Detailed Schedule of 1st IAS Academic Session

Plenary lecture **Location: Third floor, Lecture hall**

October 13, Morning		
09:40-10:15	**Christopher Watkins** Cornell University, the United States of America Preharvest and postharvest 1-MCP application on apple fruit quality and physiological disorders	Chair: Fengwang Ma
10:15-10:50	**Wei Guo** Digital China Group Co.,Ltd, China Small apple, huge industry, big data	
10:50-11:25	**Andrew C Allan** Institute for Plant & Food Research Ltd, New Zealand Exploring all the options towards engineering an even healthier apple	
11:25-12:00	**Wubin Gao** Fruit Administrative Bureau of Shaanxi, China Different backgrounds for same apple — the apple industry development in Shaanxi province	
October 13, Afternoon		
14:00-14:35	**Vincent Bus** Institute for Plant & Food Research Ltd, New Zealand Genes and genomes: the role of genetic markers in pipfruit breeding	Chair: Stuart Tustin
14:35-15:10	**Mingyu Han** Northwest A&F University, China Current status and technical evolution of apple industry in China	
15:10-15:45	**Yi Li** University of Connecticut, the United States of America Transgene free genome editing for non-sexually propagated crop plants	
15:45-16:05	Coffee breaks	
16:05-16:40	**Zhenhai Han** China Agricultural University, China Apple rootstocks breeding in China — advance and challenge	Chair: Lailiang Cheng
16:40-17:15	**Riccardo Velasco** Fondazione Edmund Mach, Italy What have we learned from the apple genome: tools and perspectives	
17:15-17:50	**Yujin Hao** Shandong Agricultural University, China Molecular mechanism underlying a co-regulation of fruit coloration and acidity in apple	

Topic 1 Germplasm Resources and Apple Breeding

Location: Second floor, East meeting room

October 14, Morning		
08:10-08:35	**Cameron Paul Peace** Washington State University, the United States of America Learning as we go: DNA-informed apple breeding at Washington State University	Chair: Vincent Bus
08:35-09:00	**Xuesen Chen** Shandong Agricultural University, China Advances in research of Xinjiang wild apple (*Malus sieversii*) and the creation and utilization of elite apple germplasm	
09:00-09:25	**Kenong Xu** Cornell University, the United States of America Understanding apple tree architecture and fruit quality through genomics approaches	
09:25-09:50	**Hongyi Dai** Qingdao Agricultural University, China Identification and genetic mapping of *Glomerella* leaf spot resistant gene in apple	
09:50-10:20	Coffee breaks	
10:20-10:45	**Wouter Eric van de Weg** Wageningen University, the Netherlands Pedigree based analyses: a powerful approach for QTL discovery and for DNA based support on breeding decisions	Chair: Zongming (Max) Cheng
10:45-11:10	**Peihua Cong** Chinese Academy of Agricultural Sciences, China Research situation of apple resources and breeding in China	
11:10-11:35	**Satish Kumar** Institute for Plant & Food Research Ltd, New Zealand Genomic selection: a novel tool to accelerate new apple cultivar delivery	
11:35-12:00	**Guangli Sha** Qingdao Agricultural University, China 'Qingzhen 1' the appropriate apple rootstock in China	

October 14, Afternoon		
14:00-14:25	**Shogo Matumoto** Nagoya University, Janpan Apple breeding and cultivation based on *S-RNase* allele information	Chair: Hongyi Dai
14:25-14:50	**Zongming (Max) Cheng** University of Tennessee, the United States of America Validation of apple cultivars in resistance to *Alternaria* blotch by a resistance-linked and susceptibility-linked molecular marker	
14:50-15:15	**Zhengyang Zhao** Northwest A&F University, China The practice of optimizing apple breeding technology system of China	
15:15-15:40	**Wei Liang** Northwest A&F University, China Fine mapping of the scab resistance gene *Rvi13* from the old Italian apple cultivar 'Durello di Forli'	
15:40-16:10	Coffee breaks	
16:10-16:35	**Christopher Merritt Richards** USDA Agricultural Research Service, the United States of America Genetic approaches for in situ and ex situ conservation of *Malus* sp. and other tree species	Chair: Cameron Paul Peace
16:35-17:00	**Ali Gharaghani** Shiraz University, Iran Global importance of Iran's apple germplasm and its potentials for breeding programs of future	
17:00-17:25	**Andrea Emilio Patocchi** Institute for Plant Production Sciences, Switzerland Testing new breeding technologies in apple: cisgenesis and early flowering	
17:25-17:50	**Zhenyu Huang** China Agricultural University, China Selection of apple cultivar series for soft cider from intra- and interspecies hybrids	

