ISBN: 979-8554864513

Chapter 8

Plant Genomics and its Role in Crop Improvement

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Abstract

Genomics to characterize and quantify all the genes, their interrelationships and influence on the organism of the organism. Genomics to characterize and quantify all genes of the organisms, their interrelationship and influence the organism. The concept of the entire genetic material of each organism currently does not include an allopolyploid with many similar but not identical genomes. Plant genomes are harder than any other eukaryotic system, and the analysis of their DNA compositions causes problems. Genomic findings shed new light on plant genomics' dynamics and complexity. The results are the sequence and assembly of the whole plant genomes and the gene functional rotations of very complex polyploidy plants. The connection of variants in sequence with phenotypes and plant or cultivated sequence differences to improve the overall use of the genome or to highly sequentially modify the native genome of the plant. This has led to the development of advanced genome sequencing technologies that allow do novo to generate large amounts of data at very low cost in a very short space of time.

Keywords: Genome sequence, Plant genomes, rRNA, Plant-genomes sequence, NGS-technology.

Introduction

The impressive achievements of the Human Genome program, which have brought to a close its most important stage-determination of the nucleotide sequence of the euchromatic part of the genome, as well as the success in deciphering "small" (viruses,