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Sommario/riassunto	"Modern plant molecular biotechnology continues to develop to achieve high-throughput, high-resolution, smart, and precision-based tools such as multiple omics-based functional genomics, CRISPR/Cas-mediated genome editing, and RNA technology. In the last decade, genome editing technology has shown the potential of plant genomes through the precise delivery of tolerant genes for crop improvement. The system of genome editing has evolved quickly, and now CRISPR/Cas has become the dominant technology. Thus, the integration and coordination of multiple omics and CRISPR/Cas for organizing omics-CRISPR breeding strategies has become a key focus in plant science. In addition, RNA technology/epigenetics has been introduced into diverse fields of plant science and has been proven to have great potential in mitigating plant stress responses as well as being a fine-tuning regulator to advance crop improvement and breeding. The role of non-coding RNAs (ncRNAs) in the management of CRISPR-edited crop production has become an important topic. In the future, achieving climate-resilient agriculture needs the coordination of some crucial technologies involving multiple omics, CRISPR/Cas, and functional RNA technology/epigenetics"--