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【内容摘要】

【关键词】

CRISPR Clustered Regularly Interspaced Short Palindromic Repeats

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CRISPR

DNA

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SECURE Sustainable, Ecological, Consistent, Uniform, Responsible, Efficient Rule

SECURE

SECURE Regulatory Status Review RSR

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SECURE RSR

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Living Modified Organism, LMO [24]

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DNA

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RNA RNA interference RNAi

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Abstract: Gene editing technology has been successfully applied in traditional plant breeding, which quickly opens a new track of competition in the field of agricultural industry. In the world, regulating gene-edited plants mainly relies on the GMO law, such as a product-based model according to the principle of substantial equivalence, a process-based model according to the risk precautionary principle, and a separate regulatory model from process-based to product-based. However, these traditional models ignore the essential difference between gene-edited plants and GMO, and produce two extreme attitudes, that is technological optimism and technological pessimism. In order to ensure food safety and environmental safety and prevent the misuse and abuse of gene editing technology in agriculture, the regulation related to gene-edited plants should separate from the GMO law, as well as change the legislative values, the legislative principles and the specific rules.

Key Words: gene-edited plant, GMO, precautionary principle, substantial equivalence principle

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