

MOSQUIRON® CRD

- New Slow Release Mosquito Larvicide
Containing Novaluron
- Storm drain / catchment basins in City of St.
Augustine, FL



Why storm drains?

- West Nile Virus vectors like *Culex quinquefasciatus* present
- Collect H₂O, debris, pollution and vegetation
- Time consuming, costly to treat



Mosquiron ® Product Details

- Common Name: Novaluron
- CDR (Control Release Device)
- Chemical Name: N-[[[3-chloro-4-[1, 1, 2-(trifluoro-2trifluoromethoxy)ethoxy]phenyl]amino]carbonyl]-2,6-difluorobenzamide
- Action: Chitin Synthesis Inhibitor
- Current recipe contains 1.2g/kg novaluron
- Low solubility in H₂O

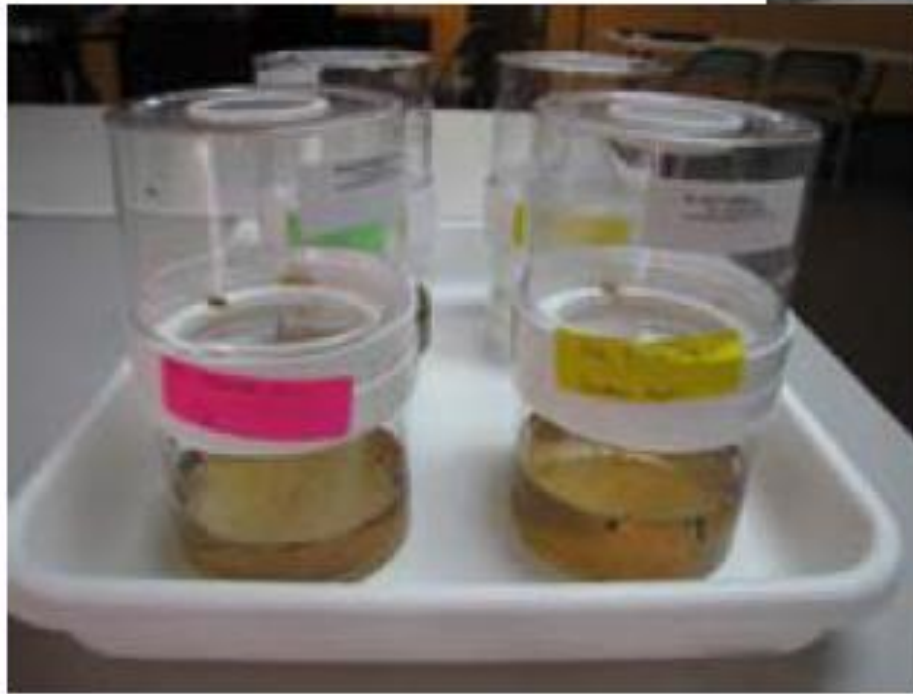


- Utilize a novel carrier technology which has been patented in numerous countries
- First registered in Canada to control fruit crop pests
- Has a residual activity depending on the formulation size and water characteristics
- The solubility of novaluron in water from 3 ppb to 10-15 ppb
- The novaluron disperse throughout the water column
- Intended for a variety of standing water bodies
- Acts on all stages of mosquito
- Approved for use in drinking water by WHO

