

Seed Treatments to Manage Insect and Nematode Pests in Cotton: A Focus on Thrips

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Efficacy of Seed Treatments Against Thrips

- Thrips occurrence in untreated plots
- Thrips efficacy changes due to rate increases
- Thrips efficacy changes due to the addition of a nematicide
- Using GreenSeeker NDVI for plant vigor ratings

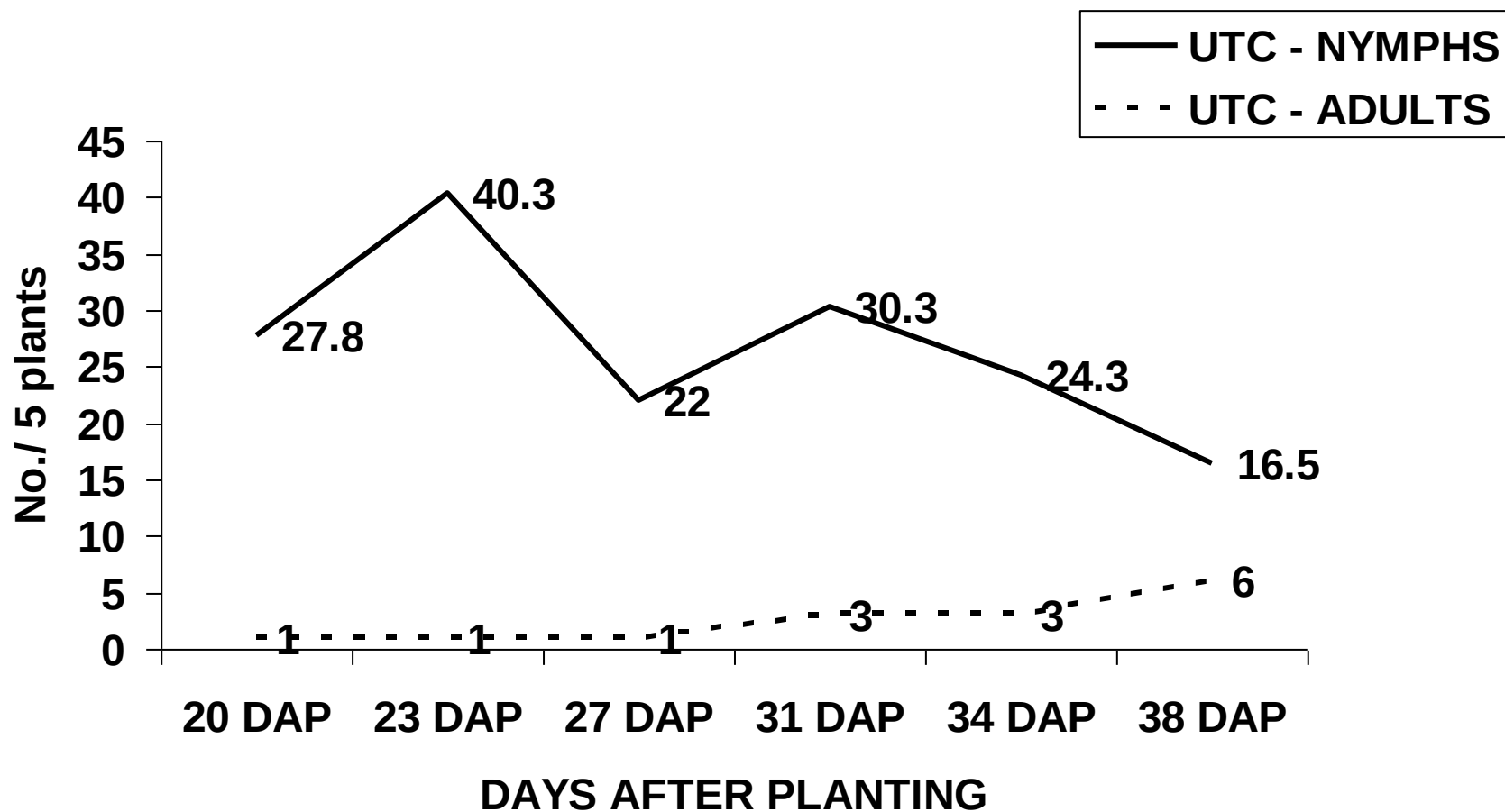


Fig.1 Thrips Occurrence In Untreated Plots

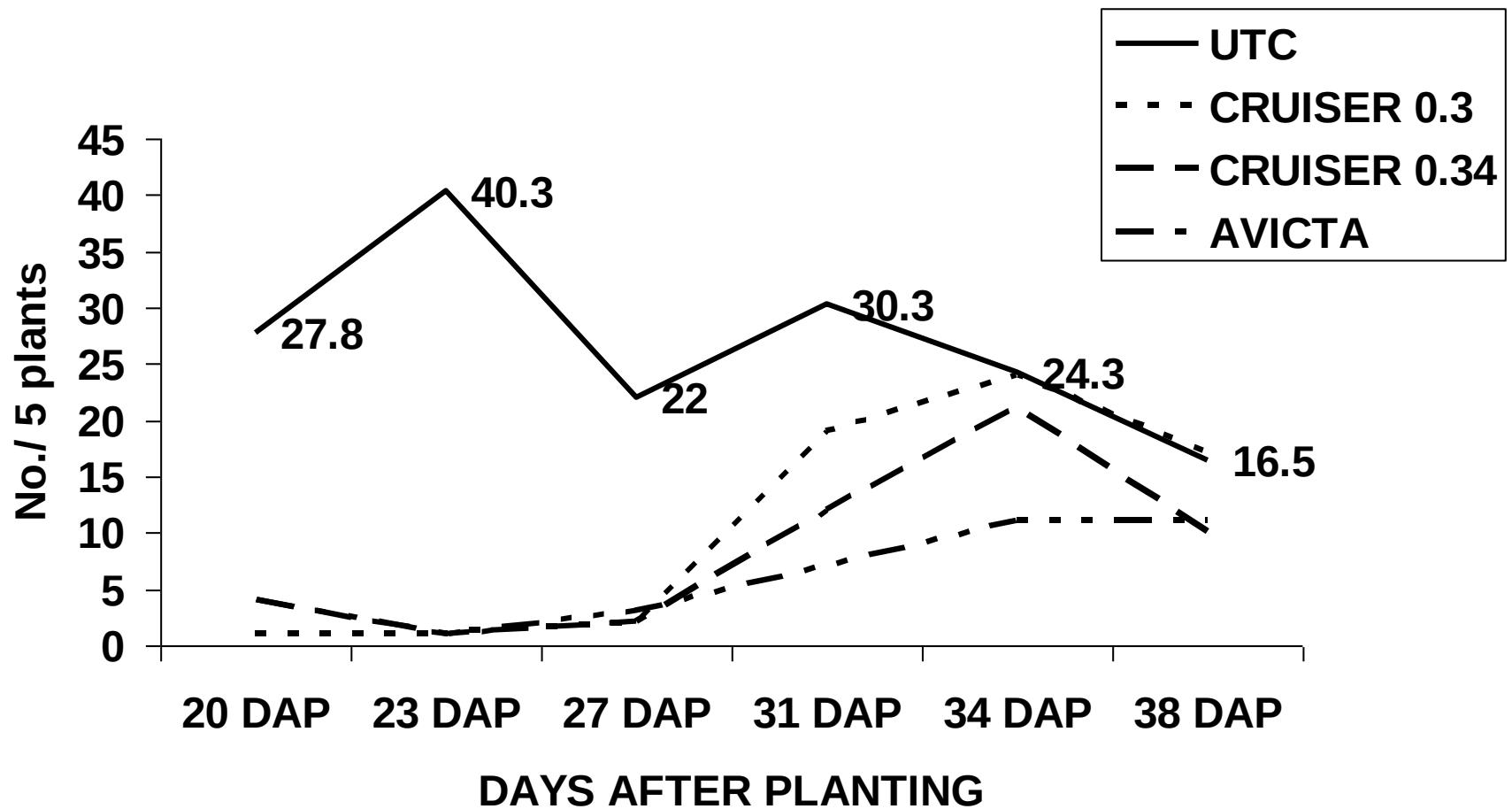


Fig. 2 Efficacy of Cruiser Rates and AVICTA Complete PAC

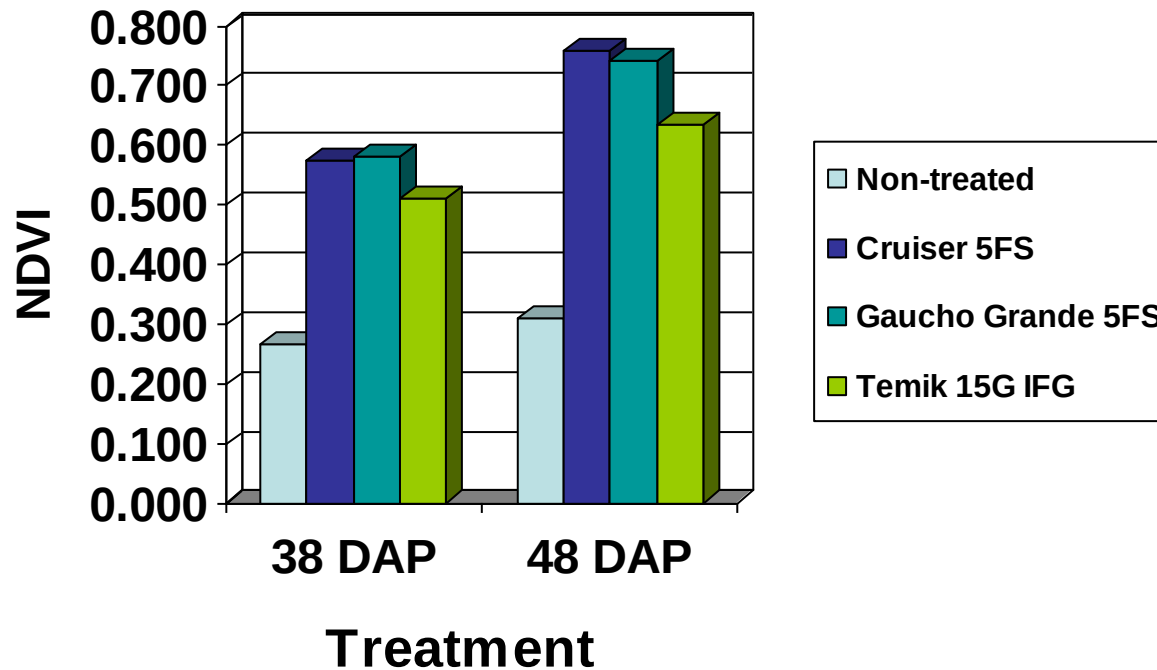
Example 2) GreenSeeker NDVI

- Improves plot data management
 - 1) handheld
 - 2) mobile



