITY TO MEXICAN LEAF RUST (*PUCCINIA TRITICINA*) RACES; Firdissa E. Bokore, Kerry Boyle, Yuefeng Ruan, Curt A. McCartney, Colin W. Hiebert, Ron E. Knox, Xiangyu Pei, Elsa Reimer, Karim Ammar, Wentao Zhang, Pierre Fobert, Richard D. Cuthbert, Samia Berraies, and Brent D. McCallum
2:00	O49	IDENTIFYING RESISTANCE (R) GENES TO BLACKLEG *LEPTOSPHAERIA MACULANS* IN ACCESSIONS OF CANOLA; Oluwafemi Lawal and Dilantha Fernando
2:15	O50	THE EFFECT OF *R* GENE ROTATION ON MITIGATION OF CANOLA BLACKLEG DISEASE IN WESTERN CANADIAN PRAIRIES; Malini Anudya Jayawardana, Zhongwei Zou, and Dilantha Fernando

MONDAY AFTERNOON Concurrent Session 2

Meeting Room 1		**CSA-II Breeding and Genetics** *Chairs: Harpinder Randhawa and Ritesh Yadav*
3:15	O51	DEVELOPMENT OF SALT TOLERANT ALFALFA (*MEDICAGO SATIVA* L.): FROM LAB TO FIELD; **Bill Biligetu**, Shanna Quilichini, and Surendra Bhattarai
3:30	O52	LEAF WATER RELATIONS AND OSMOTIC ADJUSTMENT OF CANADA WESTERN RED SPRING WHEAT CULTIVARS SUBJECTED TO DROUGHT; Gopal Sharma, Thorsten Knipfer, and **Gurcharn S. Brar**
3:45	O53	ENHANCING PROTEIN CONTENT IN *BRASSICA NAPUS*: GENETIC INSIGHTS AND BREEDING IMPLICATIONS; **Harmeet S. Chawla**, Mohamed S. Youssef, Sean Walkowiak, and Robert W. Duncan
4:00	O54	PARTICIPATORY PLANT BREEDING TO INCREASE DIVERSITY AND RESILIENCE: A CASE STUDY OF CANADIAN WHEAT; **Michelle Carkner** and Martin Entz
4:15	O55	EXAMINING THE RELATIONSHIP BETWEEN BACTERIAL BROWN SPOT AND COMMON BACTERIAL BLIGHT IN COMMON BEAN; Caio Correa, Emily Morneau, Owen Wally, Chris Gillard, and **Jamie Larsen**
4:30	O56	PROGRESS IN OAT BREEDING IN NORTH CHINA; **Junyong Ge**, Xingyu Wang, Yunxia Li, Zhanhong Dong, Haige Zhao, Huadong Zang, Yadong Yang, Zhaohai Zeng
Meeting Room 15		**CSA-III Agronomy I – Cropping Systems** *Chairs: Malinda Thilakarathna and Ahmad Sharjeel*
3:15	O57	DETERMINING OPTIMUM SEEDING RATIOS AND PEA-BRASSICA INTERCROP COMBINATIONS FOR MAXIMIZING AGRONOMIC BENEFITS; **Yunfei Jiang** and Claude Caldwell
3:30	O58	AN INTEGRATED STRATEGY TO IMPROVE PROFITABILITY OF BARLEY PRODUCTION IN WESTERN CANADA: AN INTRODUCTION OF GROW BARLEY PROGRAM; **Hiroshi Kubota**
3:45	O59	IMPLEMENTING DIVERSIFIED CROP ROTATIONS ENHANCES ECOSYSTEM SERVICES; **Liu K**, Wen G, Chau H, Kubota H, Mohr R, Peng G, Semach G, Lokuruge P, Entz M, Lemke M, Khakbazan M, Kim YM, Sharpe S, Town J, Hernandez G, Iheshiulo E, Ferrari Machado P, Glenn A, Zhang H, Qian B, Jing Q, Kroebel R, and Bourgault M
4:00	O60	EFFECT OF ECOTEA™ SEED TREATMENT ON SPRING CROPS AT THUNDER BAY; **Tarlok Singh Sahota**
4:15	O61	COVER CROPPING AND NITROUS OXIDE EMISSIONS IN THE RED RIVER VALLEY; **Mario Tenuta**, Shannon Mustard, Katie Webb, Junaid Afzal, Rida Sabirova, and Brad Sparling
Meeting Room 3		**CSPB-IV Molecular Host-Pathogen Interaction #2** *Chair: Christian Danve Castroverde*
3:15	O62	MOLECULAR ANALYSES OF DIFFERENTIAL RESISTANCE IN LODGEPOLE AND JACK PINE TO CRONARTIUM HARKNESSII, THE CAUSAL AGENT OF WESTERN GALL RUST; **Janice Cooke**, Samson Osadolor, Rhiannon Peery, Laura Manerus, Marion Mayerhofer, L. Irina Zaharia, and Chandra McAllister
3:30	*O63	DO GINSENOSIDES ALTER THE PATHOGENICITY OF *ILYONECTRIA*? **Anka Colo** and Mark A. Bernards

3:45	O64	PLANT IMMUNE RESILIENCE: FROM GENE REGULATORY NETWORKS TO BIOMOLECULAR CONDENSATES; Christian Danve M. Castroverde, Jong Hum Kim, Alyssa Shields, Lingya Yao, Shuai Huang, Eric J.R. Marchetta, Richard Hilleary, Adam Seroka, John D. MacMicking, Xiu-Fang Xin, and Sheng Yang He
4:00	*O65	BACK TO THE ROOTS: EXPLORING PLANT-INSECT INTERACTIONS IN CULTIVATED AND WILD TOMATOES; Andreea Bosorogan, Osmond Hui, and Eliana Gonzales-Vigil
4:15	O66	PAPERCLIP RNA STRUCTURES REDUCE DISEASE SYMPTOMS CAUSED BY SCLEROTINIA SCLEROTIORUM THROUGH HOST INDUCED GENE SILENCING; Mark F Belmonte, Bliss M. Beernink, and Steve Whyard
Meeting Room 4		**CBA/CSPB-V Cellular Conversations: Decoding Plant Signals and Developmental Responses** *Chair: Shelley Hepworth*
3:15	O67	VOICES FROM BOTH SIDES: A MOLECULAR DIALOGUE BETWEEN TRANSCRIPTIONAL ACTIVATORS AND REPRESSORS IN SEED AND SEEDLING DEVELOPMENT; Liang Song
3:45	*O68	SOMETHING SWEET: SUGAR MEDIATED CHANGES IN CELL PROLIFERATION VIA TOR-BRASSINOSTEROID SIGNALLING REQUIRE THE MICROTUBULE ASSOCIATED PROTEIN *CLASP;* Sean P.A. Ritter, Dr. Laryssa Halat, and Dr. Geoffrey Wasteneys
4:00	O69	HOW INTERNAL GROWTH CONTROLS PLANT MORPHOGENESIS? Sylvia R. Silveira, Loann Collet, Sahil M. Haque, Luc Lapierre, Agnieszka Bagniewska-Zadworna, Frederick P. Gosselin, Richard S. Smith, Anne-Lise Routier-Kierzkowska, and Daniel Kierzkowski
4:30	O70	A UNIVERSAL MODEL OF EMBRYO DEVELOPMENT IN LAND PLANTS (EMBRYOPHYTES) AND THEIR POTENTIAL APPLICATIONS FOR CROP IMPROVEMENT; Prakash Venglat, Perumal Vijayan, Timothy F. Sharbel, Abidur Rahman, and Karen Tanino
4:45	*O71	ADAPTIVE ROOT MORPHOLOGY AND ARCHITECTURE AS A DROUGHT RESPONSE IN *BROMUS* INERMIS; Nora Kroeger and Rafael Otfinowski
Meeting Rooms 7+8		**CSHS-II / CPS-J2 Cannabis** *Chair: Dr. Youbin Zheng (University of Guelph)*
3:15	*O72	QUANTIFICATION OF BIO-STIMULANTS (MICROBES AND BACILLIN-20) AND THEIR INTERACTIONS FOR ENHANCED CANNABIS GROWTH AND QUALITY IN TERMS OF SECONDARY METABOLITE COMPOSITION; Ambreen, A. Geitmann, and D.L.Smith
3:30	*O73	BIOCONTROL ACTIVITY OF *BACILLUS SP.* OF PHYTOMICROBIOME AGAINST *BOTRYTIS CINEREA* IN *CANNABIS* SATIVA; Haleema Tariq, Anja Geitmann, and Donald Smith
3:45	O74	GENETIC CONTROL OF FLOWERING IN *CANNABIS SATIVA*; Soheil S. Mahmoud
4:00	O75	HOW TO DETERMINE THE OPTIMAL FLOWERING-STAGE PHOTOPERIOD FOR CANNABIS PRODUCTION; Youbin Zheng
4:15	*O76	OPTIMIZATION OF SOLVENT-BASED EXTRACTION USING A CENTRIFUGE ON THE BASIS OF PARTICLE SIZE AND THE AGITATION TIME; Ritul Jyani, Philip Wiredu Addo, Sarah MacPherson, Nichole Taylor, Michelle Shearer, Fredrick Gallant, Maxime Paris, Valerie Orsat, and Mark Lefsrud
4:30		**PANEL DISCUSSION**

