

# Pumpkin Herbicide Options

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# Pumpkin Weed

## Control Strategies

- Preplant or Preemergence Herbicides
  - Annual Grasses
  - Small Seeded Broadleaf Weeds
- Postemergence
  - Large Seeded Broadleaf Weeds
  - Escapes
- Cultivation
  - Escapes
- NT
  - Residue / Mulch – Weed Suppression

# Pumpkin Weed Control

- Preplant Burndown
  - Aim 2EC @ up to 2 fl oz/A
  - Glyphosate
  - Paraquat
- PRE
  - Curbit 3EC @ 3 to 4.5 pints/A, PRE
  - Dual Magnum 7.64EC @ 1 to 1.33 pints/A (not over row)
  - Prefar 4EC @ 5 to 6 quarts/A, PPI
  - Sandea 75DG @ 0.5 to 0.67 oz/A, PRE
  - Strategy 2.1L @ 2 to 6 pints/A, PRE

# Pumpkin Weed Control

- POST
  - Sandea 75DG @ 0.5 to 0.67 oz/A (?)
  - Poast 1.5EC @ 1 to 1.5 pints/A
  - Select Max 1EC @ 9 to 16 fl oz/A
- POST-Directed
  - Aim 2EC @ up to 2 fl oz/A
  - Glyphosate
  - Sandea 75DG @ 0.5 to 1 oz/A
  - Treflan 4EC @ 1 to 1.5 pints/A

# Issues

- No “strong” stand alone products.
- Must combine all strategies.
- Limited POST options.
- Two and three way combinations are the best.
- What are the best options for the weeds you are trying to control?

# Reflex

- Received Federal Tolerance in Fall of 2013.
  - Will be handled as a 24c Label;
    - But will be an indemnified label
  - Received indemnified label in some states during 2014.
  - Will work with VDACS to hopefully obtain a 24c label for VA. (Pumpkin, Tomato, Pepper, Watermelon)
  - Then you will go to FARM ASSIST to print the label.

# Locations in 2011

- Montgomery County
  - NT
  - Drip Irrigation
  - Variety
    - ‘Magic Wand’
- Allegheny County, NC
  - NT
  - No Irrigation
  - Variety
    - ‘Aladdin’
- Chowan County, NC
  - NT
  - Center Pivot Irrigation
  - Variety
    - ‘Hijinks’
- Washington County
  - CT
  - No Irrigation
  - Variety
    - ‘Spartan’

