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MOLECULAR MARKERS AS A BOON FOR PLANTS GENETIC FIDELITY: A REVIEW

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ABSTRACT

Molecular markers have brought to the fore an extremely efficient method of estimating the genetic diversity of germplasm collections of various plant species. They can enhance the speed and effectiveness of plant breeding, and can even be used efficiently for quality control. Different types of molecular markers have made it possible to detect the sequence of DNA or protein whose inheritance can be monitored and thus proves an important tool for studying genetic fidelity among plants. These markers are extremely essential for phylogenetic analysis adding new dimension to the evolutionary theories. The present review deals with the different types of molecular markers and their possible implications in improving the breeding process, for sex identification of dioeceous plants and testing the genetic fidelity in plants.

Keywords : molecular markers, plant breeding, genetic fidelity, germplasm.

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