Meeting Rooms 9+10		**CSA-IV Nutrient Management (Graduate Students)** *Chairs: Hiroshi Kubota and Emma McIlveen*
3:15	*O77	EFFECT OF ENHANCED EFFICIENCY NITROGEN FERTILIZERS AND *ANVOL™* ON SPRING WHEAT PRODUCTION AND SOIL HEALTH; Harsh Bagria, Tarlok Singh Sahota, and Brian McLaren
3:30	*O78	CAN STARTER POTASH APPLICATIONS IMPROVE THE YIELD AND CROP HEALTH OF CHICKPEA, MUSTARD, AND DURUM WHEAT IN THE BROWN SOIL ZONE OF SASKATCHEWAN? Tristan Chambers, Jeff Schoenau, Ryan Hangs, Michelle Hubbard, Alejandra Oviedo-Ludeña, and Randy Kutcher
3:45	*O79	THE EFFECT OF VARYING FERTILITY MANAGEMENT REGIMES N THE YIELD AND QUALITY OF VARIOUS FORAGE SPECIS/MIX; Puja Lamichhane and Kimberley Schneider
4:00	*O80	EFFECT OF ENHANCED EFFICIENCY NITROGEN FERTILIZERS ON AGRONOMIC AND ENVIRONMENTAL PERFORMANCE IN GRAIN CORN; Baillie Lynds and Yunfei Jiang
Meeting Rooms 11+12		**CPS-IV Molecular Host-Pathogen Interactions (Competition)** *Chair: Dr. Jim Menzies (AAFC Morden) & Dr. Mohamed Abdel-Fattah (AAFC Lethbridge)*
3:15	*O81	MECHANISMS OF DEMETHYLATION INHIBITOR RESISTANCE IN *CLARIREEDIA JACKSONII*; E. McNab and T. Hsiang
3:30	*O82	FUNCTION OF THE CONCANAMYCIN PHYTOTOXINS IN THE POTATO COMMON SCAB PATHOGEN STREPTOMYCES SCABIEI; Corrie V. Vincent and Dawn R. D. Bignell
3:45	*O83	TRANSGENIC EXPRESSION OF PROTEIN-BASED INHIBITOR AGAINST TURNIP YELLOW MOSAIC VIRUS IN ARABIDOPSIS THALIANA; J K Anuradha De Silva, Kihun Kim, Jacky Chung, John Weiland, Jihyun Hwang, Melvin Bolton, Mohammed Mira, Claudio Stasolla, Sachdev Sidhu, and Brian Mark
4:00	*O84	DECIPHERING *TETRANYCHUS URTICAE - ARABIDOPSIS THALIANA* INTERACTIONS: UNVEILING DETOXIFICATION MECHANISMS AND PLANT RESISTANCE STRATEGIES; Michele Antonacci, Jorden Maglov, Julia Pastor Fernandez, Chetan Sharma, Vladimir Zhurov, Brendan Abiskaroon, Maksymilian Chruszcz, and Vojislava Grbic
4:15	*O85	PROTEOMIC ANALYSIS REVEALS NEW INSIGHTS RELATED TO THE INTERACTION BETWEEN *XANTHOMONAS PHASEOLI PV PHASEOLI* AND *PHASEOLUS VULGARIS* L.; Mylene Corzo-Lopez, Jason McAlister, Boyan Liu, Jennifer Geddes-McAlister, and K. Peter Pauls
4:30	*O86	INSIGHTS FROM NEXT GENERATION SEQUENCING: NOVEL VIRUSES AND VARIANTS IN HIGHBUSH BLUEBERRIES OF BRITISH COLUMBIA; Sachithrani Kannangara, Juan Rodriguez, Adam Gilewski, Gerda de Villiers, Megan Ellis, Peter Ellis, Eric Erbrandt, and Jim Mattsson
4:45	*O87	A CLUBROOT PATHOGEN EFFECTOR DISRUPT AUXIN HOMEOSTASIS TO PROMOTE COLONIZATION; Melaine González García, Marina Silvestre Vano, Soham Mukhopadhyay, Ian Major, and Edel Pérez López

Meeting Room 13		**CPS-V Advances in Fusarium Management (Competition)** *Chairs: Dr. Adam Foster, AAFC Charlettetown & Dr. Ahmed Abdelmagid (AAFC Morden)*
3:15	*O88	RNASEQ STUDY OF PARTIALLY RESISTANT AND SUSCEPTIBLE PEA GENOTYPES UPON *FUSARIUM AVENACEUM* INFECTION; Sijan Pandit, Eoin O'Hara, Robert Gruninger, and Syama Chatterton
3:30	*O89	METABARCODING REVEALS BACTERIAL ENDOPHYTES FROM BARLEY GRAINS ARE SIGNIFICANTLY ASSOCIATED WITH FUSARIUM HEAD BLIGHT, BARLEY GENOTYPE, AND TIME OF SAMPLING; Vinuri Weerasinghe, Matthew Bakker, James Tucker, Dilantha Fernando, Ana Badea, and Champa Wijekoon
3:45	*O90	COMMERCIAL FORMULATIONS CONTAINING *BACILLUS* SPECIES REDUCE THE DEVELOPMENT AND SURVIVAL OF *FUSARIUM OXYSPORUM* IN SOIL-LESS GROWTH MEDIA; Denna N. Dalrymple and Zamir K. Punja
4:00	*O91	GENETIC MAPPING OF RESISTANCE TO FUSARIUM HEAD BLIGHT AND DON ACCUMULATION IN WATKINS LANDRACE WAT.1190580; Sharandeep Dhaliwal, Maria Antonia Henriquez, Curt McCartney, Samuel Holden, and Gurcharn Singh Brar
4:15	*O92	THE EVOLUTIONARY DYNAMICS OF AZOLE RESISTANCE IN *FUSARIUM GRAMINEARUM*; Kelsey Wog, Matthew. G. Bakker, and Aleeza C. Gerstein
4:30	*O93	THE ROLE OF HYD5 PROTEIN IN *FUSARIUM*-BARLEY INTERACTIONS; Anuradha U. Jayathissa, W. G. Dilantha Fernando, Raymond He, David N. Langelaan, and Matthew G. Bakker
Meeting Room 2		**CPS-VI Soilborne Diseases and Pathogens** *Chairs: Dr. Michelle Hubbard (AAFC Swift Current) & Dr. Owen Wally (AAFC Harrow)*
3:15	O94	PREVALENCE OF *VERTICILLIUM* SPP. AND *PRATYLENCHUS* SPP. IN COMMERCIAL POTATO FIELDS IN EASTERN CANADA; Dahu Chen, Ryan Barrett, Benjamin Mimee, Tanya Arseneault, Louis-Pierre Comeau, Kamrun Nahar, Sebastian Ibarra Jimenez, and Bernie J. Zebarth
3:30	O95	IMPACT OF CROP ROTATION ON THE MICROBIOMES OF SUDDEN DEATH SYNDROME (SDS) AND SOYBEAN CYST NEMATODE (SCN) SUPPRESSIVE SOILS OF SOYBEANS IN SOUTHERN ONTARIO, CANADA; R. Malla, L.A. Phillips, K.E. Dunfield, B.Seuradge, A. Wragg, and O.S. Wally
3:45	O96	PREVALANCE STUDY AND EVALUATION OF COMMERCIAL CULTIVARS AS AN IMMEDIATE MEASURE TO FIND VERTICILLIUM MANAGEMENT OPTIONS ON CANOLA; Venkat Chapara, Anitha Chirumamilla, Amanda Arens, and Larissa Jennings
4:00	O97	GINSENOSIDE MOBILITY IN GINSENG GARDEN SOIL; Andrew Rabas and Mark A. Bernards
4:15	O98	INTERACTIONS BETWEEN *APHANOMYCES EUTEICHES* AND *FUSARIUM AVENACEUM* AND *GRAMINEARUM*; Michelle Hubbard, Olivia Zajac, Anas Eranthodi, Syama Chatterton, David Overy, and Nora Foroud
4:30	O99	PRESCREENING AND MONITORING EVALUATION USING SEQUENCING TECHNOLOGIES FOR *PHYTOPHTHORA* AND OOMYCETES; Guillaume J. Bilodeau and Hervé Van der Heyden

5:00 – 7:00 pm Poster Session 1 in Hall D

Students who have a poster with an **ODD** number are to remain by their posters until they are judged.

Light refreshments will be served.

Sponsored by

MANITOBA CROP ALLIANCE

TUESDAY AFTERNOON Concurrent Session 3

Meeting Room 1		**CAPB/CSPB-VI Plant Metabolomics** *Chair: Barbara Hawkins*
1:15	*O100	PROFILING ENVIRONMENTAL AND SEASONAL VARIATIONS IN CONDENSED TANNINS AND METABOLITES OF BIRDSFOOT TREFOIL (*LOTUS CORNICULATUS* L.) CULTIVARS; Solihu Kayode Sakariyahu, Tim McDowell, Justin Renaud, Yousef Papadopoulos, Kathleen Glover, Rebecca Brown, Mike Peel, Heathcliffe Riday, Susanne Kohalmi, and Abdelali Hannoufa
1:30	O101	METABOLIC ENGINEERING-INDUCED TRANSCRIPTOME REPROGRAMMING ENHANCES OIL COMPOSITION IN OAT (*AVENA SATIVA* L.); Zhou Zhou, Rajvinder Kaur, Thomas Donoso, Jae-Bom Ohm, Rajeev Gupta, Mark Lefsrud, and Jaswinder Singh
1:45	*O102	THE RELATIONSHIPS AMONG PHYTOHORMONES AND BENZYLISOQUINOLINE ALKALOIDS DURING EARLY DEVELOPMENT OF *PAPAVER RHOEAS* L.; Zeynab Azimychetabi, Anna B. Kisiala, Scott C. Farrow, and R. J. Neil Emery
2:00	O103	PROANTHOCYANIDINS IN POPLAR ROOTS: EFFECTS ON MYCORRHIZAL COLONIZATION AND NITROGEN UPTAKE; Daisuke Yamakawa, C. Peter Constabel, and Barbara J. Hawkins
2:15	*O104	A PROMOTER FOR THE METABOLIC ENGINEERING OF GLANDULAR TRICHOMES IN LAVENDER; Reza Sajaditabar and Soheil Mahmoud
Meeting Room 2		**CAPB/CSPB-VII Plant Lipids** *Chair: Eliana Gonzales-Vigil*
1:15	*O105	SOYBEAN CYTOCHROME P450S AND THE MAKING OF ALIPHATIC SUBERIN MONOMERS; Lorena S. Yeung, Delicia Wong, Sangeeta Dhaubhadel, and Mark A. Bernards
1:30	*O106	BUILDING OF SUBERIN - THE IMPORTANCE OF TIMING AND A STRONG FOUNDATION; Jessica L. Sinka and Mark A. Bernards
1:45	*O107	SUBERIN PRODUCTION IN SOYBEAN IS MICROBIOME-RESPONSIVE; Alicia Halhed, Isabel Molina, and Owen Rowland
2:00	O108	GONE WITH THE WIND: CUTICULAR WAXES AS PRECURSORS OF VOLATILE ORGANIC COMPOUNDS; Jeff Y. Chen, Aswini Kuruparan, Mahbobeh Zamani-Babgohari, and Eliana Gonzales-Vigil
2:15	*O109	IDENTIFICATION OF QUANTITATIVE TRAIT LOCI (QTL) FOR ERUCIC ACID CONTENT IN *BRASSICA NAPUS* L.; Yong Liu, Genyi Li, Harmeet S Chawla, Robert W. Duncan, and Curt McCartney
Meeting Room 3		**CSPB- VIII Plant Organelle Biology** *Chair: Peter Constabel*
1:15	*O110	TOC159 RECEPTORS: THE ROLE OF PLASTID MEMBRANE GALACTOLIPIDS IN TARGETING TO THE CHLOROPLAST OUTER ENVELOPE; Michael Fish, George Saudan, Simon Chuong, Masoud Jelokhani-Niaraki, and Matthew Smith
1:30	O111	THE REGULATORY FUNCTION OF PLASTID CHAPERONE HSP90C C-TERMINAL EXTENSION; Bona Mu, Adheip Monakan Nair, and Rongmin Zhao
1:45	*O112	IDENTIFICATION AND CHARACTERIZATION OF OEP6 MOTIFS AND THEIR ROLE IN TARGETING TO THE CHLOROPLAST OUTER MEMBRANE; Holly Ferguson, Matthew Smith, and Simon Chuong