Lost to Frost

# Herbicide Treatments, 2011

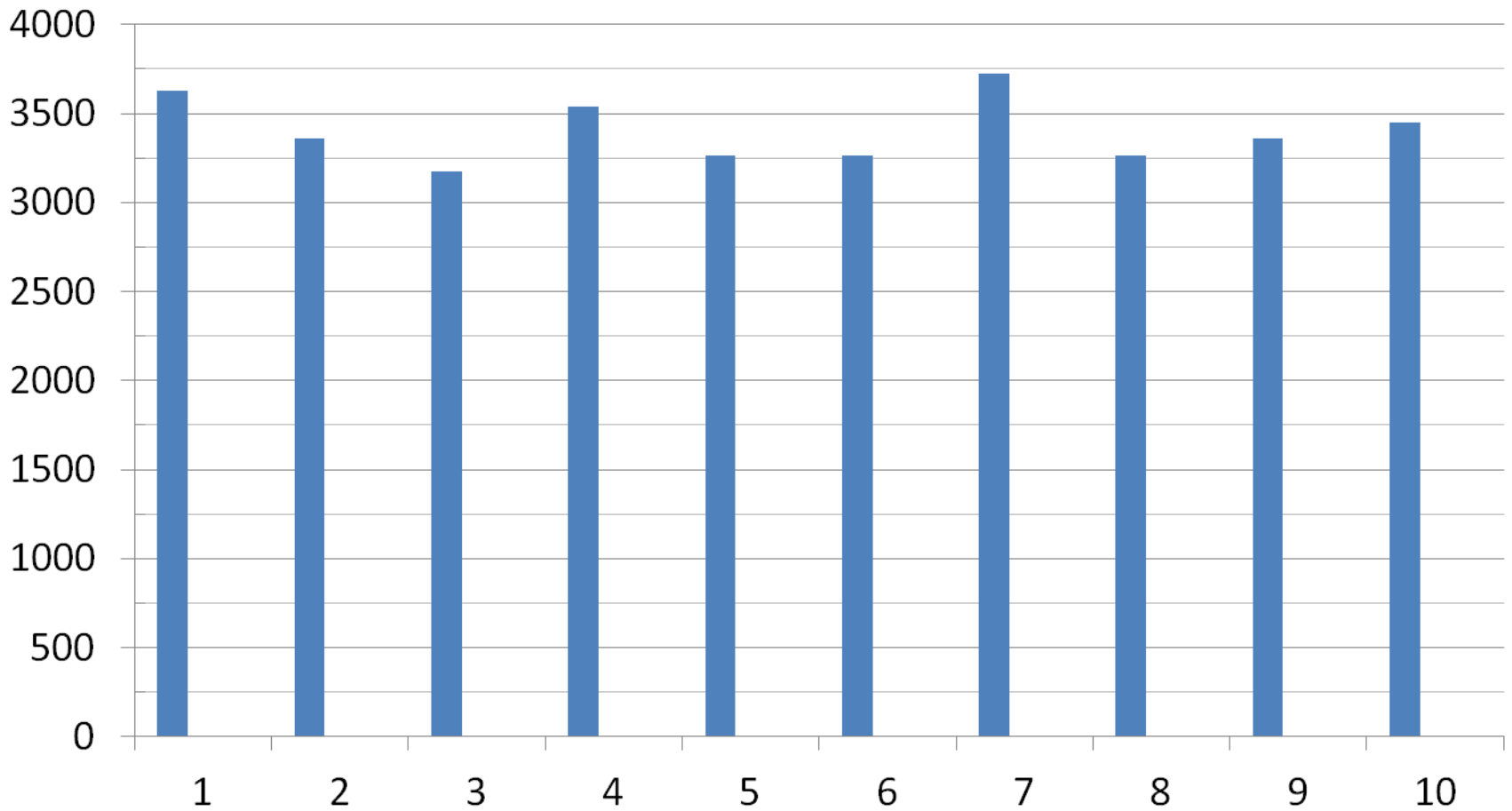
1. UTC
2. Dual Magnum @ 1.5 pints/A
3. Dual Magnum @ 1.5 pints/A plus Reflex @ 1.5 pints/A
4. Dual Magnum @ 1.5 pints/A plus Reflex @ 2 pints/A