October 15, Morning		
09:00-09:25	**Endrit Kullaj** Agricultural University of Tirana, Albania A novel screening method in breeding apples for optimal stomatal behavior	Chair: Wouter Eric van de Weg
09:25-09:50	**Francois Laurens** the National Institute for Agriculture Research, France Aftermath of the EU research project fruit — breedomics: still some work to be done to get efficient apple breeding programs	
09:50-10:15	**Qian Peng** Chinese Academy of Sciences, China Genome-wide view of single nucleotide polymorphisms in 30 wild and cultivated apples uncovers patterns of genetic diversity and selection	
10:15-10:40	**Yan Yan** Northwest A&F University, China A DREB family member in *Malus prunifolia*, MpDREB2A, enhances drought tolerance of apple by increasing DNA demethylation under drought stress	
10:40-11:10	Coffee breaks	

Topic 2 Orchard Environment, Tree and Fruit Physiology, and Cultivation Management

Location: Second floor, West meeting room

October 14, Morning		
08:10-08:35	**Pierre Eric Robert Generoso Lauri** The National Institute for Agricultural Research, France Apple tree architecture and cultivation - a tree in a system	Chair: Luigi Manfrini
08:35-09:00	**Stuart Tustin** Institute for Plant & Food Research Ltd, New Zealand New planar tree canopy design to increase orchard light utilisation and productivity potential of apple planting systems	
09:00-09:25	**Peter Hirst** Purdue University, the United States of America Can apple tree pruning be automated?	
09:25-09:50	**Narayan Bhusal** Kyungpook National University, Korea Canopy light distribution and fruit quality in excessive tall spindle apple production system	
09:50-10:20	Coffee breaks	
10:20-10:45	**Oleichenko Sergey** Kazakh National Agriculture University, Kazakhstan A new method of formation of the crown of fruit trees	Chair: Stuart Tustin
10:45-11:10	**Zhiquan Mao** Shandong Agricultural University, China Effects of apple mixed cropping with *Allium fistulosum* L. on alleviating apple replant disease	
11:10-11:35	**Yuncong Yao** Beijing University of Agriculture, China Aromatic plants play an important role in regulating the diversity and structure of arthropod community and soil microorganisms in the orchard ecosystem	
11:35-12:00	**Luigi Manfrini** University of Bologna, Italy Development of precision apple fruit growing techniques: monitoring strategies for high quality fruit and yield production	

October 14, Afternoon		
14:00-14:25	**Xiaochun Huang** Hirosaki University, Japan Apple industry in Japan	Chair: Peter Hirst
14:25-14:50	**Jinzheng Wang** Shandong Institute of Pomology, China Apples cultivation history, production status and development trend in Shandong province	
14:50-15:15	**Edward Zurawicz** Research Institute of Horticulture, Poland The apple industry in Poland	
15:15-15:40	**Deguo Lv** Shenyang Agricultural University, China Apple industry in the cool climate region of North-East China — take 'Hanfu' apple industry for example	
15:40-16:10	Coffee breaks	
16:10-16:35	**Ali Kuden** University of Çukurova, Turkey Apple growing in Turkey	Chair: Jinzheng Wang
16:35-17:00	**Endrit Kullaj** Agricultural University of Tirana, Albania Research on apples in Albania	
17:00-17:25	**Dragan Radivojevic** University of Belgrade, Serbia Effect of chemical thinning by hormonal agents on yield and fruit quality in young apple orchard	
17:25-17:50	**Zhongwu Jiang** Yantai Academy of Agricultural Science, China Research on utilizing of new apple rootstock clones with replant disease resistance in old orchard of Yantai	