2:00	*O113	PLASTID MOLECULAR CHAPERONE HSP90C INTERACTS WITH THE SECA1 SUBUNIT OF SEC TRANSLOCASE FOR THYLAKOID PROTEIN TRANSPORT; Adheip Monikantan Nair, Tim Jiang, Bona Mu, and Rongmin Zhao
Meeting Room 4		**CPS-J4/CAPB/CSPB-IX Plant Pathogenesis and Protection** *Chair: Shuanglong Hong*
1:15	O114	ADVANCING CANOLA PROTECTION: QPCR SCREENING AND MARKER DEVELOPMENT FOR VERTICILLIUM STRIPE DISEASE RESISTANCE; Mohamed Samir Youssef, W. G. Dilantha Fernando, Robert Duncan, Sally Vail, Isobel A. P. Parkin, and Harmeet Singh Chawla
1:30	*O115	IDENTIFICATION OF MICROORGANISMS WITH CLUBROOT BIOCONTROL POTENTIAL AND INVESTIGATION OF MECHANISMS OF THEIR ACTION; Ananya Sarkar, Anna Kisiala, Vedanti Ghatwala, Neil Emery, Habibur Rahman, and Nat N.V. Kav
1:45	O116	MODULATION OF PLASTIDIAL PROTEIN TURNOVER BY *PB*PAE, A *PLASMODIOPHORA BRASSICAE* PLASTID-ASSOCIATED EFFECTOR THAT FACILITATES CLUBROOT DISEASE PROGRESSION IN ARABIDOPSIS; Musharaf Hossain, Christopher D. Todd, Yangdou Wei, and Peta C. Bonham-Smith
2:00	*O117	CLUBROOT RESISTANCE OF *BRASSICA NAPUS* INTROGRESSED FROM *BRASSICA OLERACEA;* Sonia Navvuru, Nat N.V. Kav, and Habibur Rahman
2:15	O118	MULTI-OMICS ANALYSIS OF MECHANISMS BEHIND THE "GAME OF HIDE AND SEEK" IN THE *BRASSICA NAPUS - LEPTOSPHAERIA MACULANS* PATHOSYSTEM; Shuanglong Huang, Peng Gao, Dilantha Fernando, and Gary Peng
2:30	O119	DECIPHERING THE MOLECULAR EVENTS BEHIND SYSTEMIN-INDUCED RESISTANCE AGAINST *BOTRYTIS CINEREA* IN TOMATO PLANTS; Julia Pastor-Fernández, Neus Sanmartín, Maria Manresa, Cédric Cassan, Pierre Pétriacq, Yves Gibon, Jordi Gamir, Beatriz Romero Rodriguez, Araceli G. Castillo, Miguel Cerezo, Victor Flors, and Paloma Sánchez-Bel
Meeting Rooms 7+8		**CSHS-III / CPS-J3 Root Crops** *Chair: Dr. Wahab Jazeem (AAFC, Saskatoon) and Dr. Bourlaye Fofana (AAFC, Charlottetown)*
1:15	O120	BLACKLEG PREVENTION IN POTATO BY PATHOGEN AND BACTERIOPHAGE IDENTIFICATION; Binod Pageni, Michele Konschuh, Jonathan Neilson, Melanie Kalischuk, and Lawrence Kawchuk
1:30	*O121	SOIL MICROBIOME AND SOIL PROPERTIES ASSOCIATED WITH THE RISK OF CAVITY SPOT ON CARROTS IN HIGH ORGANIC MATTER SOILS; Umbrin Ilyas, Lindsey J. du Toit, M. Kalischuk, and Mary Ruth McDonald
1:45	O122	PERFORMANCE OF SWEET POTATO UNDER HIGH-TUNNEL PRODUCTION SYSTEM IN SASKATCHEWAN; Jazeem Wahab, Reynald Lemke, Raju Soolanayakanahally, Champa Wijekoon, Edmund Mupondwa, Erl Svendsen, Dale Tomasiewicz, and Evan Derdall
2:00	O123	CULTURAL PRACTICES INFLUENCE WEED COMMUNITY AND SEEDBANK DYNAMICS IN THE LIVING LABS ATLANTIC; McKenzie-Gopsill A, Nyiraneza J, and Fillmore S
2:15	O124	GLOBAL REGULATION OF PLANT PATHOGENICITY IN THE COMMON SCAB PATHOGEN STREPTOMYCES SCABIEI; Wanyue Li, Aaron Rees, and Dawn R. D. Bignell
2:30	O125	DROUGHT-RESILIENT DIPLOID POTATOES FOR SHORT AND LONG GROWING SEASON AGROCLIMATES AS DEPICTED THROUGH GENOME-WIDE ASSOCIATION STUDIES; Bourlaye Fofana, David Main, Moshin Zaidi, and Benoit Bizimungu

Meeting Room 17		**CBA-II General Botany** *Chair: John Markham*
1:15	O126	GENOMIC DISSECTION OF ISLAND SYNGAMEONS: ARBORESCENT ASTERACEAE FROM ST HELENA (SOUTH ATLANTIC OCEAN); **Quentin Cronk**, Andreas Kolter, and Mikko Paajanen
1:30	O127	NUTRIENT LIMITATION IN SUBARCTIC TERRESTRIAL PLANT COMMUNITIES; **John Markham** and Emily Klapprat
1:45	O128	TESTING ECOWOOL PELLET APPLICATION AS AN ENVIRONMENTALLY FRIENDLY AMENDMENT IN GREENHOUSES; **Liette Vasseur**, Avalon Halgreen, Natasha Hearn, Reem Mahamoud, and Vaughn Mangal
2:00	O129a	DESIGNING AND IMPLEMENTING A USER-FRIENDLY PLANT COMMUNITY SURVEY PROTOCOL TO HELP CONSERVATION ORGANIZATIONS SELECT REINTRODUCTION SITES FOR AN ENDANGERED PRAIRIE BUTTERFLY IN MANITOBA; **Katherine Dearborn** and Richard Westwood
2:15	*O129b	CHARACTERIZING DEFENSE MECHANISMS IN *ARABIDOPSIS THALIANA* AGAINST *TETRANYCHUS URTICAE* HERBIVORY; **Jorden Maglov**, Julia Pastor-Fernandez, Michele Antonacci, Alexander Harrison, Emilie Widemann, Vladimir Zhurov, and Vojislava Grbic
2:30	O129c	BRAWLING WEEDS AND THE FIGHT FOR CROP SURVIVAL; **Clarence Swanton**, Sasan Amirsadeghi, Nicole Berardi, William Kramer, and Andrew McKenzie-Gopsill
Meeting Rooms 11+12		**CSPB-X Plant Signaling** *Chair: Hong Wang*
1:15	O130	DECIPHERING THE ROLE OF ER-LOCALIZED HSP90 FAMILY HEAT SHOCK PROTEIN IN PLANT DEVELOPMENT AND STRESS RESPONSES; **Rongmin Zhao**, Jenan Noureddine, and Morvenley Mamenta
1:30	O131	ARABIDOPSIS ICK/KRP CYCLIN-DEPENDENT KINASE INHIBITORS ARE INTRINSICALLY DISORDERED PROTEINS AND REGULATED BY BOTH UBIQUITIN-DEPENDENT AND UBIQUITIN-INDEPENDENT MECHANISMS; Shengjian Ye, Sheng Wang, Ron Chan, Ling Cao, and **Hong Wang**
1:45	*O132	EXPLORING SPECIFICITY OF PLANT RLCK-VII SIGNALLING; **Eleanor Khochaba** and Thomas A. DeFalco
2:00	*O133a	DOWNSTREAM SIGNALING RESULTING FROM DAMAGED RIBOSOMAL RNA BY POKEWEED ANTIVIRAL PROTEIN (PAP); **Tanya Prashar** and Katalin A. Hudak
2:15	O133b	*ASCOPHYLLUM NODOSUM*-DERIVED FUCOIDAN INDUCES FLOWERING BY REGULATING THE *MIR156*-MEDIATED AGE PATHWAY IN ARABIDOPSIS; **Ramin Bahmani**, Pramod Rathor, and Balakrishnan Prithiviraj
Meeting Room 13		**CPS-VII Resistance Genetics and Host-Pathogen Interactions (Competition)** *Chairs: Dr. Rudolph Fredua-Agyeman (U of Alberta) & Mary Ruth McDonald (U of Guelph)*
1:15	*O134	THE IDENTIFICATION AND FUNCTIONAL ASSESSMENT OF *PLASMODIOPHORA BRASSICAE* EFFECTORS; **Emilee Storfie**, Leonardo Galindo-González, Sheau-Fang. Hwang, and Stephen Strelkov
1:30	*O135	GENOMIC ANALYSIS OF THE PUCCINIA STRIIFORMIS F.SP TRITICI POPULATIONS CAUSING STRIPE RUST IN CANADA; **Bohan Wei**, Ryan Gourlie, Rodrigo Ortega Polo, Nathaniel Zhin-Loong Lim, Rhodesia Celoy, Stephen Strelkov, and Reem Aboukhaddour