5. Dual Magnum @ 1.5 pints/A plus Reflex @ 3 pints/A



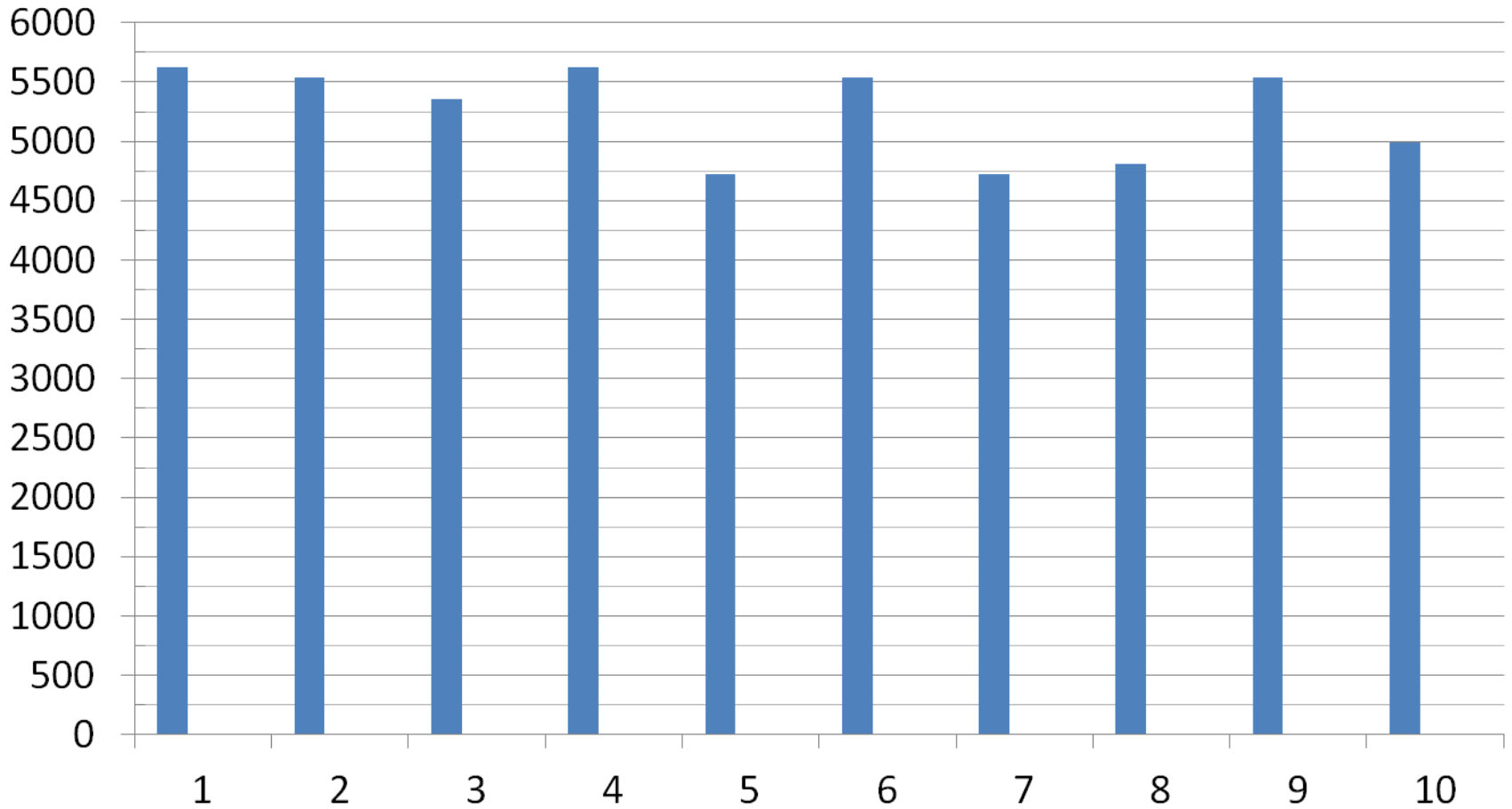
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9. Command 3ME @ 1 pint/A plus Curbit @ 3 pints/A
10. Command 3ME @ 21 fl oz/A plus Curbit @ 4 pints/A

