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4.5. Forms of reproductive isolation: conclusions and future directions5 A genetic mechanism to link selection to reproductive isolation; 5.1. Genetics of ecological speciation: the theory of divergence hitchhiking; 5.2. Linking selection to reproductive isolation via pleiotropy; 5.3. Linking selection to reproductive isolation via linkage disequilibrium; 5.4. Genetic constraints on ecological speciation; 5.5. The individual genetic basis of traits under selection and traits conferring reproductive isolation; 5.6. Ecological speciation genes
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6.7. Detecting divergence in the face of gene flow: comparative geographic approaches

Sommario/riassunto

The origin of biological diversity, via the formation of new species, can be inextricably linked to adaptation to the ecological environment. Specifically, ecological processes are central to the formation of new species when barriers to gene flow (reproductive isolation) evolve between populations as a result of ecologically-based divergent natural selection. This process of 'ecological speciation' has seen a large body of particularly focused research in the last 10-15 years, anda review and synthesis of the theoretical and empirical literature is now timely. The book begins by clarifying wha