October 15, Morning		
09:00-09:25	**Yuanmao Jiang** Shandong Agricultural University, China Nitrogen management in apple orchard with low soil organic matter content in China	Chair: Jill Stanley
09:25-09:50	**Linlin Huang** Northwest A&F University, China Drought stress changes nitrogen uptake and metabolism of fine roots in *Malus hupenensis*	
09:50-10:15	**Ali Kuden** University of Çukurova, Turkey Chemical applications affected dormancy breaking in modi apple cultivar under subtropical conditions	
10:15-10:40	**Weiwei Yang** Northwest A&F University, China Photosynthetic capacity in 'Fuji' apple trees influenced by interstocks at leaf and canopy scale	
10:40-11:10	Coffee breaks	

Topic 3 Molecular Biology and Biotechnology

Location: Third floor, Lecture hall

October 14, Morning		
08:10-08:35	**Steven Richard Van Nocker** Michigan State University, the United States of America Chromatin landscape of flowering in apple	Chair: Yongbing Yuan
08:35-09:00	**Fengwang Ma** Northwest A&F University, China Linking abiotic stresses to autophagy: potential implications for improvement in apple stress tolerance and productivity	
09:00-09:25	**Stefan Martens** Fondazione Edmund Mach, Italy Dihydrochalcone biosynthesis: innovative target for breeding in Rosaceae and biotechnological approaches	
09:25-09:50	**Ting Wu** China Agricultural University, China A TATA box driven adaptation to Fe deficiency tolerance in apple genotypes: a selected mechanism for enhancing gene expression	
09:50-10:20	Coffee breaks	
10:20-10:45	**Yongbing Yuan** Qingdao Agricultural University, China Molecular cloning and expression analysis of *MdUVR8*, *MdCRY1* and *MdHY5* in anthocyanin synthesis of apple (*Malus domestica* Borhk cv. Fuji)	Chair: Qingmei Guan
10:45-11:10	**Sergey Dolgov** Russian Academy of Agricultural Sciences, Russia Production of marker-free cisgenic apple plants using inducible site-specific recombinase and a bifunctional selectable gene	
11:10-11:35	**Qiulei Zhang** China Agricultural University, China The mechanism of a novel Md-miRLn12 regulate apple *Alternaria* leaf spot	
11:35-12:00	**Yuanyuan Li** Shandong Agricultural University, China The SUMO E3 ligase MdSIZ1 promotes anthocyanin accumulation by sumoylating MdMYB1 under adverse temperature conditions in apple	

October 14, Afternoon		
14:00-14:25	**Qingmei Guan** Northwest A&F University, China SERRATE plays important roles in drought stress tolerance of apple	Chair: Andrew C Allan
14:25-14:50	**Xinzhong Zhang** China Agricultural University, China miR156 switches plant vegetative phase change under the control of plastid retrograde signals	
14:50-15:15	**Christopher Chaerles Gottschalk** Michigan State University, the United States of America A molecular framework for the repressive effect of fruit on floral initiation in apple	
15:15-15:40	**Na Wang** Northwest A&F University, China Functions of *Malus hupehensis* YT521-homology domain containing RNA binding proteins in stress responses, leaf senescence and fruit ripening	
15:40-16:10	Coffee breaks	
16:10-16:35	**Jun Song** Agriculture and Agri-Food Canada, Canada Developing and application of 'omics' techniques for maintenance and improvement of quality of apple fruit	Chair: Yi Li
16:35-17:00	**Anil Kumar Singh** ICAR-Indian Institute of Agricultural Biotechnology, India Molecular regulatory mechanism of chilling-mediated bud dormancy release in apple (*Malus domestica* Borkh.)	
17:00-17:25	**Yi Wang** China Agricultural University, China Nitric oxide signaling is involved in the response to iron deficiency in the apple rootstock (*Malus xiaojinensis*)	
17:25-17:50	**Ji Tian** Beijing University Of Agriculture, China Different environmental factors can impact anthocyanin accumulation in *Malus* crabapple leaves	

