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## Sommario/riassunto

Genome of an organism is depicted by genetic linkage mapping and physical mapping. Genome mapping started with genetic linkage mapping and contributed enormously in genome analysis and its improvement. Physical mapping emerged later and is the prelude to structural and functional genomics. Volume One of Principles and Practices of Plant Genomics introduces the historical background of genome mapping, and delineates modern methods in the field. This volume briefly introduces the historical background and overview on genome mapping. Chapters deliberating on different types of molecular markers, their detection, relative merits, shortcomings and applications; types of mapping populations, methods of their generation, applications; basic concepts and schematic depiction of construction of genetic linkage maps; concepts and strategies of mapping genes controlling qualitative and quantitative traits on framework genetic linkage maps; rationale, methodologies and implications of comparative mapping; principles, strategies, and outcome of map-based cloning; overviews on the recent advances on plant genomics and genome initiatives; and finally computer strategies and software.

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