1:45	*O136	DEVELOPMENT OF A KASP ASSAY FOR DETECTION OF SUCCINATE DEHYDROGENASE MUTATIONS ASSOCIATED WITH SDHI RESISTANCE IN *STEMPHYLIUM VESICARIUM*; Julia Scicluna, Emily McFaul, Afsaneh Sedaghatkish, Bruce D. Gossen, and Mary Ruth McDonald
2:00	*O137	GENOME-WIDE ASSOCATION STUDY (GWAS) OF STEM RUST RESISTANCE IN WESTERN CANADIAN WINTER WHEAT; Kaitlyn A. Pidherny, Jim G. Menzies, Colin W. Hiebert, Harwinder S. Sidhu, and Curt A. McCartney
2:15	*O138	GENETIC ANALYSIS AND GENOMIC SELECTION MODELS FOR LEAF RUST RESISTANCE IN CANADA WESTERN RED WINTER WHEAT; Anirup Sengupta, Brent D. McCallum, Colin W. Hiebert, Harwinder S. Sidhu, and Curt A. McCartney
2:30	*O139	UNVEILING A DNA VIRUS SECRETS: *DE NOVO* METHYLATION PROFILING OF GRAPEVINE RED BLOTCH VIRUS VIA LONG-READ SEQUENCING; Vahid J Javaran, Pierre Lemoyne, Dong Xu, Dave T Ste-Croix, Peter Moffett, and Mamadou L Fall
Meeting Room 15		**CSA-V Agronomy II (Graduate Students)** *Chair: Bill Biligetu and Baillie Lynds*
1:15	*O140	PURPOSE-GROWN BIOMASS CROPS IN NOVA SCOTIA: STATISTICAL PREDICTIVE YIELD MODELLING AND REAL-WORLD VERIFICATION; Emily G. Mantin, Laura K. Weir, Yousef A. Papadopoulos, and J. Kevin Vessey
1:30	*O141	A SEED TREATMENT FOR THE MANAGEMENT OF SOYBEAN CYST NEAMTODE ON DRY BEANS; Emma McIlveen, Chris Gillard, and Owen Wally
1:45	O142	EFFECT OF HUMIC-BASED SOIL AMENDMENT ON PLANT GROWTH, YIELD AND SYMBIOTIC NITROGEN FIXATION OF FIELD PEA (*Pisum sativum* L.); Pramod Rathor, Thomas D. Warkentin, and Malinda S. Thilakarathna
2:00	*O143	ON-FARM ASSESSMENT OF YIELD RESPONSE OF GRAIN CROPS TO SOIL PH AND LIMING IN CENTRAL ALBERTA; Chirchir Jedida, Dyck Miles, Enesi Rebecca, and Gorim Linda
2:15	*O144	THE EFFECT OF INTEGRATED CROP MANAGEMENT PRACTICES ON WEED GROWTH AND PERSISTENCE TRAITS; Uthpala Ekanayake, Rob Gulden, Chris Willenborg, Jonathan Rosset, and Dilshan Benaragama
Meeting Rooms 9 + 10		**CPS-VIII Advances in Plant Pathology 2** *Chair: Drs. Mamadou Fall (AAFC) and Afsaneh Sedaghatkish (U. of Guelph)*
1:15	O145	THE EFFECT OF BORON ON CLUBROOT SEVERITY AND DEFENSE MECHANISMS IN *BRASSICA NAPUS*; A. Sedaghatkish, S. Chesney, B. D. Gossen, and M. R. McDonald
1:30	O146	BACTERIAL LEAF STREAK SURGE ON THE CANADIAN PRAIRIES: INSIGHTS AND MANAGEMENT STRATEGIES; Shaheen Bibi, Malini Jayawardana, and Dilantha Fernando
1:45	O147	A SURVEY FROM 2006-2023 TO STUDY THE STATE AND PREVALENCE OF FUSARIUM HEAD BLIGHT DISEASE ON WHEAT IN ALBERTA; Monika Dayarathne, Michael Harding, and Dilantha Fernando
2:00	O148	ARE NEMATODES INVOLVED IN THE EMERGING CHICKPEA HEALTH ISSUE IN SASKATCHEWAN? Fernanda Gouvea Pereira, Mario Tenuta, Michelle Hubbard, and Sarah Anderson
2:15	O149	ADVANCEMENT OF B2-BASED DSRNA EXTRACTION METHOD: COST-EFFECTIVENESS COMPARISON OF HTS-BASED VIRUS DETECTION METHODS; Mamadou L. Fall, Dong Xu, and Pierre Lemoyne

TUESDAY AFTERNOON Concurrent Session 4

Meeting Room 1		**CSPB-XI Plant Cell Biology** *Chair: Katharina Braeutigam*
3:15	*O150	PECTIN DYNAMICS DICTATES ANISOTROPIC CELL GROWTH DURING MESOPHYLL MORPHOGENESIS; **Diksha Bhola** and Anja Geitmann
3:30	*O151	SNAKE CHARMMING: UNDERSTANDING COBRA THROUGH BIOINFORMATICS AND MUTATIONAL ANALYSIS; **Kamryn Diehl** and Geoffrey Wasteneys
3:45	O152	FROM SINGLE CELLS TO COMPLEX TISSUES - THE MOLECULAR DECODING OF PLANT SEXUAL REPRODUCTION AT SINGLE CELL RESOLUTION; **Katharina Bräutigam**
4:00	O153	FORMATION OF A STABLE TUBULAR ER NETWORK REQUIRES A LOCALIZED PHOSPHATIDYLCHOLINE SYNTHESIS IN ARABIDOPSIS; **Weina Wang**
Meeting Room 2		**CSHS-IV Fruits** *Chair: Dr. Melanie Kalischuk (University of Guelph)*
3:15	O154	TESTING THREE ALTERNATIVE TECHNOLOGIES AGAINST POWDERY AND DOWNY MILDEWS ON WINE GRAPE, GREENHOUSE CUCUMBER, FIELD ZUCCHINI AND STRAWBERRY; **Andrew C. Wylie**, Irina Perez-Valdes, and Rose Buitenhuis
3:30	O155	DEVELOPING 'STONY HARD' PEACH TO MITIGATE CLIMATE CHANGE EFFECTS AND LONGER SHELF LIFE; **Jayasankar Subramanian** and Naincy Sharma
3:45	O156	CRANBERRY RESPONSES TO IN-FIELD EXPERIMENTAL WARMING; **Lauren A E Erland**
4:00	O157	EPIDEMEOLOGY OF *NEOPESTALOTIOPSIS* SPP. IN STRAWBERRY; Justin McNally, Adam Dale, Erica Pate, and **Melanie Kalischuk**
4:15	*O158	THE DIVERSITY OF BIOACTIVE COMPOUND PROFILES IN CANADIAN PRAIRIE SMALL FRUITS AND THEIR ANTIOXIDANT AND ANTI-HYPERTENSIVE POTENTIAL AS FUNCTIONAL FOODS; **Chamali Kodikara**, Sura Srinivas, Nandika Bandara, Thomas Netticadan, Sijo Joseph, and Champa Wijekoon
4:30	*O159	EXOGENOUS APPLICATIONS OF DOUBLE-STRANDED RNA TO INDUCE RNA INTERFERENCE FOR THE CONTROL OF THE NOVEL FUNGAL PATHOGEN *NEOPESTALOTIOPSIS* SP. AFFECTING STRAWBERRY; **Sarah Koeppe** and Melanie Kalischuk
Meeting Room 3		**CSHS-V Vegetables** *Chair: Dr. Lord Abbey (Dalhousie University)*
3:15	O160	LEAFY GREEN VEGETABLE PRODUCTION IN SASKATCEWAN; **Jazeem Wahab,** Janitha Wanasundara, Edmund Mupondwa, Erl Svendsen, Raju Soolanayakanahally, and Evan Derdall
3:30	*O161	OPTIMIZATION OF LIGHT INTENSITY FOR GROWTH OF MINT (*MENTHA* SPP.) IN CONTROLLED ENVIRONMENTS; **Andrew Burns**, Mike Dixon, Mike Stasiak and Youbin Zheng
3:45	*O162	HARNESSING CONTROLLED ENVIRONMENT SYSTEMS FOR ENHANCED PRODUCTION OF MEDICINAL PLANTS; **Ajwal Dsouza**, Mike Dixon, Mukund Shukla, and Thomas Graham

