GRAFTING WITH INTER-SPECIFIC ROOTSTOCK PROVIDES NOVEL APPLICATIONS FOR HOST RESISTANCE IN TOMATO

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Abstract

Due to the phaeoal of metals and demand for local and organic produce, tomato growers in NC face many challenges for successful tomato production. High tunnels are used to extend the harvest season and reduce disease incidence. Understanding the functional effect is still unknown. Future work is underway to determine how plant-microbe interactions activate defense gene expression. Elucidating the dynamics of systemic signaling between scion and rootstock and determining the impact of grafting on systemic signaling may improve future S. One system where the primary goal of applied research is to:

- Analyze whether or not a specific rootstock can be used to increase yields under no soilborne disease pressure as a result of added vigor from the rootstock genotype.
- Analyze whether or not grafting can increase yields under no soilborne disease pressure as a result of added vigor from the rootstock genotype.

NC STATE UNIVERSITY

Introduction and Statement of Research Objectives

Field Trial Results – Tomato growers in NC face many challenges for successful tomato production. High tunnels are used to extend the harvest season and reduce disease incidence. The systems comparison was used to determine the role that grafting plays in organic high tunnel and field production of heirloom tomato. A systems comparison was used to characterize the dynamics of defense gene expression. Elucidating the dynamics of systemic signaling between scion and rootstock and determining the impact of grafting on systemic signaling may improve future S. One system where the primary goal of applied research is to:

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CFS High Tunnel / Grafting Research Project

Organic farmers in North Carolina are interested in integrated disease management strategies to increase yields and reduce the use of synthetic fungicides. A systems comparison was used to determine the role that grafting plays in organic high tunnel and field production of heirloom tomato. A systems comparison was used to characterize the dynamics of defense gene expression. Elucidating the dynamics of systemic signaling between scion and rootstock and determining the impact of grafting on systemic signaling may improve future S. One system where the primary goal of applied research is to:

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Extension and Professional Development

An extension service program was developed to increase research-based communication with growers. This program developed and extended education and outreach services to address the needs of growers and stakeholders. The program developed and extended education and outreach services to address the needs of growers and stakeholders. The program developed and extended education and outreach services to address the needs of growers and stakeholders.