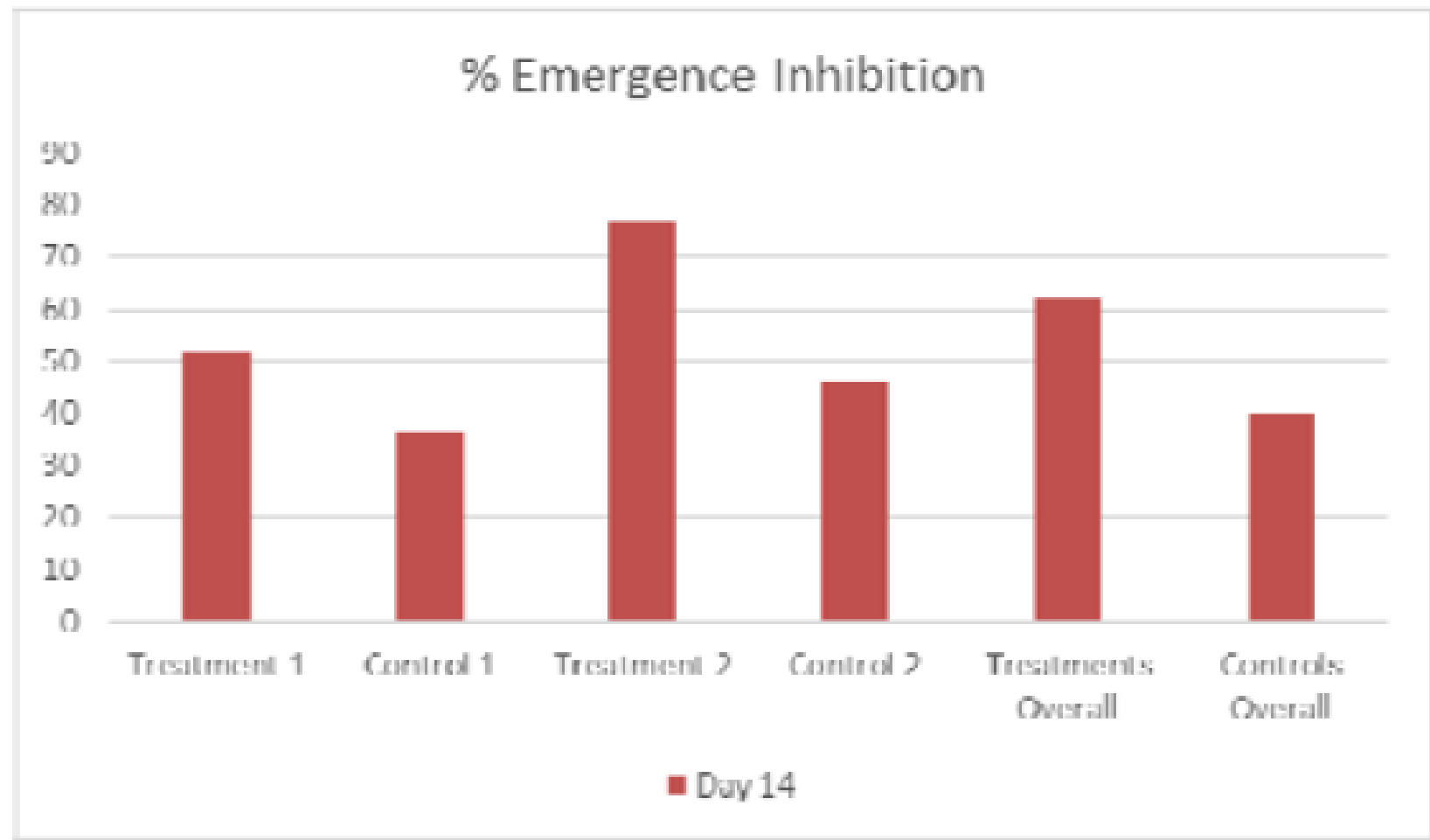
Field Methods



Lab Bioassay