4:00	O165a	TEMPERATURE IMPACT ON PLANT GROWTH AND DEVELOPMENT OF SELECTED VEGETABLES; Peter A. Ofori, Raphael Ofoe, Efoo B. Nutsukpo, and Lord Abbey
4:15	*O165b	EXPLORING THE IMPACT OF FAR-RED AND BLUE LED LIGHT RATIOS ON *BOTRYTIS CINEREA*'S MORPHOGENESIS; Abheet Aulakh, William Jordan, and Valerie Gravel
Meeting Room 4		**CAPB/CSPB-XII Plant Genomics** *Chair: David Konkin*
3:15	O166	COMPARING PHENOTYPIC SELECTION WITH GENOMIC SELECTION WHEN BREEDING FOR NEW VARIETIES OF COMMON BEAN (PHASEOLUS VULGARIS): AN EMPIRICAL STUDY; Robert McGee, Isabella Chiaravalotti, Marysia Zaleski-Cox, Evan Wright, Karen Cichy, Diego Jarquin D, and Valerio Hoyos-Villegas
3:30	O167	A MULTISPECIES AMPLISEQ APPROACH TO ASSESS INTRA- AND INTER-SPECIFIC DIVERSITY OF *SPHAGNUM* AND ASSIST RESTORATION EFFORTS; Mélanie Bourque, François-Olivier Hébert, and David L. Joly
3:45	*O168	GENOME-WIDE ASSOCIATION ANALYSIS OF LODGING-RELATED CULM TRAITS IN DIVERSE SPRING WHEAT (*TRITICUM AESTIVUM* L.) POPULATION; Ginelle Grenier, Muhammad Iqbal, Curt McCartney, Gavin D. Humphreys, Dean Spaner, and Belay T. Ayele
4:00	O169	PAN-GENOME AND LONG-READ STRUCTURAL VARIANT LANDSCAPE OF 51 BRASSICA NAPUS GENOMES UNVEIL CANOLA'S HIDDEN GENETIC DIVERSITY FOR CROP IMPROVEMENT; Sampath Perumal, Kevin Koh, Raju Chaudhary, Peng Gao, Isobel Parkin, and Andrew Sharpe
4:15	*O170	GENOME-WIDE ASSOCIATION AND GENOMIC SELECTION FOR OIL AND FATTY ACID PROFILE IN RAPESEED (*BRASSICA NAPUS* L.); Jared Bento, Jia Sun, Sakaria Liban, Curt McCartney, Harmeet Chawla, and Robert Duncan
4:30	O171	CROSS-SPECIES COMPARATIVE SEQUENCE-BASED GENE EXPRESSION MODELLING IN LEGUMES; Nicolas Raymond, Sheikh Jubair, Jordan Ubbens, Xi Zhang, Fatima Davelouis, Ruchika Verma, David Staszak, Dustin Cram, Halim Song, Yongguo Cao, Christine Sidebottom, Yasmina Bekkaoui, Morgan Kirzinger, Deborah Akaniru, and David Konkin
Meeting Rooms 7+8		**CSA-VI Plant-Soil health** *Chair: Kui Liu and Jedida Chirchir*
3:15	O173	HUMIC PRODUCTS: TO USE OR NOT TO USE IN YOUR FIELD; Linda Y. Gorim
3:30	O174	GROWTH-PROMOTING RHIZOBACTERIA MITIGATES SALT STRESS IN RICE THROUGH THE ENHANCEMENT OF ANTIOXIDANT DEFENSE, ION HOMEOSTASIS, AND PHOTOSYNTHETIC PARAMETERS; Ayesha Siddika, Alfi Anjum Rashid, Shakila Nargis Khan, Amena Khatun, Muhammad Manjurul Karim, PV Vara Prasad, and Mirza Hasanuzzaman

3:45	O175	EFFECTS OF DEFOLIATION ON ROOT TRAITS, NITROGEN FIXATION, SOIL NITROGEN AVAILABILITY, SOIL ENZYME ACTIVITIES AND SOIL BACTERIAL COMMUNITIES OF FORAGE LEGUMES; Malinda Thilakarathna, Danielito Dollete, Rhea Amor Lumactud, Cameron Carlyle, and Krzysztof Szczyglowski
4:00	O176a	EFFECT OF ROW SPACINGS/GEOMETRY AND RATES OF S APPLICATION ON ALFALFA YIELD AND QUALITY IN NORTHERN ONTARIO; Tarlok Singh Sahota, Harmeet Singh, Mikala Parr, David Thompson, and Kim Jo Bliss
4:15	O176b	CLIMATE CONDITIONS IN THE NEAR-TERM, MID-TERM AND DISTANT FUTURE FOR GROWING SOYBEANS IN CANADA; Budong Qian, Ward Smith, Qi Jing, Yong Min Kim, Guillaume Jégo, Brian Grant, Scott Duguid, Ken Hester, and Alison Nelson
Meeting Room 17		**CPS-IX OMICS** *Chair: Dr. Wen Chen (AAFC Ottawa) & Dr. Sandra Velasco-Cuervo (U of Alberta)*
3:15	O177	DE NOVO WHOLE-GENOME ASSEMBLIES AND A COMPARATIVE PANGENOME ANALYSIS OF THE SOILBORNE PLANT PATHOGEN PLASMODIOPHORA BRASSICAE; Sandra M. Velasco-Cuervo, Yoann Aigu, Leonardo Galindo-Gonzailez, Sheau-Fang Hwang, and Stephen E. Strelkov
3:30	O178	GENOMIC INVESTIGATION OF WESTERN CANADIAN *APHANOMYCES EUTEICHES* ISOLATES FROM MULTIPLE HOST LEGUME CROPS; Zelalem Taye, Jamuna Paudel, Lou Kun, Cormier Trista, Ethan Done, Jennifer Town, Syama Chatterton, Michelle Hubbard, Hossein Borhan and Nicholas Larkan
3:45	O179	SINGLE-CELL DNA SEQUENCING OF *PLASMODIOPHORA BRASSICAE* REVEALS CLONAL CHARACTERISTICS; A. Sedaghatkish, B. D. Gossen, and M. R. McDonald
4:00	O180	METAGENOMICS-BASED MICROBIAL COMMUNITY PROFILING IN THE QUEST FOR POTATO WART BIOLOGICAL CONTROL AGENTS; Ishraq Akbar, Yichao Shi, Bart. T. L. H. van de Vossenberg, Theo A. J. van der Lee, Sean Li, Linda Jewell, Hai D.T. Nguyen, and Wen Chen
4:15	O182	ALLELIC DIVERSITY AND EVOLUTIONARY PATTERNS OF TOXB GENE IN PYRENOPHORA TRITICI-REPENTIS AND RELATED SPECIES: A GLOBAL PERSPECTIVE; Mohamed Hafez, Ryan Gourlie, Megan McDonald; Melissa Telfer, Marcelo A. Carmona, Francisco J. Sautua, Caroline S. Moffat, Paula M. Moolhuijzen, Pao Theen See, and Reem Aboukhaddour
4:30	O183	ENDOGENOUS RUST PEPTIDES FROM PUTATIVE SHORT OPEN READING FRAMES IDENTIFIED USING PEPTIDOMICS AND DE NOVO SEQUENCING STRATEGIES; Christof Rampitsch, Slavica Djuric-Ciganovic, Zhen Yao, and Mark Lubberts

Meeting Rooms 11+12		**CPS-X Disease Management (Competition)** *Chairs: Maxime Delisle-Houde (U of Laval) & Dr. Bruce Gossen (AAFC Saskatoon)*
3:15	*O185	CHANGES IN SENSITIVITY OF *CLARIREEDIA JACKSONII* TO THE DEMETHYLATION INHIBITOR FUNGICIDE PROPICONAZOLE AFTER 30 YEARS OF USE; Andrea Rether, Mikaela Ryan, Nava Brimble, Alexa Nguyen, and Tom Hsiang
3:30	*O186	IMPROVING BACTERIAL LEAF STREAK MANAGEMENT IN WHEAT: DEVELOPMENT OF A RAPID LOOP-MEDIATED AMPLIFIATION (LAMP) PROTOCOL FOR SEED TESTING; Valentina Anastasini, Heting Fu, Jie Feng, T. Kelly Turkington, Michael Harding, Constanza Fleitas, and Randy Kutcher
3:45	*O187	EVALUATING THE INFLUENCE OF NITROGEN ON ROOT ARCHITECTURE AND CLUBROOT RESPONSE IN *BRASSICA* GENOTYPES; Danna Rotariu, Yoann Aigu, Rudolph Fredua-Agyeman, Sheau-Fang Hwang, and Stephen Strelkov
4:00	*O188	EFFECTS OF FREEZE AND THAW TEMPERATURE CYCLES ON THE SURVIVAL OF PLASMODIOPHORA BRASSICAE RESTING SPORES; K. Holy, B. D. Gossen, and M. R. Mcdonald
Meeting Room 13		**CSPB-XIII Plant Biochemistry** *Chair: Neha Vaid*
3:15	*O189	UNRAVEL TO BUILD: PTEROCARPAN BIOSYNTHESIS FROM LEGUMES TO HETEROLOGOUS HOSTS; Audrey Cote, Brandon Saltzman, and Mehran Dastmalchi
3:30	*O190	CHARACTERIZATION OF A CYSTEINE PROTEASE FROM PHYTOLACCA AMERICANA AND ITS ASSOCIATION WITH POKEWEED ANTIVIRAL PROTEIN; Annabelle Audet and Katalin A. Hudak
3:45	O191	GLUTAMINE ACTIVATION OF TOR REGULATES PROTEIN SYNTHESIS IN DEVELOPING PEAS; Brendan O`Leary, Vinti Kumari, and Christoph Rampitsch
4:00	*O192	EXPLORING THE ALKENE BIOSYNTHETIC PATHWAY IN POPULUS TRICHOCARPA; Jessica Hu, Jeff Chen, Bianca Ortiz,, and Eliana Gonzales-Vigil
4:15	O193	POPLAR LEAF BUD RESIN BIOCHEMISTRY: SEASONAL PATTERNS AND ENZYMES FOR RESIN SYNTHESIS IN BLACK COTTONWOOD (POPULUS TRICHOCARPA); C. Peter Constabel, David Ma, and Eerik-Mikael Piirtola
4:30	O194	REGIOSELECTIVE O-METHYLATION OF STILBENES IN SACCHARINAE GRASSES; Nan Lin, Andy CW Lui, Kah Chee Pow, Zhuming Fan, Chen Jing Khoo, Quan Hao, and Clive Lo
Meeting Rooms 9 + 10		**CSPB-XIV All Societies Gene Editing Session** *Chair: Andriy Bilichak*
3:15	*O195	MODULATION OF CLOCK IN WHEAT VIA DIPLOID AND HAPLOID GENE EDITING; Sandhya Gautam, Fengying Jiang, Chelsi Harvey, Andre Laroche, Guanqun Chen, John Laurie
3:30	*O196	SPEED EDITING: HIGH THROUGHPUT GENE EDITING USING CRISPR/CAS9 SYSTEM IN *BRASSICA NAPUS*; Rajbir Kaur, Mohamed Samir Youssef, Robert Duncan, and Harmeet Singh Chawla

3:45	O197	FUNCTIONAL VALIDATION OF A CANDIDATE GENE CONTROLLING SOYBEAN ROOT SYSTEM ARCHITECTURE BY CRISPR-CAS9 TECHNOLOGY; **Benjamin Karikari**, Waldiodio Seck, Davoud Torkamaneh, and François Belzile
4:00	O198	GENE EDITING-ASSISTED FUNCTIONAL GENOMICS STUDIES IN WHEAT (TRITICUM AESTIVUM L.); **Andriy Bilichak**, Louie Lopos, Emanpreet Kaur, and Natalia Bykova
4:15	O199	CRISPR/CAS9 BASED LOSS-OF-FUNCTION GENE EDITING CONFERS BROAD-SPECTRUM CLUBROOT TOLERANCE IN CANOLA; **L. Wang**, R. Wen, B. Luo, K. Yang, X. Liu, T. Dumonceaux, G. Peng, and W. Xiao

5:00 – 7:00 pm Poster Session 2 in Hall D

Students who have a poster with an **EVEN** number are to remain by their posters until they are judged.