# Plant Stand – no./A Montgomery County

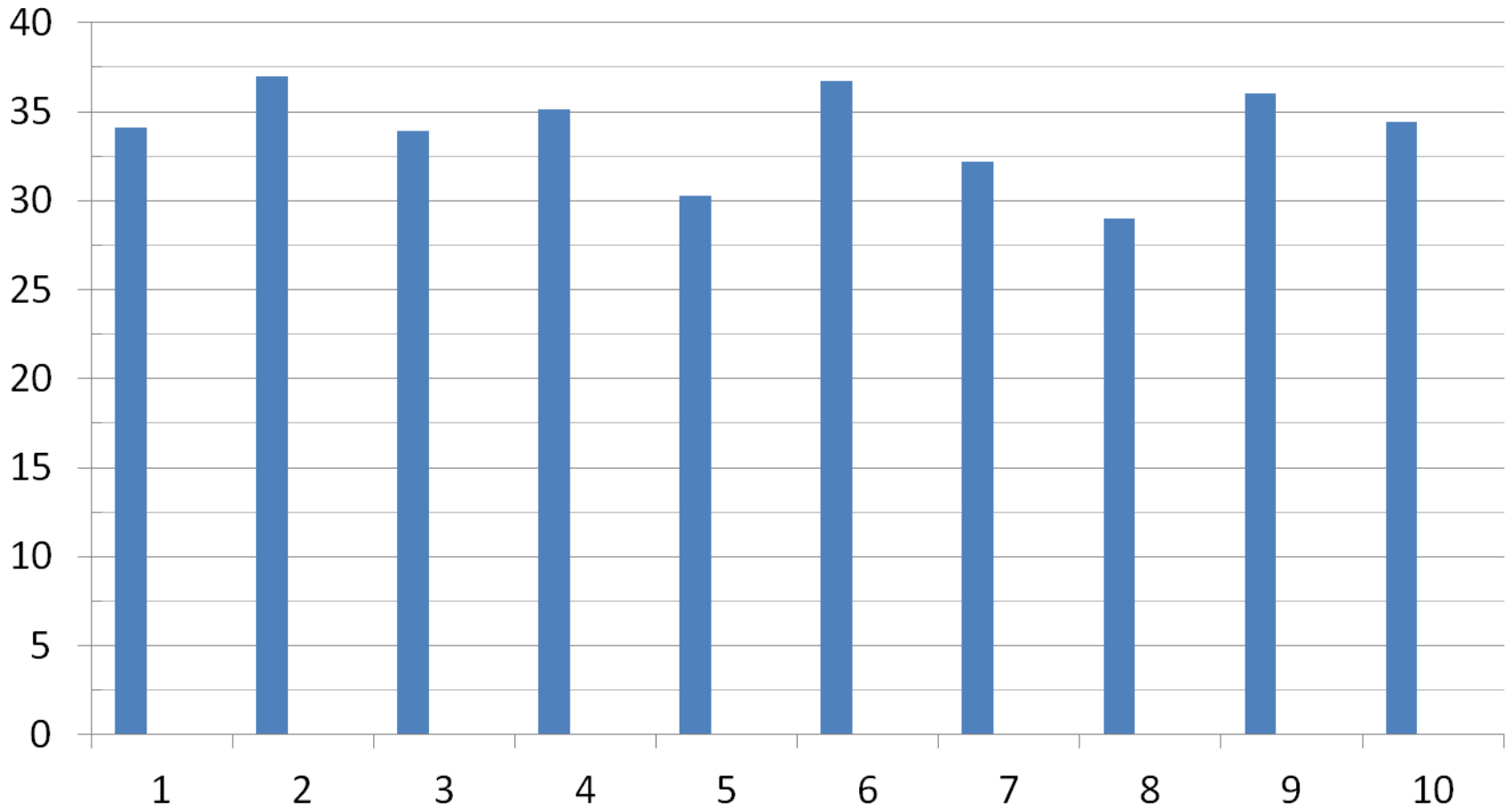


# Yield – no./A Montgomery County



