

"PLANT EXOMICS IN CEREAL IMPROVEMENT"

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ABSTRACT

Exome refers to entire protein coding sequence in an organism i.e. exon. Although exome represent almost a hundredth of whole genome. It don't provide complete picture of gene regulation they represent all sequences that code for proteins and regulate phenotype. It has advantages of producing sequencing data in a quicker way, since exome comprises only a small portion of genome. It is usually used to identify mutations in protein coding genes. Exome sequencing data are now becoming widely available for secondary uses. Many of the functional elements located outside exonic region is not sequenced (about 50% of SNPs are located in the intronic region). Exomics plays an important role in exploring biodiversity, to understand host pathogen interaction and investigating evolution of cereals.

KEYWORDS: EXOME, Intronic, SNPs and Organism