Light refreshments will be served.

Sponsored by

Poster Presentations

Poster presentations are grouped by society in the following order: CPS, CWSS, CBA, CSHS, CAPB, CSPB, CSA, and non-affiliated. The presenter name is underlined. Student presentations for competition are designated by an asterisk. Poster sessions will be held in Hall D from 5:00 pm – 7:00 pm on Monday July 8 (odd numbers) and Tuesday July 9 (even numbers).

CPS (Posters P1-P51, P148)

P1	**FIRST REPORT OF *FUSARIUM SPOROTRICHIOIDES* AND *FUSARIUM CEREALIS* CAUSING ROOT ROT OF SOYBEAN IN CANADA, WITH POTENTIAL IMPLICATIONS FOR CROP ROTATION STRATEGIES;** Ahmed Abdelmagid, Mohamed Hafez, and Fouad Daayf
P2	**THE OCCURRENCE AND SPREAD OF CLUBROOT IN ALBERTA (2005-2023);** Y. Aigu, V.P. Manoli, S.F. Hwang, and S.E. Strelkov
P3	**CHARACTERIZATION OF EFFECTOR *Pb*PE29: ITS POTENTIAL ROLE IN SUCCESSFUL *Plasmodiophora brassicae* COLONIZATION OF *Brassica napus* L. (CANOLA);** Cresilda V. Alinapon, Chris D. Todd, and Peta C. Bonham-Smith
*P4	**EVALUATION OF WHEAT FOR RESISTANCE TO BACTERIAL LEAF STREAK UNDER CONTROLLED CONDITIONS;** Valentina Anastasini, T. Kelly Turkington, Constanza Fleitas, and Randy Kutcher
P5	**EXPLORING THE DIVERSITY OF *STREPTOMYCES* BACTERIA CAUSING COMMON SCAB DISEASE IN NEWFOUNDLAND;** Artho Baroi, Matthew Drodge, Gustavo A. Díaz Cruz, and Dawn R. D. Bignell
P6	**UNDERSTANDING THE INTERACTION BETWEEN BLACKLEG RESISTANCE AND VERTICILLIUM STRIPE DISEASE IN CANOLA;** Carol. N. Bvindi, Aria Dolatabadian, and W. G. Dilantha Fernando
*P7	**THE PHASED GENOME AND COLD RESPONSIVE TRANSCRIPTOME FOR ALLOTETRAPLOID POTATO WILD RELATIVE *SOLANUM ACAULE* BITTER;** Camargo-Tavares, J.C., Achakkagari, S., Praslickova, D., Martini, C., Bizimungu, B., Anglin, N.L., Manrique-Carpintero, N., Lindqvist-Kreuze, H., Tai, H.H., and Strömvik M.V.
P8	**STRATIFIED EFFECTS OF TILLAGE AND CROP ROTATION ON SOIL MICROBES IN C AND N CYCLING AT TWO SOIL DEPTHS IN LONG-TERM CORN, SOYBEAN, AND WHEAT PRODUCTION;** Yichao Shi, A. Claire Gahagan, Malcolm J. Morrison, Edward Gregorich, David R. Lapen, and Wen Chen
*P9	**EXPLORING FUSARIUM WILT RESISTANCE IN *BRASSICA* GENOTYPES LINKED TO ROOT ARCHITECTURAL TRAITS UNDER SEMI-HYDROPONIC CONDITIONS;** Chunxiao Yang, Rudolph Fredua-Agyeman, Kan-Fa Chang, Sheau-Fang Hwang, and Stephen E. Strelkov
P10	**BIOLOGICAL CONTROL OF *FUSARIUM GRAMINEARUM* AND *VERTICILLIUM LONGISPORUM* CAUSING FHB AND VERTICILLIUM STRIPE IN CANOLA BY PHYLLOSPHERE AND RHIZOSPHERE BACTERIA FROM CANOLA AND SOYBEAN;** Monika Dayarathne and Dilantha Fernando
P11	**EVALUATION OF DIFFERENT STRATEGIES TO CONTROL STRAWBERRY ANGULAR LEAF SPOT (*XANTHOMONAS FRAGARIAE*);** Maxime Delisle-Houde, Valérie Tremblay, François Demers, Stéphanie Tellier, Gabrielle Labrie, Valérie Fournier, Nicholas Lefebvre, and Russell J. Tweddell

P12	**EFFECT OF VOLATILE COMPOUNDS PRODUCED BY BROWN MUSTARD ON DIFFERENT PLANT BENEFICIAL AND PHYTOPATHOGENIC MICROORGANISMS;** Marwa Mejri, Maxime Delisle-Houde, Thi Thuy An Nguyen, Martine Dorais, and Russell J. Tweddell
P13	**ANTIFUNGAL ACTIVITY OF ESSENTIAL OILS FROM DIFFERENT NORDIC PLANT SPECIES AGAINST *BOTRYTIS CINEREA*;** Antoine Roy-Lemieux, Maxime Delisle-Houde, Russell J. Tweddell
P14	**POTENTIAL OF FOREST PLANT EXTRACTS TO CONTROL ANGULAR LEAF SPOT OF CUCURBITS;** Sabra Mimouni, Maxime Delisle-Houde, François Demers, Martin Filion, and Russell J. Tweddell
*P15	**EFFICIENT IN VITRO DOUBLED HAPLOID PRODUCTION IN BRASSICA NAPUS FROM ISOLATED MICROSPORE CULTURE;** Xinlong Dong, Rudolph Fredua-Agyeman, Stephen E. Strelkov, and Sheau-Fang Hwang
*P16	**REAL-TIME NUTRIENT ASSESSMENT IN ONIONS USING PICKETA-LENS TECHNOLOGY;** Ifesinachi Nelson Ezeh, Xavier Hébert-Couturier, and Mary Ruth McDonald
P17	**PROTOCOL FOR DEVELOPING MUTAGENIZED WHEAT UNDER IN VITRO SELECTION PRESSURE FOR FUSARIUM HEAD BLIGHT RESISTANCE;** Clinton Dovell, D Ryabova, Susan Stasiuk, Harpinder Randhawa, Harwinder Sidhu, and Nora A. Foroud
P18	**FORECASTING FUSARIUM HEAD BLIGHT EPIDEMICS IN THE MARITIME PROVINCES OF CANADA;** Emily Johnstone, Morteza Mesbah, Kristen Murchison, and Adam J. Foster
P19	**QPCR METHODS TO DETECT AND QUANTIFY THE NOVEL FUSARIUM GRAMINEARUM ANX CHEMOTYPE VARIANT;** Abbey Saunders, Emily Johnstone, and Adam J. Foster
P20	**INFLUENCE OF COVER CROPS ON SOIL AND RESIDUE FUNGAL MICROBIOMES AND THEIR IMPACT ON FUSARIUM ROOT AND CROWN ROT;** Harini S. Aiyer, Aaron Mills, Andrew Mckenzie-Gopsill, and Adam J. Foster
*P21	**EVALUATION OF THE HOST SPECIFICITY OF VERTICILLIUM LONGISPORUM IN WESTERN CANADA;** Lidan Gao, Haitian Yu, Godfrey Chongo, Stephen E. Strelkov, and Sheau-Fang Hwang
P22	**BALANCING SELECTION COMPLICATES MANAGEMENT OF CLUBROOT AND (POSSIBLY) OTHER PROBLEM DISEASES;** Bruce D. Gossen, A. Sedaghatkish and M. R. McDonald
P23	**DO NEMATODES GET AROUND? A CASE OF SOYBEAN CYST NEMATODE IN A MANITOBA FIELD;** Fernanda Gouvea Pereira, Nazanin Ghavami, Jason Voogt, and Mario Tenuta
*P24	**SMOKE SIGNALING: VOLATILE TERPENES RELEASED IN BURNING ARTEMISIA TRIDENTATA NUTT. ARE ACCUMULATED IN GRAPEVINES;** Alisha Greene, Susan J Murch, and Robert O'Brien
P25	**RESISTANCE MECHANISMS TO FUSARIUM HEAD BLIGHT IN WINTER WHEAT IN RESPONSE TO *FUSARIUM* GRAMINEARUM;** Maria A. Henriquez, Philip L. Walker, Mark F. Belmonte, Brent D. McCallum, Curt A. McCartney, and Harpinder S. Randhawa
*P26	**PATHOTYPES OF *PLASMODIOPHORA BRASSICAE* IN ONTARIO, 2023;** K. Holy, B. Gossen, and M.R. Mcdonald
*P27	**DOTHISTROMA NEEDLE BLIGHT DEVELOPMENT IN FAMILIES OF LODGEPOLE PINE: MECHANISMS OF RESISTANCE AND PRECIPITATION-RESISTANCE INTERACTIONS UNDER CLIMATE CHANGE;** Dana Hopfauf and Jonathan Cale

