II. ANNOUNCEMENTS

Publication: Genomics-assisted Crop Improvement.

Two volumes of ***Genomics-assisted Crop Improvement*** (GACI) have been recently published by Springer. Volume 1, entitled '**Genomics Approaches and Platforms'**, presents state-of-the-art genomic resources and platforms and also describes the strategies and approaches for effectively exploiting genomics research for crop improvement (http://www.springer.com/home?SGWID=5-102-22-173739833-0). Volume 2, entitled '**Genomics Applications in Crops**', presents a number of case studies of important crop and plant species that summarize both the achievements and limitations of genomics research for crop improvement (http://www.springer.com/dal/home?SGWID=1-102-22-173739832-0).

More than 90 authors, representing 16 countries from five continents have contributed 16 chapters for Volume I and 18 chapters for Volume II. Each article shows how structural and/or functional genomics can improve our capacity to unveil and deploy natural and artificial allelic variation for the benefit of plant breeders. The editors hope that these two volumes, while providing new ideas and opportunities to those working in crop breeding, will help graduate students and teachers to develop a better understanding of the applications of crop genomics to plant research and breeding.

Contents of Volume 1

1. Genomics-assisted crop improvement: an overview; *RK Varshney, R Tuberosa*.
2. Genic molecular markers in plants: development and applications; *RK Varshney, T Mahender, RK Aggrawal, A Börner.*
3. Molecular breeding: maximizing the exploitation of genetic diversity; *AP Sørensen, J Stuurman, JR van der Voort, J Peleman*.
4. Modeling QTL effects and marker-assisted selection in plant breeding; *M Cooper, DW Podlich, L Luo*.
5. Applications of linkage disequilibrium and association mapping in crop plants; *ES Ersoz, J Yu, ES Buckler*.
6. Exploitation of natural biodiversity through genomics; *S Grandillo, S D Tanksley, D Zamir*.
7. Genomeless genomics in crop improvement; *KJ Lim, V Fey, S Rudd*.
8. Comparative genomics of cereals; *J Salse, C Feuillet*.
9. Cloning QTLs in plants; *S Salvi, R Tuberosa*.
10. Use of serial analysis of gene expression (SAGE) for transcript profiling in plants; *PC Sharma, H Matsumura, R Terauchi*.
11. Genetical genomics: successes and prospects in plants; *M Kirst, Q Yu*.
12. Analysis of salt stress-related transcriptome fingerprints from diverse plant species; *A Pareek, SL Singla-Pareek, SK Sopory, A Grover*.
13. Auxin and cytokinin signaling component genes and their potential for crop improvement; *JP Khurana, M Jain, AK Tyagi*.
14. Statistical advances in functional genomics; *RW Doerge*.
15. TILLING and EcoTILLING for crop improvement; *BJ Till, L Comai, S Henikoff*.
16. Characterization of epigenetic biomarkers using new molecular approaches; *M-V Gentil, S Maury.*

Contents of Volume 2

1. Microsatellite and SNP markers in wheat breeding; *MW Ganal, MS Röder*.
2. Molecular markers and QTL analysis for grain quality improvement in wheat; *D Lafiandra, MC Sanguineti, M Maccaferri, E Deambrogio*.
3. Molecular approaches and breeding strategies for drought tolerance in barley; *M Baum, M van Korff, P Guo, B Lakew, SM Udupa, H Sayed, W Choumane, S Grando, S Ceccarelli*.
4. Molecular markers for gene pyramiding and disease resistance breeding in barley; *W Friedt, F Ordon*.
5. Cloning genes and QTLs for disease resistance in cereals; *B Keller, S Bieri, E Bossolini, N Yahiaoui*.
6. Maize breeding and genomics; *M Lee*.
7. Molecular markers and marker-assisted selection in rice; *DJ Mackill*.
8. Application of genomics for molecular breeding in rice; *NK Singh, T Mohapatra*.
9. Marker-assisted selection in sorghum; *G Ejeta, JE Knoll*.
10. Molecular genetics and breeding of grain legume crops for the semi-arid tropics; *RK Varshney, DA Hoisington, HD Upadhyaya, PM Gaur, SN Nigam, K Saxena, V Vadez. NK Sethy, S Bhatia, R Aruna, MVC Gowda, NK Singh*.
11. Genomics approaches to soybean improvement; *TD Vuong, X Wu, MS Pathan, B Valliyodan, HT Nguyen*.

12. Application of genomics to forage crop breeding for quality traits; *T Lübberstedt*.
13. Molecular mapping, marker-assisted selection and map-based cloning in tomato; *MR Foolad*.
14. Genomics for improvement of Rosaceae temperate tree fruit; *P Arús, S Gardiner*.
15. DNA markers: development and application for genetic improvement of coffee; *PS Hendre, RK Aggarwal*.
16. Genomics of root nodulation in soybean; *K Van, MY Kim, S-H Lee*.
17. Genomics of wheat domestication; *C Pozzi, F Salamini*.
18. Transcriptome analysis of the sugarcane genome for crop improvement; *P Arruda, T Rezende e Silva*.