October 15, Morning		
9:00-9:25	**Lailiang Cheng** Cornell University, the United States of America Regulation of photosynthesis and carbon metabolism by sorbitol/sucrose synthesis and carbon export in apple leaves	Chair: Steven Richard Van Nocker
9:25-9:50	**Hisayo Sawada** Kyoto University, Japan Expression analysis of apple MADS-box genes in 'Fuji' dormant flower buds	
9:50-10:15	**Zengyu Gan** China Agricultural University, China *MdPIN8* promotor methylation in M9 may contribute to dwarfing effect in M9 interstem apple tree	
10:15-10:40	**Yanxiao Tan** Northwest A&F University, China Overexpression of *MpCYS4*, a phytocystatin gene from *Malus prunifolia* (Willd.) Borkh., delays natural and stress-induced leaf senescence in apple	
10:40-11:10	Coffee breaks	

Topic 4 Plant Protection and Ecological Strategies

Location: Third floor, East meeting room

October 14, Morning		
08:10-08:35	**Mickael Arnaud Malnoy** Fondazione Edmund Mach, Italy Biotechnology for apple improvement disease resistance	Chair: Lili Huang
08:35-09:00	**Guangyu Sun** Northwest A&F University, China Management of valsa canker on apple with adjustments to potassium nutrition	
09:00-09:25	**Lisa Larisa Lydia Gustavsson** Swedish University of Agricultural Sciences, Sweden A multidisciplinary approach for a better understanding of resistance to European canker in apple	
09:25-09:50	**Liyun Guo** China Agricultural University, China Research progress on apple ring rot disease	
09:50-10:20	Coffee breaks	
10:20-10:45	**Xiangming Xu** the National Institute of Agriculture Botany, the United Kingdom Off-season management to reduce primary inoculum	Chair: Mickael Arnaud Malnoy
10:45-11:10	**Lili Huang** Northwest A&F University, China Recent advances in pathogenetic mechanism of *Valsa mali* on apple tree	
11:10-11:35	**Daniel Cormier** St-Bruno-de-Montarville Quebec, Canada Mass releases of *Trichogramma minutum* affect tortricid pests in apple orchards	
11:35-12:00	**Keqiang Cao** Hebei Agricultural University, China New understanding on infection 1 processes of *Valsa* canker of apple in China	

October 14, Afternoon		
14:00-14:25	**Shujing Wu** Shandong Agricultural University, China The revealing of the suppressed defense responses in MdBAK1 overexpressed apple seedlings under its pathogenic fungi infection	Chair: Xiangming Xu
14:25-14:50	**Bruno Le Cam** The National Institute for Agriculture Research, France A Troyan Horse in orchards : a new scenario of pathogens emergence in agriculture	
14:50-15:15	**Benye Liu** Braunschweig University of Technology, Germany Biphenyls and dibenzofurans are the phytoalexins of apple	
15:15-15:40	**Marciel Joao Stadnik** Federal University of Santa Catarina, Brazil Genetic and pathogenic diversity of *Colletotrichum* species associated with apple diseases in Southern Brazil and Uruguay	
15:40-16:10	Coffee breaks	
16:10-16:35	**Baohua Li** Qingdao Agricultural University, China Reasons for epidemics and control means of apple ring rot (*Botryosphaeria dothidea*) in China	Chair: Marciel Joao Stadnik
16:35-17:00	**Susan Elizabeth Gardiner** the Institute for Plant & Food Research Ltd, New Zealand Fire blight resistance from *Malus* x 'Robusta 5' — identification and application of genetic markers	
17:00-17:25	**Shifang Li** Chinese Academy of Agricultural Sciences, China Molecular identification of a novel ilarvirus associated with apple mosaic disease in China	
17:25-17:50	**Xiaoning Gao** Northwest A&F University, China Screening and evaluation of biocontrol agents against *Valsa mali* causing apple *Valsa* canker	

October 15, Morning		
9:00-9:25	**Daniel Cormier** St-Bruno-de-Montarville Quebec, Canada Comparisons between different monitoring techniques for plum curculio, *Conotrachelus nenuphar* (Herbst) in apple orchards	Chair: Shujing Wu
9:25-9:50	**Liying Sun** Northwest A&F University, China Apple tree infecting viruses in China: from a decade of monitoring to molecular study	
9:50-10:15	**Bakyt Kopzhassarov** Kazakh Research Institute of Plant Protection and Quarantine, Kazakhstan Established etiology of the fire blight in the south and south-east of the Kazakhstan	
10:15-10:40	**Chao Xu** Northwest A&F University, China Peltaster fructicola genome reveals evolution from an invasive phytopathogen to an ectophytic parasite	
10:40-11:10	Coffee breaks	

