Título: Model Plants And Crop Improvement

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Within the past decade, there has been an explosion of research in both the public and private sectors regarding the use of plant genetic models to improve crop yield. Bringing together experts from across the globe, Model Plants and Crop Improvement provides a critical assessment of the potential of model plant species for crop improvement. The first comprehensive summary of the use of model plant systems, the book delineates the model species' contribution to understanding the genomes of crop species.

The book provides an in-depth examination of the achievements and limitations of the model paradigm. It explores how continued research in models can contribute to the goal of delivering the outputs of molecular biology to crops. Covering the major genetic models such as Arabidopsis thaliana, Lotus japonicus, and Medigago, the book goes on to discuss applications to food plants of global importance including rice, canola, and legumes. The book introduces the evolutionary, genetic, genomic, and morphological attributes of B. distachyon that make it such an attractive new model plant system.

As the post-genomic era dawns, a key question to address is how this growing body of genetic and biological information can be extended beyond the model to the modeled species. This book takes you one step closer to applying modeling results to crops in the field.

Contents.
Development and Application of Genomic Models for Large-Crop Plant Genomes, R.M.D. Koebner and R.K. Varshney
Conserved Mechanisms of Dormancy and Germination as Targets for Manipulation of Agricultural Problems, M. Holdsworth, L. Bentsink, and M. Koornneef
Utilization of Arabidopsis and Brassica Genomic Resources to Underpin Genetic Analysis and Improvement of Brassica Crops, G.J. King
Characterization of the Completed Rice Genome Sequence and Scope of its Utilization in Cereal Improvement, B. A. Antonio and T. Sasaki