



# Performance of Crop Establishment Systems on Irish Farms and Farmers Perceptions

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Teagasc, CELUP, Oak Park Crops Research



# Why is there a need for this work?

- Increase in interest/uptake in these systems.
- Growers are dependent on research from conditions/climates different from our own.

## Does climate impact on system performance?

- Soils: Organic matter, Structure, Fertility.
- GHG Emissions.
- Disease and Weed control.
- Crop Performance.
- Sustainability: Economic & Environmental.



# 1: Focus Study



- 21 Farms (7 Plough, 7 Min-till & 7 No-till)
- Light, Medium & Heavy Soils.



## Monitoring 1<sup>st</sup> Winter Wheats:

- Crop establishment, Growth, Yield components
- Management practices
- 3 ▪ Economic & Environmental Sustainability

# 2: Small Plot Trial



- Plough, Min-till & No-till.
- Teagasc Knockbeg.
- 4 Replications



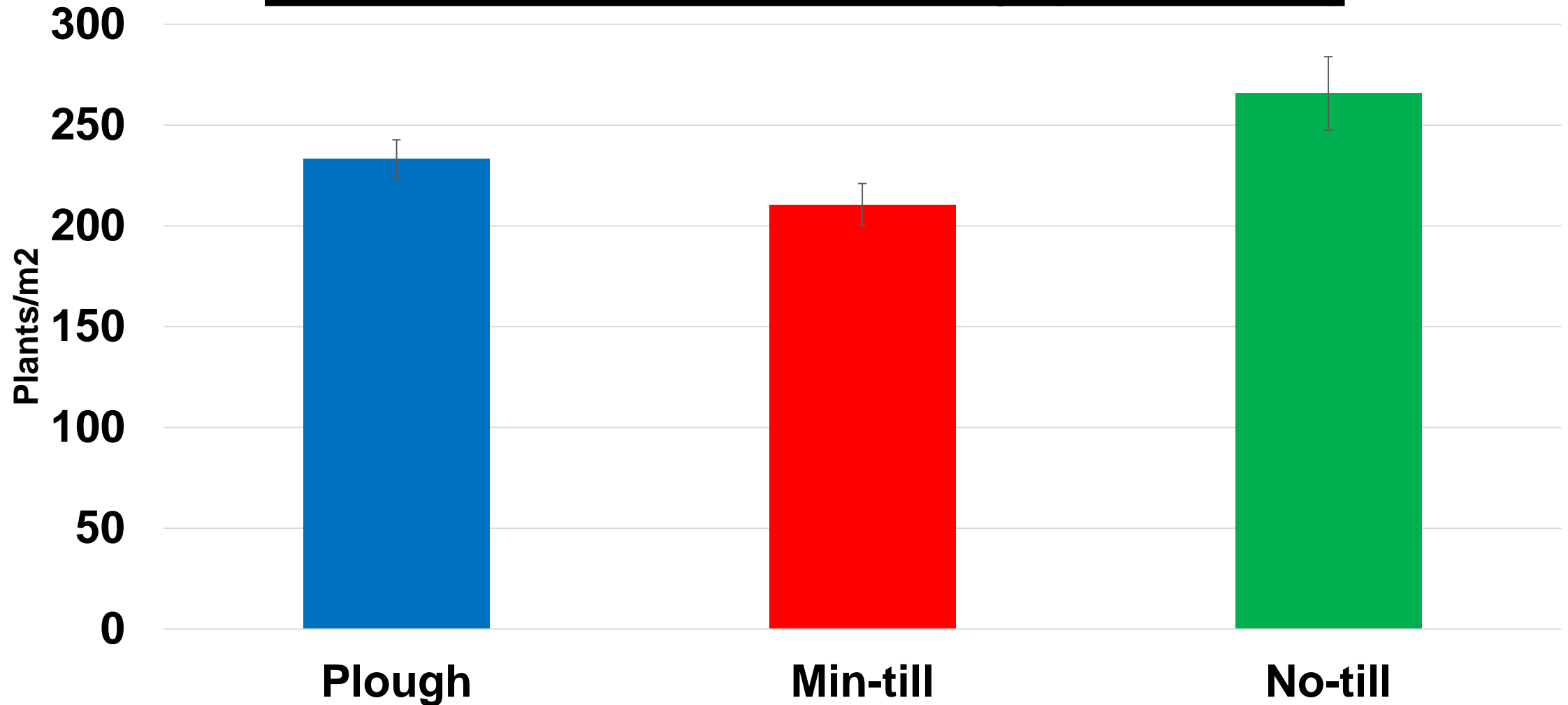
# 3: Perception Study



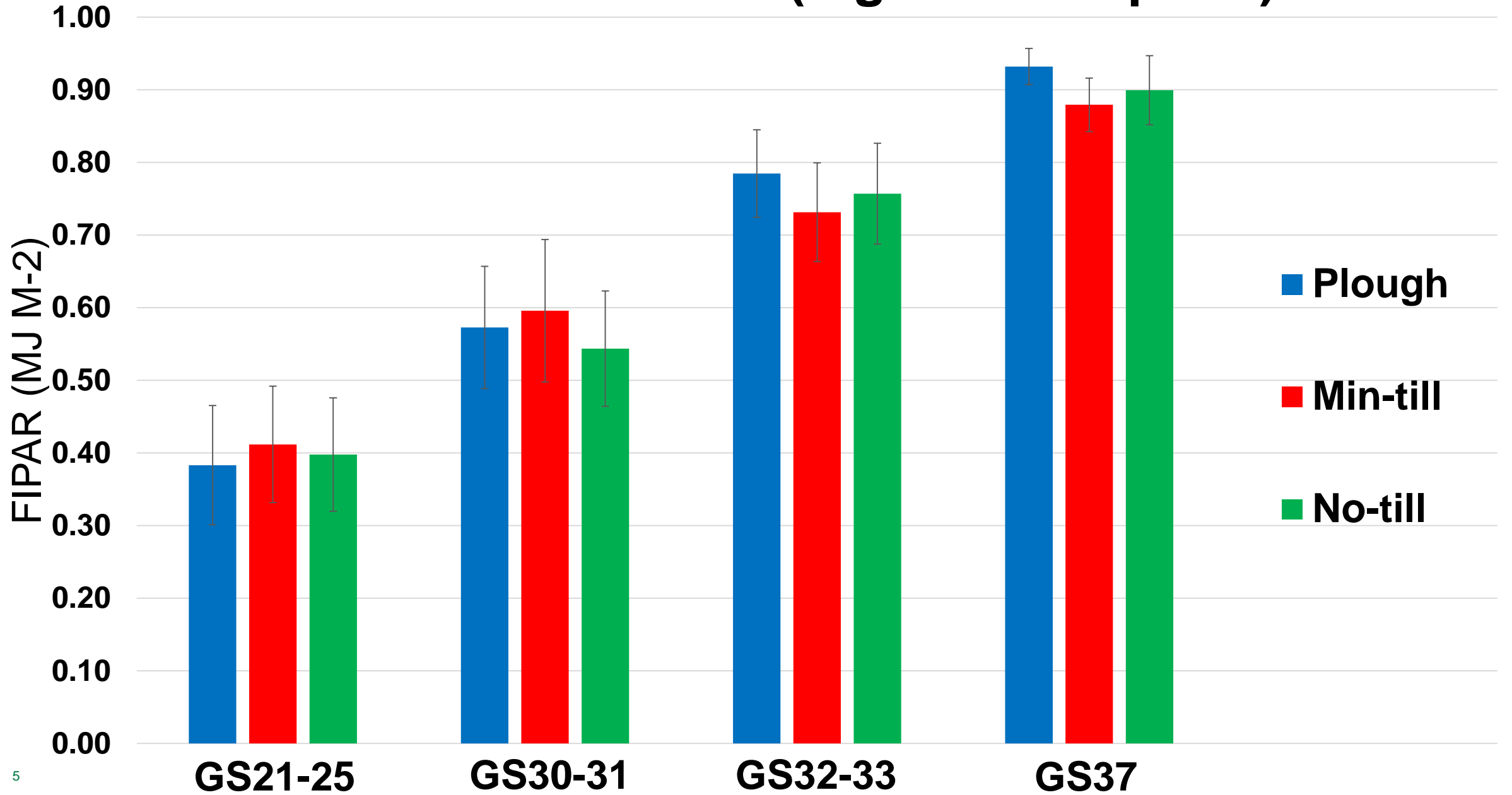
- 140 Tillage Farmers (> 50Ha.)
- Plough, Min-till, Strip-till & No-Till.
- Assessing: Information Sources and Interaction Method.
- Views on how systems perform.

