

Innovations in CRISPR Technology for Disease Resistance in Crops

Riley Edwards

PhD

Wageningen University & Research

Droevendaalsesteeg 4, 6708 PB Wageningen, Netherlands

Kim Clark

Dr.

University of Barcelona

Gran Via de les Corts Catalanes, 585, 08007 Barcelona, Spain

Nico Martin

Prof.

Seoul National University

1 Gwanak-ro, Gwanak-gu, Seoul 08826, South Korea

Abstract. CRISPR technology has revolutionized genetic engineering, offering new avenues for enhancing disease resistance in crops. This article explores recent innovations in CRISPR applications, demonstrating improved crop resilience and potential for sustainable agriculture.

Keywords: CRISPR, Genetic Engineering, Disease Resistance, Crop Resilience, Sustainable Agriculture

Introduction

Crop diseases pose a significant challenge to global food security, necessitating innovative solutions to enhance crop resilience. CRISPR technology, a groundbreaking tool in genetic engineering, offers new possibilities for developing disease-resistant crops. This study presents recent advancements in CRISPR applications, highlighting successful modifications that improve resistance to various pathogens. Our research underscores the potential of CRISPR technology in promoting sustainable agricultural practices and addressing food security issues.

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