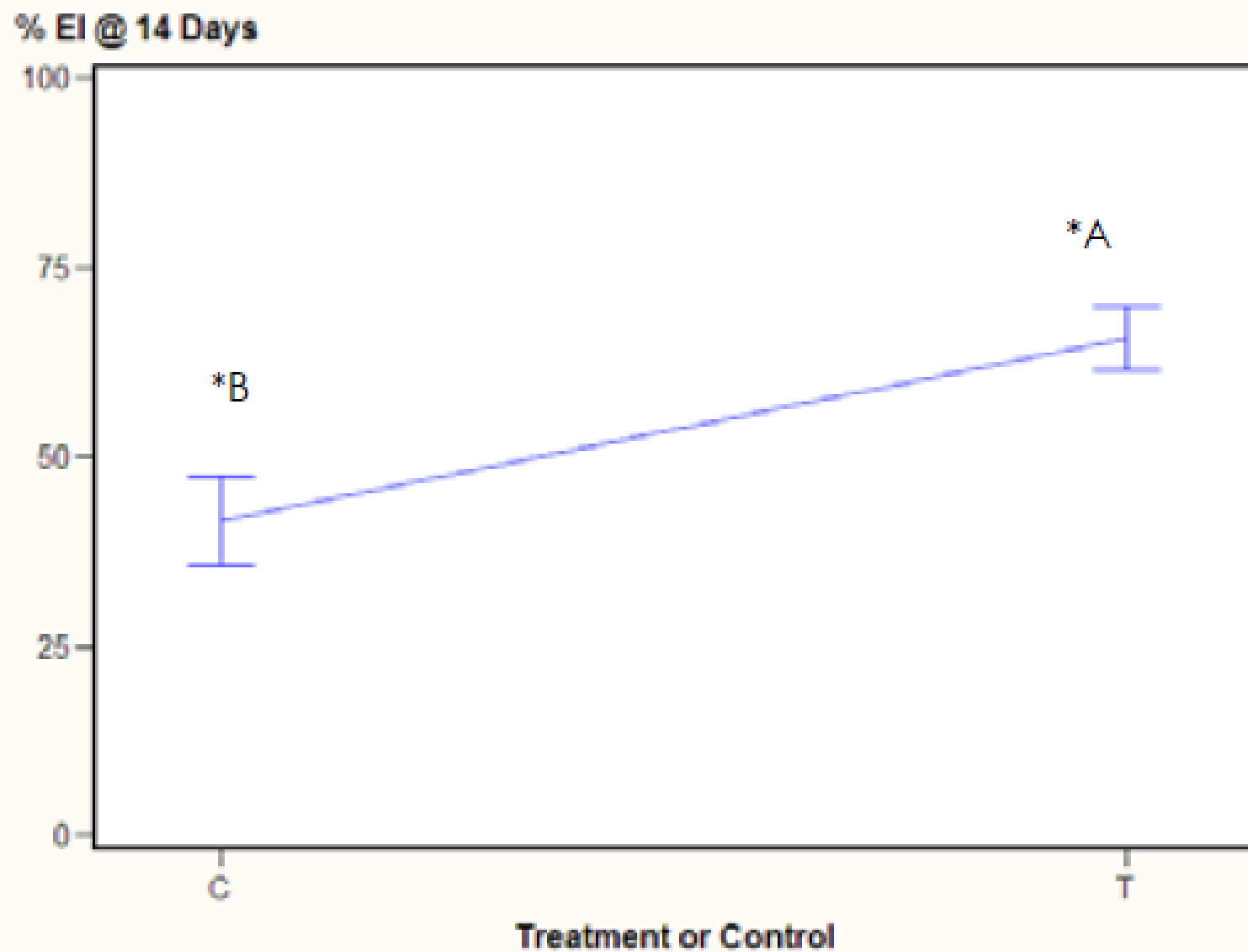


Results for Mean

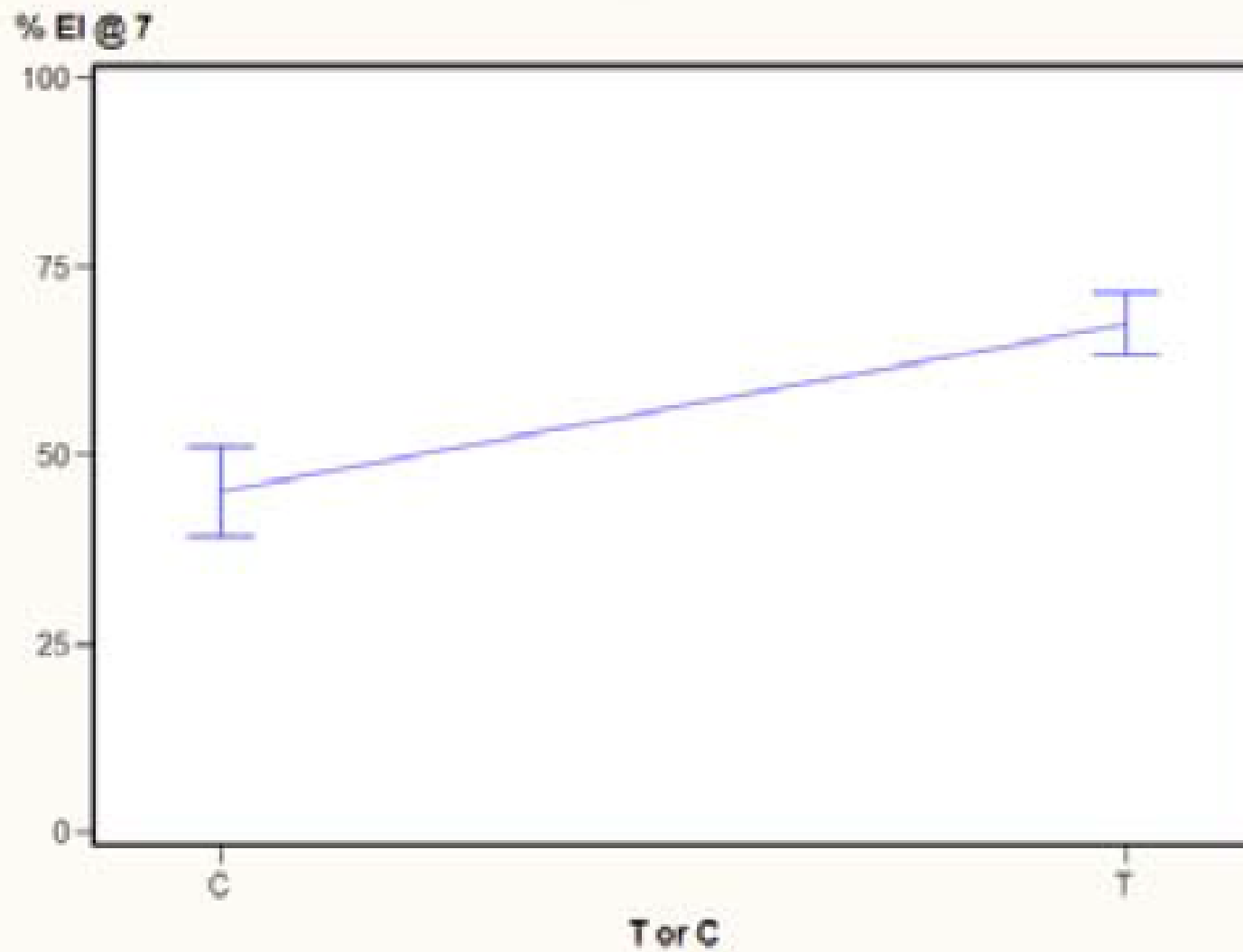


*No correction for controls added yet

Means Plot of '% EI @ 14 Days' by 'Treatment or Control'