# Preliminary Results:

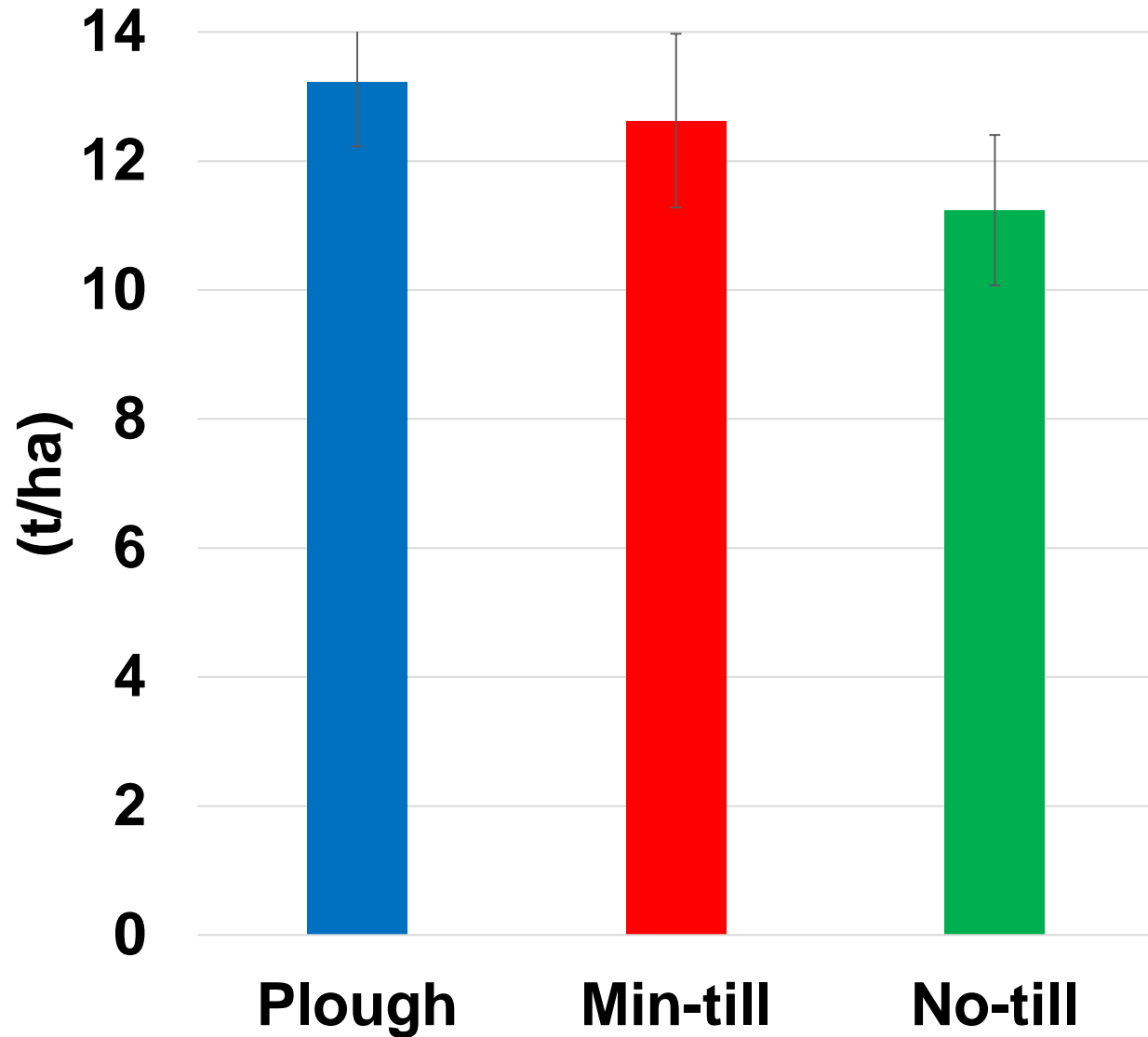
## Plant Counts- Focus Study (21 Farms)