P28	**FUNGICIDE INSENSITIVE IN *COLLETOTRICHUM LENTIS* ON LENTIL IN SASKATCHEWAN, 2020-2022;** Michelle Hubbard, Zakir Hossain, Merek Wigness, and Bruce D. Gossen
*P29	**IDENTIFICATION OF PYTHIUM SPECIES ASSOCIATED WITH CAVITY SPOT LESIONS ON CARROTS IN THE HOLLAND MARSH, ONTARIO;** Umbrin Ilyas, Lindsey J. du Toit, and Mary Ruth McDonald
*P30	**UNVEILING THE COMPLETE GENOME OF THE CLUBROOT PATHOGEN;** Muhammad Asim Javed, Soham Mukhopadhyay, Éric Normandeau, Anne-Sophie Brochu, and Edel Pérez-López
P31	**SOYBEAN ROOT DISEASES IN MANITOBA: HISTORY, MONITORING, PREVALENCE, AND CROP ROTATION EFFECTS;** Yong Min Kim[1], Ahmed Abdelmagid[2], Owen Wally[3], Ramona Mohr[1], and Debra McLaren
*P32	**PATHOTYPE SHIFTING OF SINGLE-SPORE ISOLATES OF *PLASMODIOPHORA BRASSICAE* OVER THREE MULTIPLICATION CYCLES;** B. Kirk, A. Botero-Ramirez, S.F. Hwang, and S.E. Strelkov
*P33	**FUSARIUM HEAD BLIGHT AND RUST FUNGI IDENTIFICATION VIA MALDI-TOF MASS SPECTROMETRY;** Shimosh Kurera, Matthew Bakker, and Sean Walkowiak
P34	**POWDERY MILDEW SPECIES ON MAPLE TREES IN CANADA;** Miao Liu, Parivash Shoukouhi, Cameron Julie, and Sarah Hambleton
P35	**DOWNCAST IS EFFECTIVE FOR FORECASTING ONION DOWNY MILDEW IN ONTARIO;** Tyler Blauel, Kevin Vander Kooi, Julia Scicluna, Geoff Farintosh, and Mary Ruth McDonald
P36	**GENETIC DIVERSITY IN VIRULENCE OF POPULATIONS OF *PUCCINIA CORONATA* VAR *AVENAE* F. SP. *AVENAE* COLLECTED USING EXTENSIVE SAMPLING TECHNIQUES COMPARED TO INTENSIVE SAMPLING TECHNIQUES;** James Menzies, Sharon Deceuninck, and Henry Klein-Gebbinck
P37	**THE ROLE OF ASCOSPORE RELEASE OF *ANISOGRAMMA ANOMALA IN* THE MANAGEMENT OF EASTERN FILBERT BLIGHT IN ONTARIO, CANADA;** Asifa Munawar, Cathy Bakker, Melanie Filotas, and Katerina Serlemitsos Jordan
P38	**PROFILING AVIRULENCE GENES OF *LEPTOSPHAERIA MACULANS* FOR RESISTANCE DEPLOYMENT IN CANADIAN PRAIRIE REGIONS;** Chun Zhai and Gary Peng
P39	**EFFECT OF DIFFERENT SOILLESS MIXES ON DEVELOPMENT OF CLUBROOT (*PLASMODIOPHORA BRASSICAE*);** Komathy Prapagar, Shauna Chesney, Bruce D. Gossen, Merek Wigness, and Mary Ruth McDonald
*P40	***BEAUVERIA BASSIANA*: A PROMISING FUNGAL ENDOPHYTE AGAINST CLUBROOT ON CABBAGE 2023;** Kelly Ruigrok, B. D. Gossen, and M. R. McDonald
P41	**POTATO FIELD AND STORAGE SCOUTING FOR IDENTIFICATION OF POTATO FUNGAL DISEASES;** M. Sayari, M. Elshetehy, P. Rehal, V. Bisht, C. Timoteo Assuntao, F. Daayf
P42	**EXPRESSION OF SOYBEAN DEFENSE GENES ASSOCIATED WITH THE SALICYLIC AND JASMONIC ACIDS DEFENSE SIGNALING PATHWAY IN RESPONSE TO FUSARIUM GRAMINEAUM (Schw.);** Nadia Garma, Rhodesia Xeloy, Mohammad Sayari, Mohamed El-Shetehy, Pawanpuneet Rehal, Fouad Daayf
P43	**LOSS OF CENTRAL METABOLIC GENES IN *PLASMODIOPHORA BRASSICAE*: A COMPARATIVE GENOMIC STUDY;** A. Sedaghatkish, B. D. Gossen, and M. R. McDonald

*P44	**FUNGICIDE TREATMENT EFFICACY FOR MITIGATING POWDERY SCAB AND PMTV IN ALBERTA POTATO FIELDS: A FIELD STUDY EVALUATION;** Muhammad Subhan Shafique, Michele Konschuh, Jennifer Foster, Michael Harding, and Dmytro Yevtushenko
P45	WITHDRAWN
P46	**EVOLUTIONARY LINEAGE OF *FUSRIUM OXYSPORUM* F.SP *CUBENSE*TR4 CAUSING NEW PANAMA DISEASE;** Kyoko Watanabe, Shunsuke Nozawa, and Yousuke Seto
P47	**BACTERIAL ENDOPHYTES IN BARLEY CONTROL FUSARIUM HEAD BLIGHT PATHOGENS IN VITRO;** Vinuri Weerasinghe, James Tucker, Ana Badea, Dilantha Fernando, and Champa Wijekoon
P48	**PATHOGENIC AND GENETIC DIVERSITY OF *VERTICILLIUM LONGISPORUM* CAUSING VERTICILLIUM STRIPE OF CANOLA IN THE CANADIAN PRAIRIES;** Longfei Wu, Rudolph Fredua-Agyeman, Godfrey Chongo, Ahmed Abdelmagid, Stephen E. Strelkov, and Sheau-Fang Hwang
P49	**DIVERSITY OF SOIL NEMATODES FROM IRRIGATED AGRICULTURAL REGIONS OF SOUTHERN ALBERTA, CANADA;** Maria Munawar and Dmytro P. Yevtushenko
P50	**EXPLORING THE MICROSCOPIC WORLD: IDENTIFICATION OF PLANT-ASSOCIATED NEMATODES WITH LIGHT AND SCANNING ELECTRON MICROSCOPY;** Maria Munawar, Michele Konschuh, and Dmytro P. Yevtushenko
P51	**PATHOGENICITY OF *VERTICILLIUM LONGISPORUM* ISOLATES ON CANOLA AT THE SEEDLING STAGE;** Haitian Yu, Yixiao Wang, Sheau-Fang Hwang, Rudolph Fredua-Agyeman, and Stephen E. Strelkov

CWSS (Posters P52-P54)

P52	**ESTIMATING SOYBEAN YIELD LOSS TO WEED INTERFERENCE USING EARLY-SEASON REMOTE-SENSING TOOLS;** RH Gulden, CJ Henry, N Badreldin, and DI Benaragama
P53	**ALTERNATIVE WEED MANAGEMENT OPTIONS IN ATLANTIC CANADIAN POTATO PRODUCTION;** Andrew McKenzie-Gopsill, Ashley Nicolle MacDonald, Laura Anderson, Scott White, Aaron Mills, Aitazaz Farooque, Marie-Josée Simard, and Robert Nurse
*P54	**MORPHOLOGICAL AND GENETIC RESPONSES OF WATERHEMP TO ENVIRONMENTAL CONDITIONS;** Sreedevi Ramachandran, Rene Van Acker, and François Tardif

CBA (Posters P55-P61)

*P55	**RESPONSE OF PROSTRATE SHRUB FUNCTIONAL TRAITS AND COMMUNITY NDVI TO LIMITING NUTRIENTS AND DEEP SNOW IN ARCTIC TUNDRA HEATH COMMUNITIES;** Liam Baron-Preston, John Markham, and James D. Roth
P56	**COMMUNITY OF PRACTICE FOR BUILDING HERBARIUM RESILIENCE, RELEVANCE, AND RELATIONSHIPS;** Nadia Cavallin and Jennifer Doubt
P57	**DRIVERS OF UNDERSTORY VEGETATION COMPOSITION AFTER NOVEL SILVICULTURAL TREATMENTS IN CANADIAN BOREAL FORESTS;** Marion Noualhaguet, Enrique Hernández-Rodríguez, and Miguel Montoro Girona

P58	**DOES PHOTOPERIOD REGULATE METHANE EMISSIONS FROM PLANTS?** Mirwais M. Qaderi and Kate Burton
P59	**HUDSON BAY LOWLANDS BRYODIVERSITY: A NATIONAL HERBARIUM INITIATIVE REVEALING TAXONOMIC AND GEOGRAPHIC GAPS IN OCCURENCE DATA;** Adam J. Storey and Jennifer Doubt
***P60**	**TOTAL PHENOLIC COMPOUNDS AND HERBIVORE RESISTANCE IN HYBRID POPLAR EXPOSED TO SALINITY;** Sandamini Bandara, Trinity Bredardt, Caleb Lavallée-Shrupka, Sylvie Renault, and German Avila- Sakar
P61	**REVISITING THE PERMANENT BIODIVERSITY MONITORING PLOTS IN THE NIAGARA ESCARPMENT BIOSPHERE;** Natasha Hearn and Liette Vasseur

CSHS (Posters P62-P63b)

***P62**	**UNRAVELLING THE DIVERSITY OF MICROBIOME IN PRUNUS SPECIES;** Vidya Venugopal, Manish N Raizada, and Jayasankar Subramanian
P63a	**EXPLORING ROOT TRAITS OF DWARFING ROOTSTOCKS IN RELATION TO TREE VIGOR IN APPLE;** Hao Xu, Danielle Ediger, Tom Forge, Paige Munro, and Lindsay King
P63b	**TRANSCRIPTOMIC ANALYSIS OF ENHANCED FRUIT RETENTION BY HEXANAL IN 'HONEYCRISP' APPLES;** Karthika Sriskantharajah, Alan Sullivan Gopinadhan Paliyath, and Jayasankar Subramanian

CAPB (Posters P64-P74)