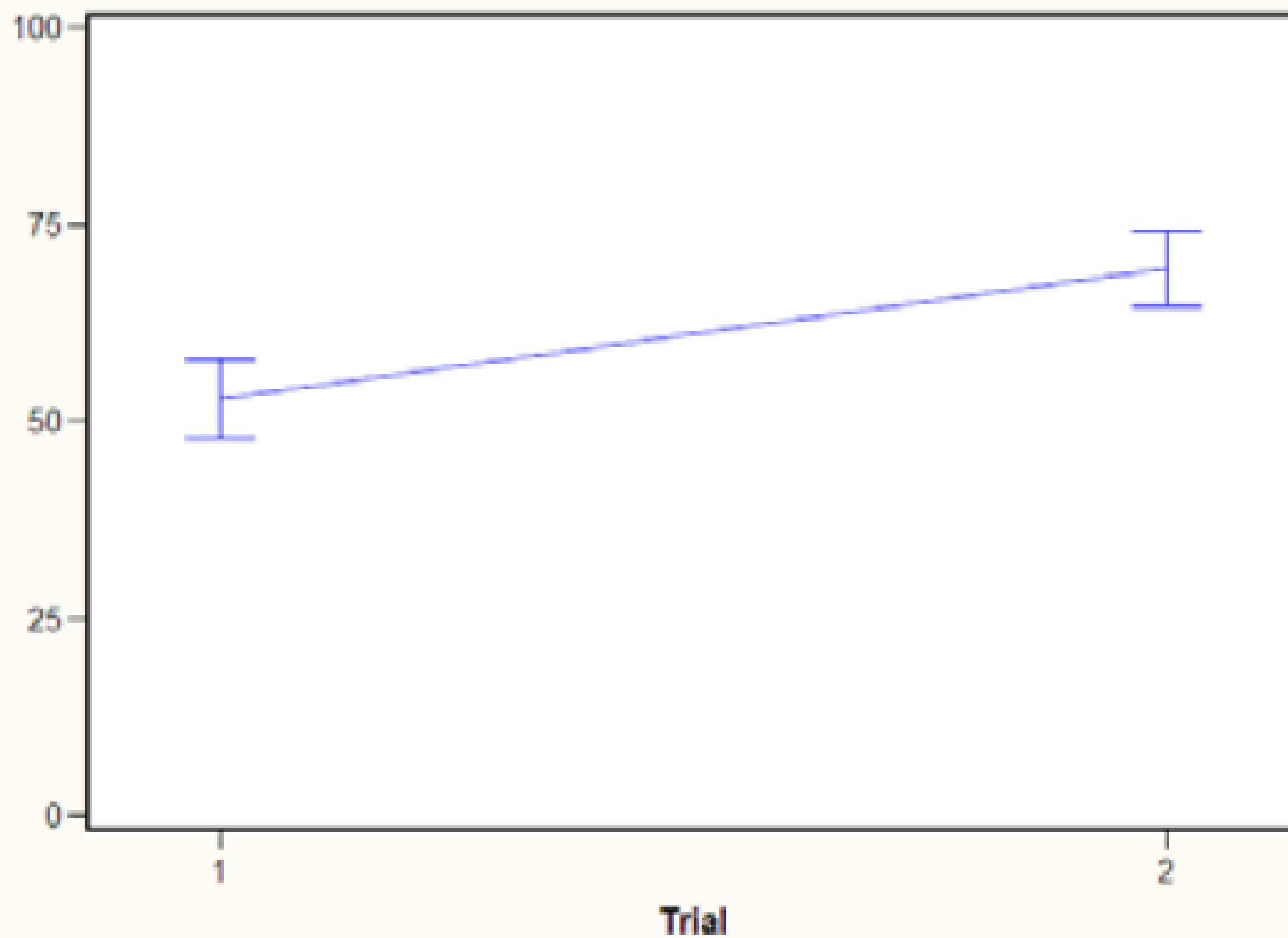


Means Plot of __ei__7 by t_or_c



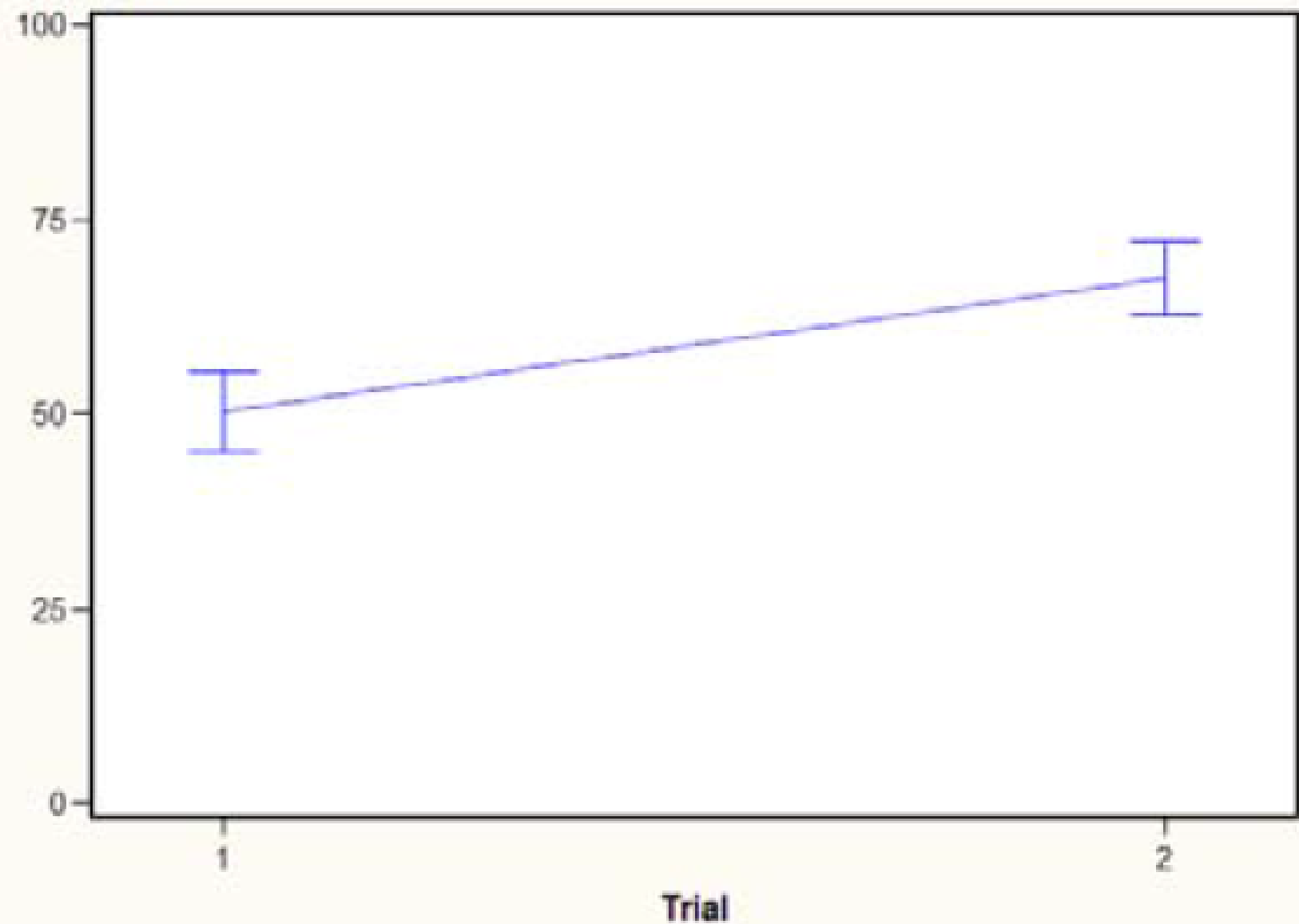
Means Plot of __ei__7 by trial

% EI @ 7



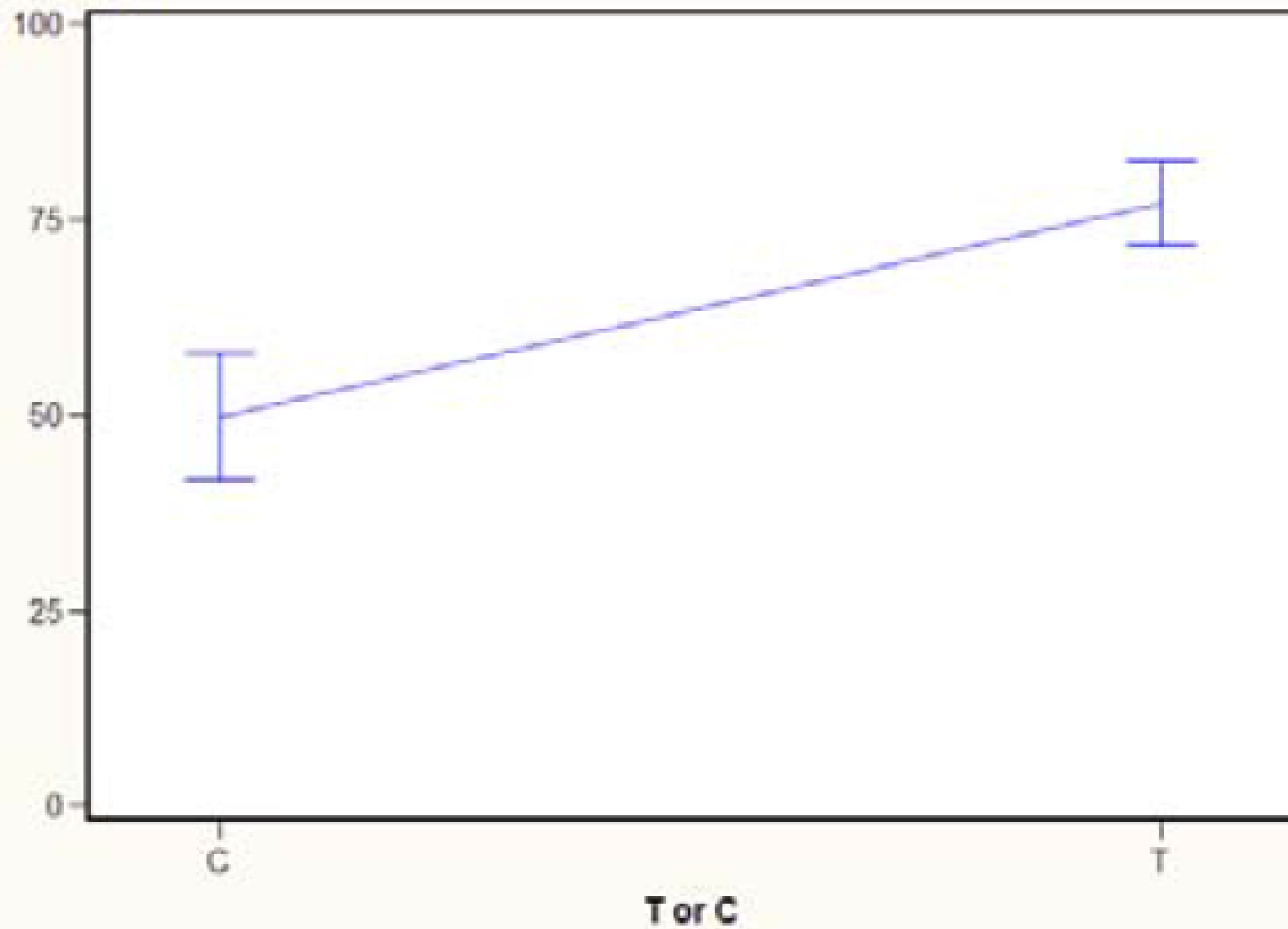
Means Plot of ei 14 by trial

% EI @ 14



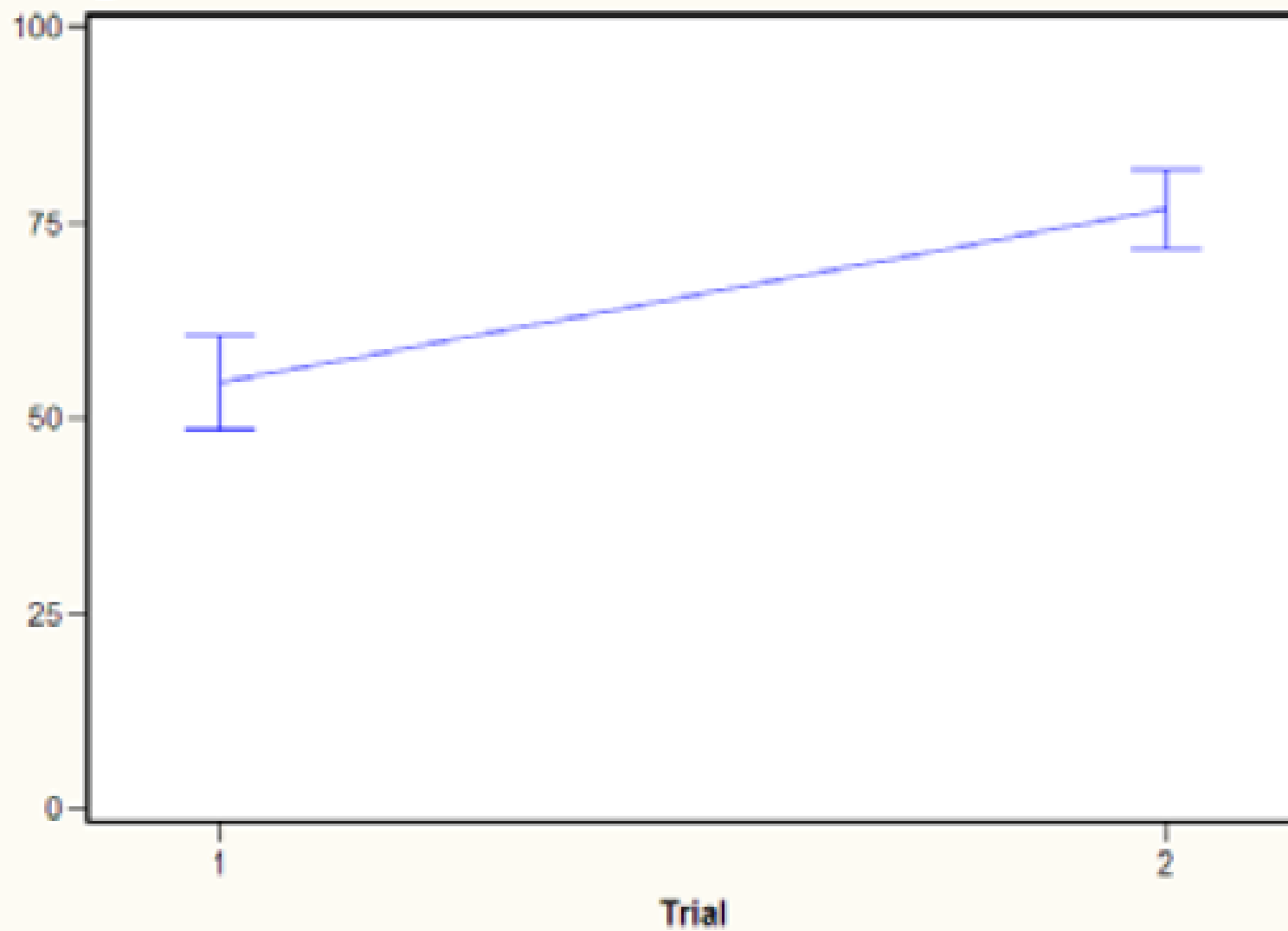
Trial=2

% EI @ 7



Means Plot of __ei__14 by trial
T or C=T

% EI @ 14



More analysis in August:

- Qualitative data such as vegetation level and water level with study reps as well as bw control and treatments