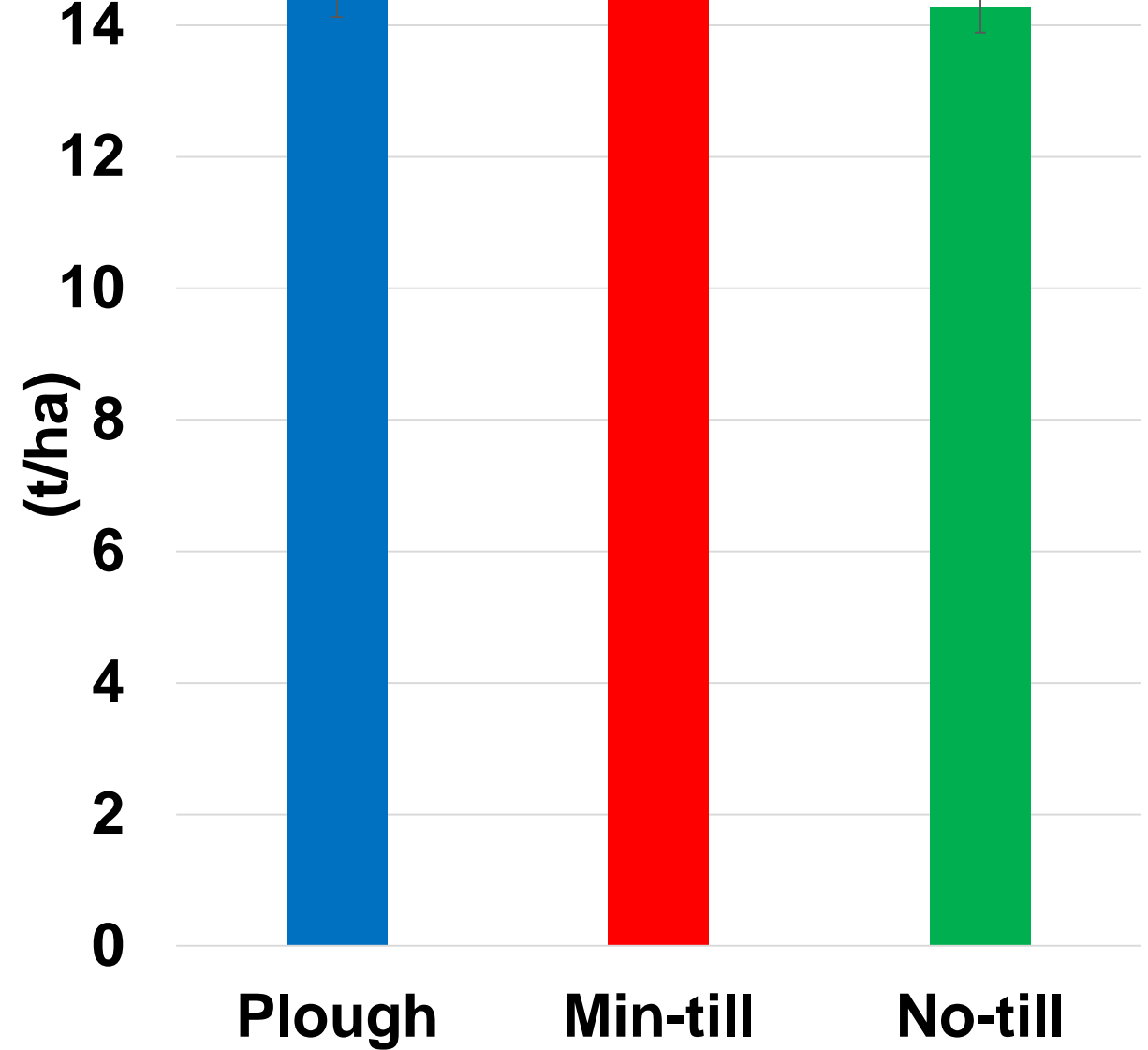
# Winter Wheat - FIPAR (Light Interception)



## Yields (t/ha)- Focus Study



## Yields (t/ha)- Small Plot Trial



# What impact will this work have?

## 1: Focus Study



- Detailed system performance information.
- Simultaneous information from on-farm and small plot research.
- Better information for system change decisions.

## 2: Small Plot Trial



## 3: Perception Study



- Source of growers information.
- How they accessed that information.
- Perceptions about these systems.
- Knowledge Gaps.
- Resource Allocation.



# Thanks for Listening

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