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Application of Marker-Assisted Selection in Plant Genetic Engineering

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Abstract: Marker-assisted selection (MAS) has revolutionized plant genetic engineering by enabling the precise identification and incorporation of desirable traits into crops. This paper explores the principles, methodologies, and applications of MAS in developing plants with improved agricultural traits, disease resistance, and enhanced nutritional content. The integration of MAS with advanced genomic tools provides new avenues for sustainable agriculture and food security.

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