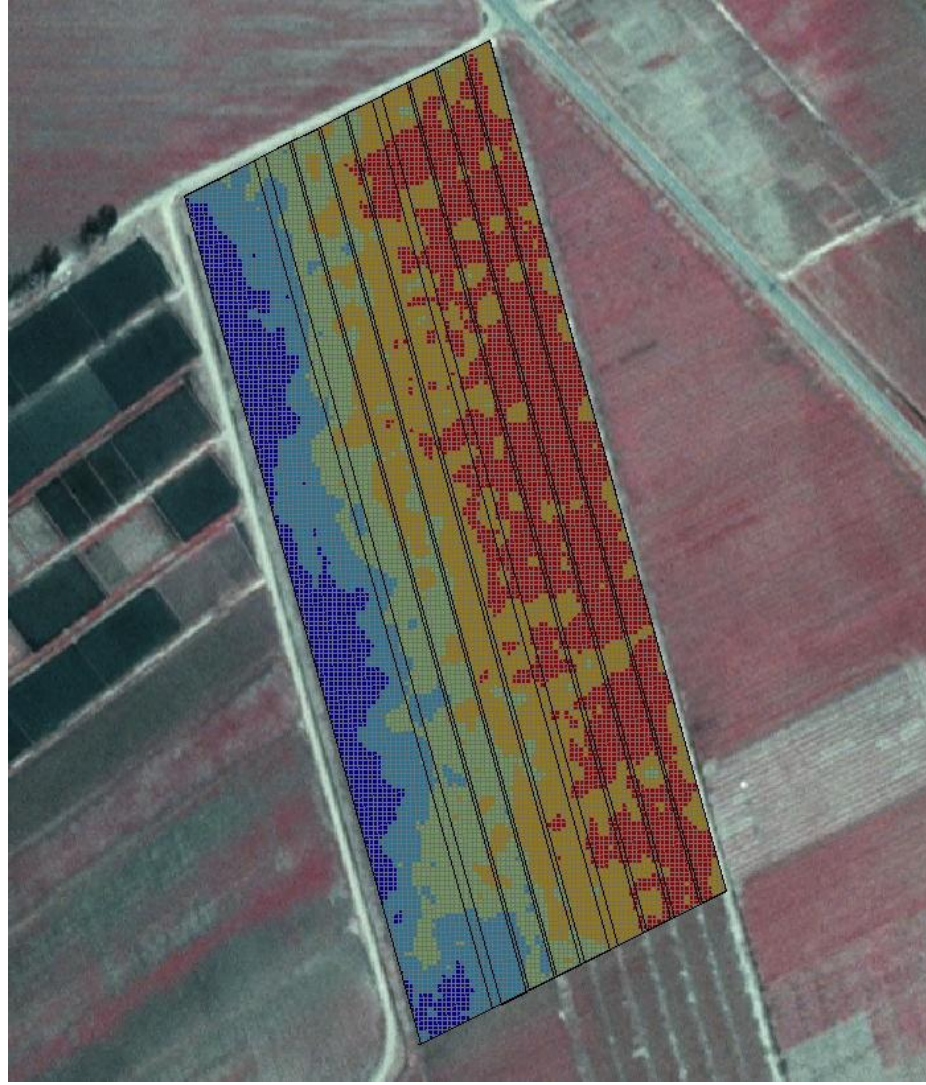
GreenSeeker NDVI

Example – handheld at cottons pre-bloom stage

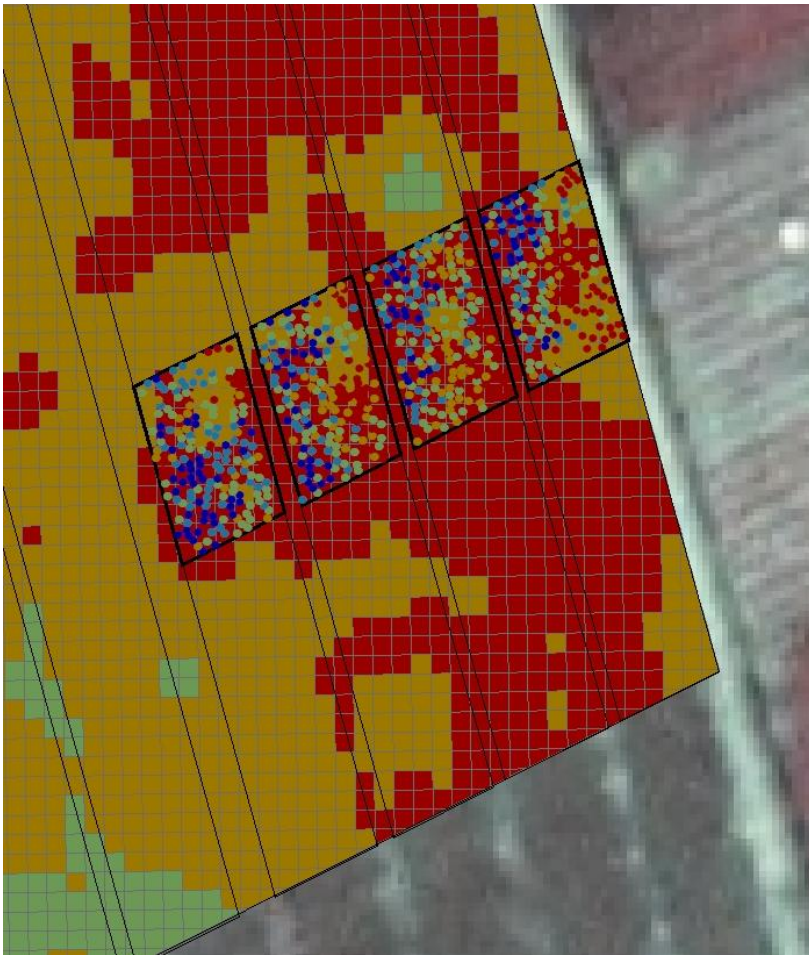




Use of NDVI
To evaluate plots



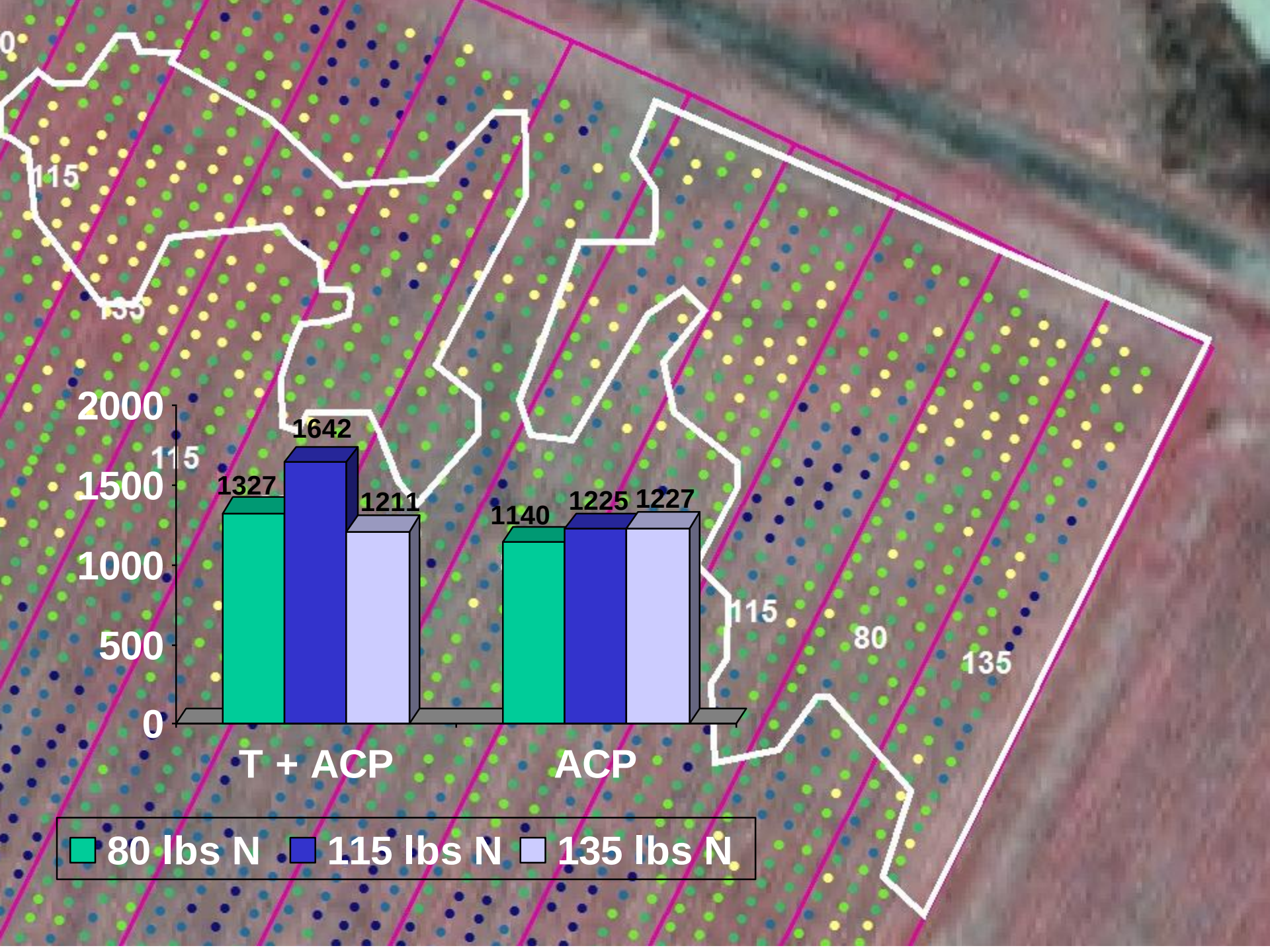
Test - SJ08CT03a, on light soil with high nematodes



- Geo-referenced tiers on the Northeast Res. Sta.