Topic 5 Postharvest, Health Benefits of Apple, and Apple Related Economics

Location: Third floor, West meeting room

October 14, Morning		
08:10-08:35	**Michael Earl Sykuta** University of Missouri-Columbia, the United States of America The underlying economics of the value chain: the case of the China apple industry	Chair: Sigfredo Fuentes
08:35-09:00	**Yande Liu** East China Jiaotong University, China Nondestructive testing technology and equipment for apple quality	
09:00-09:25	**Stefano Tartarini** University of Bologna, Italy Apple allergenicity: towards the understanding of the role of the different isoallergens	
09:25-09:50	**Pengmin Li** Northwest A&F University, China Physiological mechanism of photooxidative sunburn in apple fruit	
09:50-10:20	Coffee breaks	
10:20-10:45	**Jinwook Lee** Mokpo National University, Korea Metabolic understanding of physiological disorder and application for controlling apple fruit quality	Chair: Pengmin Li
10:45-11:10	**Lav R Khot** Washington State University, the United States of America Rapid detection technologies for in-field and post-harvest apple bitter pit management	
11:10-11:35	**Yurong Guo** Shaanxi Normal University, China Innovation and practice of SPPT and whole apple utilization	
11:35-12:00	**Marie Eva Olsson** Swedish University of Agricultural Sciences, Sweden Effects of pre- and post-harvest treatments with ozone and essential oils on postharvest fungal decay of apple and pear fruit	

October 14, Afternoon		
14:00-14:25	**Franz Ruess** State Institute for Viticulture and Fruit Growing Weinsberg, Germany The vocational education system in the apple production of Germany	Chair: Marie Eva Olsson
14:25-14:50	**Fuzeng Yang** Northwest A&F University, China Development and experimental research of canopy type remote orchard mist sprayer and fertilizing machinery	
14:50-15:15	**Elena Rudikovskaya** Siberian Institute of Physiology and Biochemistry Siberian Branch of the Russian, Russia Particularities of accumulation of phenolic compounds and ascorbic acid in the fruit of Siberian crabapple and its hybrids with *Malus domestica* L.	
15:15-15:40	**Cuihua Liu** Northwest A&F University, China Analysis of cuticular wax compositions that influence the peel greasiness of apple during storage	
15:40-16:10	Coffee breaks	
16:10-16:35	**Ibrahim Tahir** Swedish University of Agricultural Sciences, Sweden A look at apple storage in Sweden	Chair: Stefano Tartarini
16:35-17:00	**Mingjun Li** Northwest A&F University, China MdFK2, as a high affinity fructokinase to fructose in apple, negatively regulates sugar concentrations	
17:00-17:25	**Xingbao Zhao** Beijing Hanlisorb Polywater Hi-Tech. Co., Ltd., China Application of in fruit trees using CLP - type soil water retention agent	
17:25-17:50	**Juan Zhao** Northwest A&F University, China Development of nondestructive detection equipment for apple moldy core disease based on spectrum technology	

October 15, Morning		
09:00-09:25	17. **Xuexi Huo** Northwest A&F University, China An empirical study on region structure and instability of China's AJC export	Chair: Mingjun Li
09:25-09:50	**Sigfredo Fuentes** The University of Melbourne, Australia Computer App development to obtain final fruit size for apples and sunburn risk with smartphones and Tablet PCs	
09:50-10:15	**Xin Yang** Hebei Agricultural University, China Development and application of key mechanical equipment research in modern orchards	
10:15-10:40	**Yonghua Jiang** Northwest A&F University, China MdHB1 inhibits anthocyanin biosynthesis in apple	
10:40-11:10	Coffee breaks	

Topic 6　Vocational Education and Development of Apple Industry

Location: Yangling Vocational & Technical College

October 14, Morning		
08:10-09:40	**Franz Ruess** State Institute for Viticulture and Fruit Growing Weinsberg, Germany The vocational education system in the apple production of Germany	Chair: Yongliang Zhang
09:40-11:40	Discussion on vocational education in apple production	