- Compare drains cleaned and street swept to those not yet this year
- Transform data for a normal distribution

Challenges



Debris
Pollution
Rain Events



Opportunities



SECTION 2B



City of St. Augustine
Public Works Department
Storm Drain Inspection Form

Form PW-001 (Rev. 01/2018)

Inspector Information

Inspector ID:	012345	Name:		
Mobile ID:		Phone:		
Inspection District:		Station(s):		
Weather:		Temperature (°F):		

Inspected Manhole(s) or Catch Basin(s) Location

Inspection ID (to page 2 of 2)	No.	Yes				
Flow	None	Trickle	Steady	High		
Color of Flow (if present)	None	Yellow	Brown	Black	Grey	Other
Odor	None	Strong	Lightly	Oil	Gas	Other
Surfing	None	Flow	Steady			
Flowable	None	Very Heavy Sludge	Sludge	Gravel	Other	
Debris	None	Medium	Oil	Stones	Other	
Vegetation	None	None	Shrubbery	Grass		
Access to Manhole	None	Partial	Partial	Partial	Blocked	
Manhole Cover Condition	Yes	No	Reason (if any):			
Manhole Cover Location	Yes	No	Reason (if any):			
Manhole Condition	Excellent	Good	Fair	Poor		
Manhole Storage	None	Nothing	Nothing	Debris	Other	

Other Inspection Notes (please include street name):

Inspected Manhole(s) or Catch Basin(s) Results

Manhole	Manhole	Catch Basin
Block Description:		

Inspection Summary

Total	Total	Total
-------	-------	-------

Inspection Comments

Inspector Signature

Inspector Title

Inspector Date

Thank You!