- .shp point data, 40 DAP represents GreenSeeker NDVI
- Mobile mount, RTK GPS
- Darker blue equal higher NDVI due to Temik 15G sidedress treatments.
- Back ground is Veris ec_a

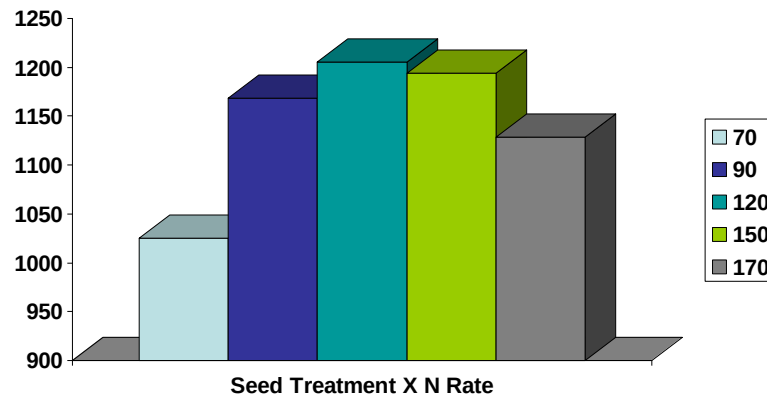
Other considerations for the use of seed treatments

- Implications for resistance in other pests
 - mites, aphids and plant bugs
- Pest status
 - expect changes in species due shifts in crop status on farms
- Management recommendations
 - plan for soil type variability and nematode pest status



LSU Analysis - McCarter

Effect	DF	F Value	Pr > F
N_rate	6	16.8	<.0001
Ec_zone	2	152.83	<.0001
N_rate*ec_Zone	12	1.24	<.0001





- **Seeding pests**
 - thrips
 - aphids
 - mites
 - fungi
 - nematodes