



Cotton Variety Screening Against Fusarium Wilt

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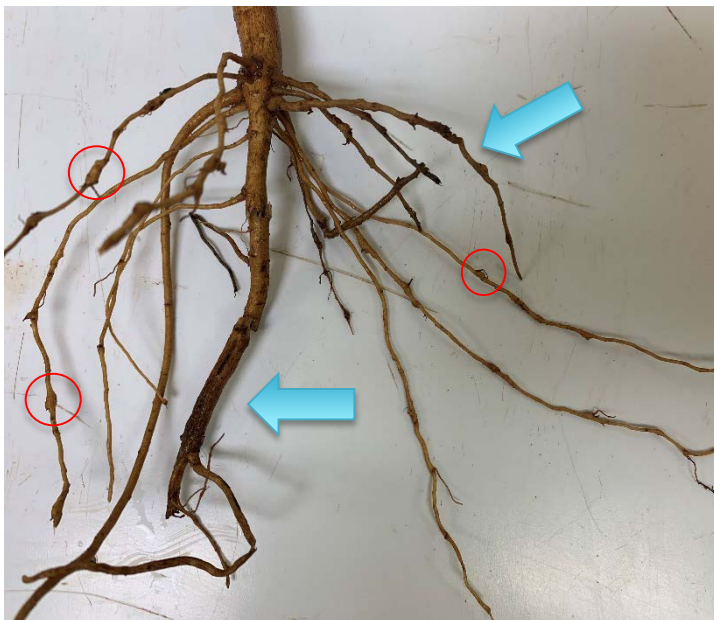
Introduction

- Fusarium Wilt is caused by the interaction of the fungal pathogen *Fusarium oxysporum* f. sp. *vasinfectum* (FOV) with *Meloidogyne incognita* (Root-knot nematode, RK).
- FOV colonizes the roots and vascular system of susceptible cultivars, causing:

Wilting/chlorosis



Root necrosis



Vascular discoloration





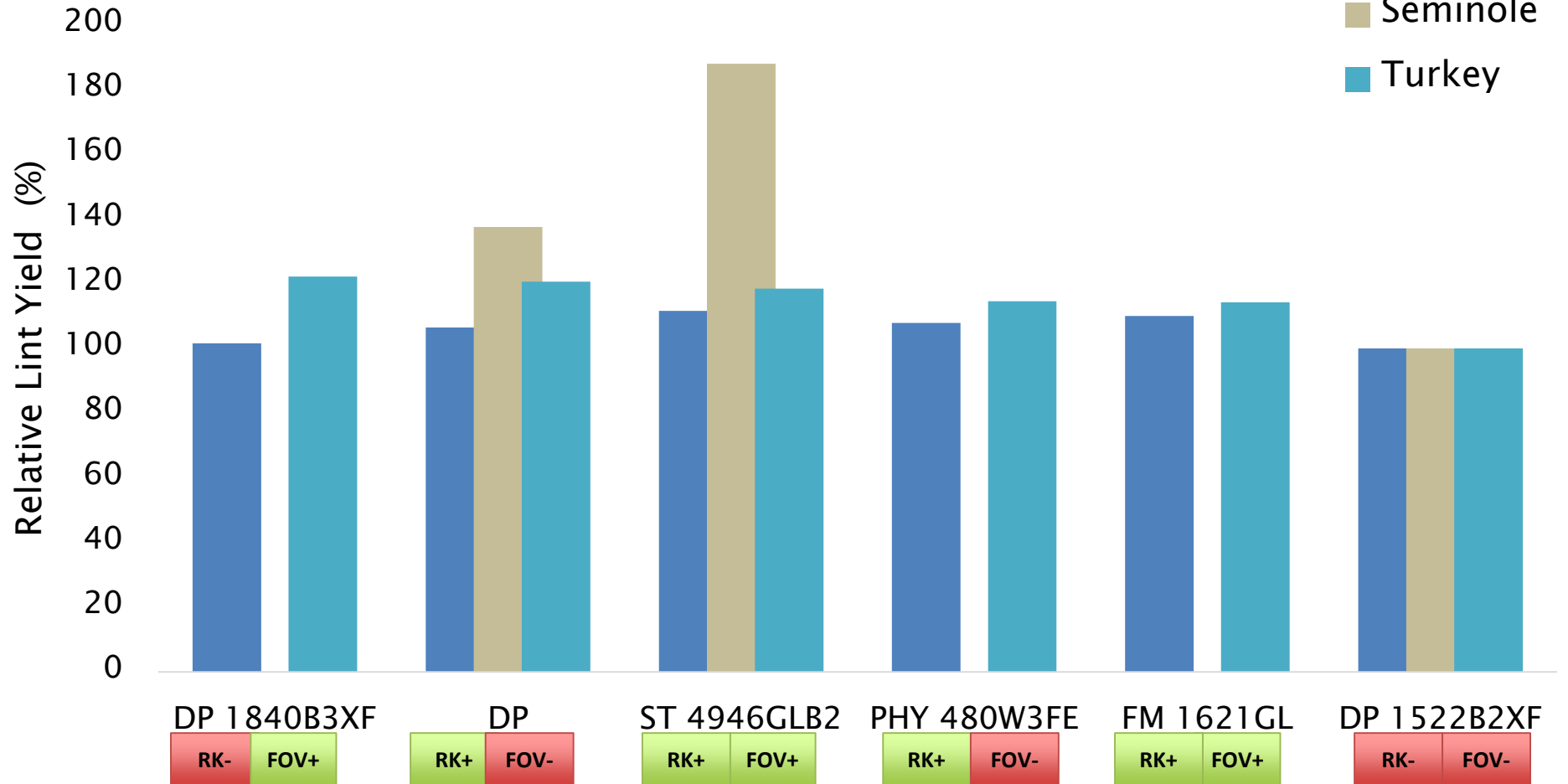
Methods

- Objective: Screen commercial cotton varieties for resistance to Fusarium wilt and root-knot nematode
- How: Screened 48 commercial cotton varieties in 2019
 - O'Donnell, TX
 - Seminole, TX
 - Turkey, TX

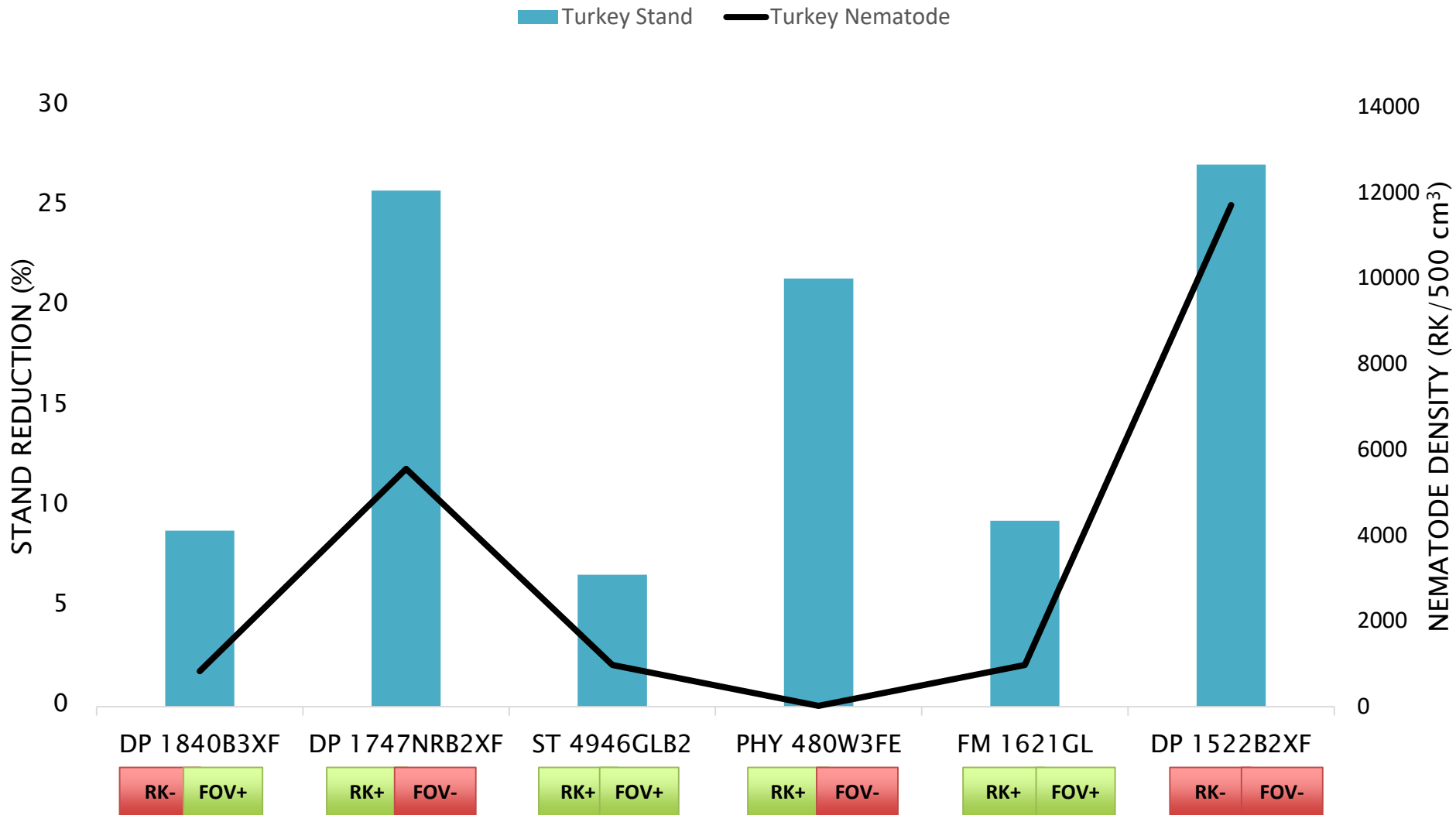
Results



- O'Donnell
- Seminole
- Turkey



Results



Conclusion



- Variety selection helps manage the presence of Fusarium wilt
 - Utilize both RKN+ resistance and FOV+ tolerance/resistance genes
 - Using a variety with only RKN+ resistance genes is not enough but can lessen nematode populations



Current Research



- This work is currently being conducted with 41 commercial varieties
 - Turkey, TX
 - Whiteface, TX



Acknowledgements



THANK YOU FOR
LISTENING!



QUESTIONS?



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