Polyploidy and genome evolution

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This book brings together for the first time the conceptual and theoretical underpinnings of polyploid genome evolution with syntheses of the patterns and processes of genome evolution in diverse polyploid groups. Because polyploidy is most common and best studied in plants, the book emphasizes plant models, but recent studies of vertebrates and fungi are providing fresh perspectives on factors that allow polyploid speciation and shape polyploid genomes. The emerging paradigm is that polyploidy, through alterations in genome structure and gene regulation, generates genetic and phenotypic novelty that manifests itself at the chromosomal, physiological, and organismal levels, with long-term ecological and evolutionary consequences.