***P64**	**EFFECT OF MIR408 OVER-EXPRESSION ON PHOTOSYNTHETIC EFFICIENCY AND BIOMASS PRODUCTION IN ALFALFA;** Sameena Alam, Kimberley Burton Hughes, Udaya Subedi, Madeline Lehmann, Christie Stephen, Mohammed Musthafa Mukthar, Alicja Ziemienowicz, Guanqun Chen, and Stacy D Singer
P65	**SPL9 REGULATES NODULATION AND DROUGHT RESPONSE IN *MEDICAGO SATIVA*;** Abdelali Hannoufa, Vida Nasrollahi, Gamalat Allam, Alexandria Hanly, and Susanne E. Kohalmi
P66	**SPL12 MODULATES NODULATION, NITROGEN FIXATION AND ROOT REGENERATION IN *MEDICAGO SATIVA*;** Abdelali Hannoufa, Vida Nasrollahi, and Susanne E. Kohalmi
***P67**	**GENE-EDITING FOR THE IMPROVEMENT OF PHOTOSYNTHESIS, GRAIN YIELD, AND LEAF RUST RESISTANCE OF WHEAT cv. 'FIELDER';** Louie Cris Lopos, Igor Kovalchuk, Stacy Singer, and Andriy Bilichak
***P68**	**DISCOVERING QUANTITATIVE TRAIT LOCI (QTL) ASSOCIATED WITH LODGING RESISTANCE IN *BRASSICA NAPUS* L.;** H. Luu, H. Chawla, R. Gulden, C. McCartney, J. Morrison, and R. Duncan
P69	**TOMATO CYSTATIN SLCYS8 AS A TRIGGER OF DROUGHT RESILIENCE AND TUBER YIELD IN POTATO;** Maude Dorval, Marc-Antoine Chiasson, Thiago Gumiere, Marie-Claire Goulet, and Dominique Michaud

P70	**AN ENGINEERED, TRANS-ZEATIN-PRODUCING STRAIN OF *AGROBACTERIUM TUMEFACIENS* TO DOWNREGULATE DEFENSE RESPONSES AND PROMOTE RECOMBINANT PROTEIN PRODUCTION IN TRANSIENT EXPRESSION HOST *NICOTIANA BENTHAMIANA*;** Adam Barrada, Louis-Philippe Hamel, Marie-Claire Goulet, and Dominique Michaud
***P71**	**GENE EXPRESSION ANALYSIS OF *ARABIDOPSIS THALIANA* DEHYDRINS AND *IN SILICO* EXPRESSION PROFILING OF *BRASSICA NAPUS* DEHYDRINS IN RESPONSE TO CLUBROOT DISEASE;** Janani Radhakrishnan, Dinesh Adhikary, Habibur Rahman, and Nat N. V. Kav
P72	**ALTERED GROWTH AND DELAYED FLOWERING IN *SUPPRESSOR OF OVEREXPRESSION OF CONSTANS 1* (*SOC1A*) KNOCKDOWN ALFALFA;** Madeline Lehmann, Guanqun Chen, Udaya Subedi, Christie Stephen, Kimberley Burton Hughes, D. Wade Abbott, and Stacy D. Singer
P73	**CHROMOSOME-LEVEL GENOME ASSEMBLY AND TRANSCRIPTOMIC ANALYSIS OF THE FORAGE LEGUME, SAINFOIN (*ONOBRYCHIS VICIIFOLIA* SCOP.);** Cuong Nguyen, David Konkin, Rodrigo Ortega Polo, Bill Biligetu, Hari P. Poudel, and Stacy D. Singer
***P74**	**IN VITRO PROPAGATION AS A METHOD TO PRODUCE SPECIFIC ANTIOXIDANT COMPOUNDS IN LINGONBERRY;** Umanath Sharma, Abir U. Igamberdiev, and Samir C. Debnath

CSPB (Posters P77-102)

P77	**INVESTIGATING MOLECULAR EFFECTS OF HUMALITE APPLICATION ON FIELD-GROWN WHEAT USING QUANTITATIVE PROTEOMICS;** Lauren E. Grubb, Mohana Talasila, Maria Rodriquez Gallo, Linda Gorim, and R. Glen Uhrig
P78	**CLASP-SORTING NEXIN 1 INTERACTION: A KEY DRIVER IN PLANT ADAPTATION TO ABIOTIC STRESS?** Yexin Han, Dr. Laryssa Halat, and Dr. Geoffrey Wasteneys
P79	**CHARACTERIZING THE CULM SKIN PIGMENTS OF BLACK BAMBOO: INTERGRATING TRADITIONAL AND MODERN METHODOLOGIES;** Xinyi Huang, Xinchun Lin, and Shawn D. Mansfield
P80	**PURIFICATION AND DIFFERENTIATION OF YOHIMBINE AND ITS ISOMERS FROM YOHIMBE TREE BARK;** Jaewook Hwang
***P81**	**DORMANCY RELEASE AND TRANSCRIPTIONAL REGULATION OF ABSCISIC ACID AND GIBBERELLIN METABOLISM GENES IN WHEAT SEEDS**; Riya Kalota, Pham Anh Tuan, Deepak Sharma, Santosh Kumar, and Belay T. Ayele
***P82**	**UNLOCKING NATURE'S PHARMACY: EXPLORING THE HIDDEN POTENTIAL OF *LESPEDEZA CAPITATA*;** Puneet Kaur and Mehran Dastmalchi
***P83**	**VARIATION IN LODGING TRAITS AND TRANSCRIPTIONAL REGULATION OF GIBBERELLIN METABOLISM GENES IN WHEAT;** Gurnoor Kaur, Ginelle Grenier, Douglas J. Cattani, Pham Anh Tuan, and Belay T. Ayele
***P84**	**UNRAVELING THE INTERPLAY BETWEEN PHENYLPROPANOID BIOSYNTHESIS AND SALICYLIC ACID SIGNALING PATHWAYS IN MEDIATING PLANT IMMUNITY;** K. A. Dinithi Kumarapeli, Ken Wilson, and Yangdou Wei
P85	**THE EFFECT OF COPPER-INDUCED OXIDATIVE STRESS ON THE SYMBIOSIS BETWEEN MODEL LEGUME LOTUS JAPONICUS AND MESORHZOBIUM LOTI;** Kathryn Lamoureux and Sheila M Macfie

*P86	**RECOMBINANT INBRED LINES OF PLANTS ADAPTED TO EXTREME ENVIRONMENTS CAN HELP IDENTIFY THE GENETIC BASIS OF LOW-PHOSPHATE TOLERANCE IN CROPS;** Laura Li, Yong Li, Barbara Moffatt, and Elizabeth Weretilnyk
*P87	**GENE EDITING WITH A TWIST; ENGINEERING CRISPR RESISTANCE INTO TRANSGENIC REPORTERS;** Magnus Macaulay, Tommy Kuo, Jose Alonso, and Geoffrey Wasteneys
P88	**MONOTERPENE INDOLE ALKALOIDS PURIFICATION AND IDENTIFICATION FROM PLANTS *VINCA MINOR* AND *TABERNAEMONTANA LITORALIS*;** Zhan Mai and Yang Qu
P89	**TEACHING SCIENTIFIC OBSERVATION AND VISUAL COMMUNICATION USING BOTANICAL DRAWINGS;** Miranda J. Meents
P90	**SKINNY MAIZE - DRIVING *ZEA MAYS* GENOME CONTRACTION THROUGH CAS9 DELETION OF HIGH COPY NUMBER LTR ELEMENTS;** Mark A. A. Minow, Ankush Sangra, and Robert J. Schmitz
P91	**PURIFICATION, IDENTIFICATION, AND INVESTIGATION OF THE BIOSYNTHETIC PATHWAYS OF MONOTERPENOID INDOLE ALKALOIDS IN *HAMELIA* PATENS;** Alyssa Seveck and Yang Qu
P92	**ELONGATION OF THE BASAL INTERNODES OF SOYBEAN AND ITS ASSOCIATION WITH THE EXPRESSION PATTERNS OF GIBBERELLIN METABOLISM GENES;** Ankita Thapar, Pham Anh Tuan, Deepak Sharma, and Belay T. Ayele
*P93	**BIOCONTROL ACTIVITY OF *BACILLUS SP.* OF PHYTOMICROBIOME AGAINST *BOTRYTIS CINEREA* IN *CANNABIS* SATIVA;** Haleema Tariq, Anja Geitmann, and Donald Smith
*P94	**GENOME-WIDE ASSOCIATION STUDY OF PREHARVEST SPROUTING ASSOCIATED ALPHA- AMYLASE ACTIVITY IN BARLEY;** Rui Wang, Gurkamal Kaur, Marta S. Izydorczyk, Dean Spaner, Aaron D. Beattie, Ana Badea, and Belay T. Ayele
P95	**EVALUATING SEASON EXTENSION TECHNOLOGIES ACROSS BOREAL NORTHERN AGRICULTURAL REGIONS;** Julia Wheeler, Karen Compton, Dena Wiseman, and Linda Elizabeth Jewell
P96	**BENEFIT: BIO-INOCULANTS FOR THE PROMOTION OF NUTRIENT USE EFFICIENCY AND CROP RESILIENCY IN CANADIAN AGRICULTURE;** George C diCenzo, Matthew G Bakker, Terrence H Bell, Derek G Brewin, Olivia Wilkins, and Ivan J Oresnik
*P97	**RENSEQ-BASED REFINEMENT OF *BRASSICA NAPUS* NLROME;** Jiaxu Wu, Soham Mukhopadhyay, Coreen Franke, and Edel Pérez-López
*P98	**SEED GERMINATION UNDER STRESS - MECHANISTIC INSIGHTS INTO THE EARLY LIFE OF LONG-LIVED PLANTS;** Michael Yankov, Oscar Felipe Nunez-Martinez, Stefan Heinen, and Katharina Bräutigam
*P99	**IDENTIFYING THE GENOMIC VARIABILITY OF DIVERSE WHITE MOULD (*SCLEROTINIA SCLEROTIORUM* (LIB.) DE BARY) ISOLATES;** Marysia Zaleski-Cox, Laura Esquivel-Garcia, and Valerio Hoyos-Villegas
*P100	**BREAKING FREE: INSIGHTS INTO AUXIN AND ETHYLENE CONTROL OF ABSCISSION ZONE PATTERNING IN ARABIDOPSIS;** Risham Osahan and Shelley R. Hepworth
P101	**THE PURIFICATION AND IDENTIFICATION OF MONOTERPENE INDOLE ALKALOIDS IN ALSTONIA SCHOLARIS;** Scott Mann and Dr. Yang Qu
*P102	**MANAGING VERTICILLIUM STRIPE DISEASE IN CANOLA THROUGH GENETICS, OMICS, AND UNDERSTANDING THE *BRASSICA NAPUS - VERTICILLIUM LONGISPORUM* INTERACTION;** Ayomi Thilakarathne and Zhongwei Zou

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