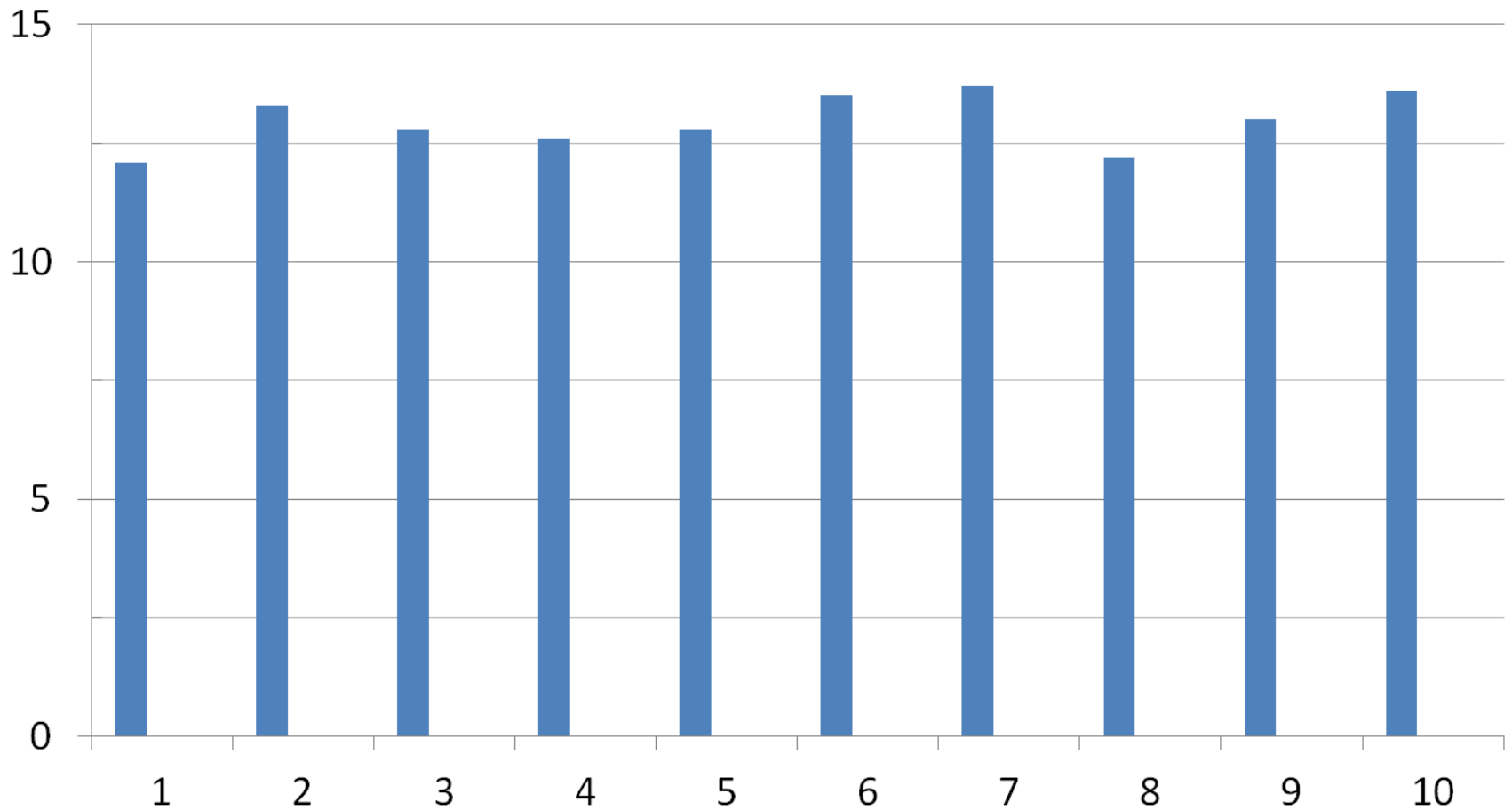
# Yield – tons/A

## Montgomery County

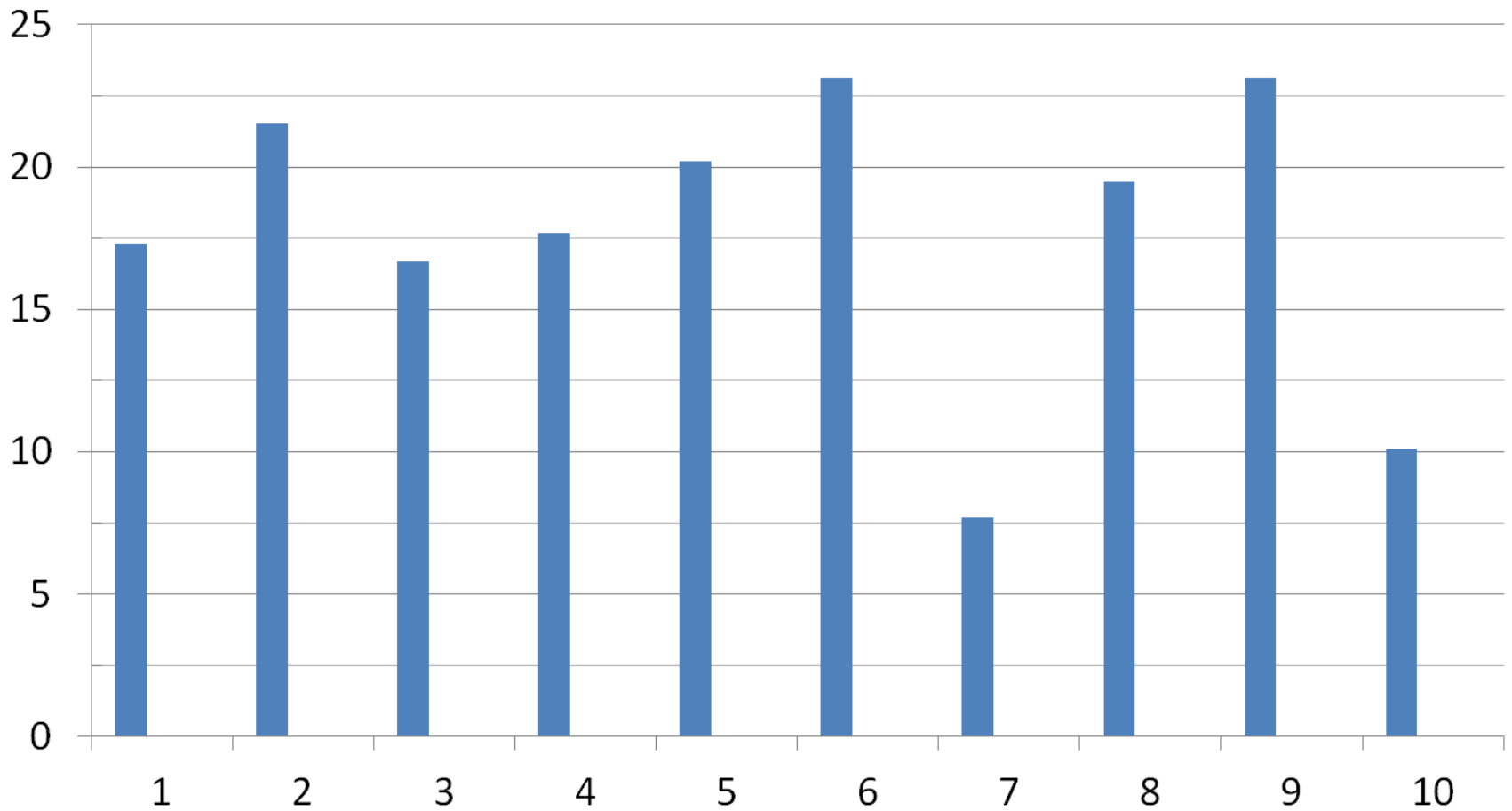


# Average Fruit Weight – lb/fruit

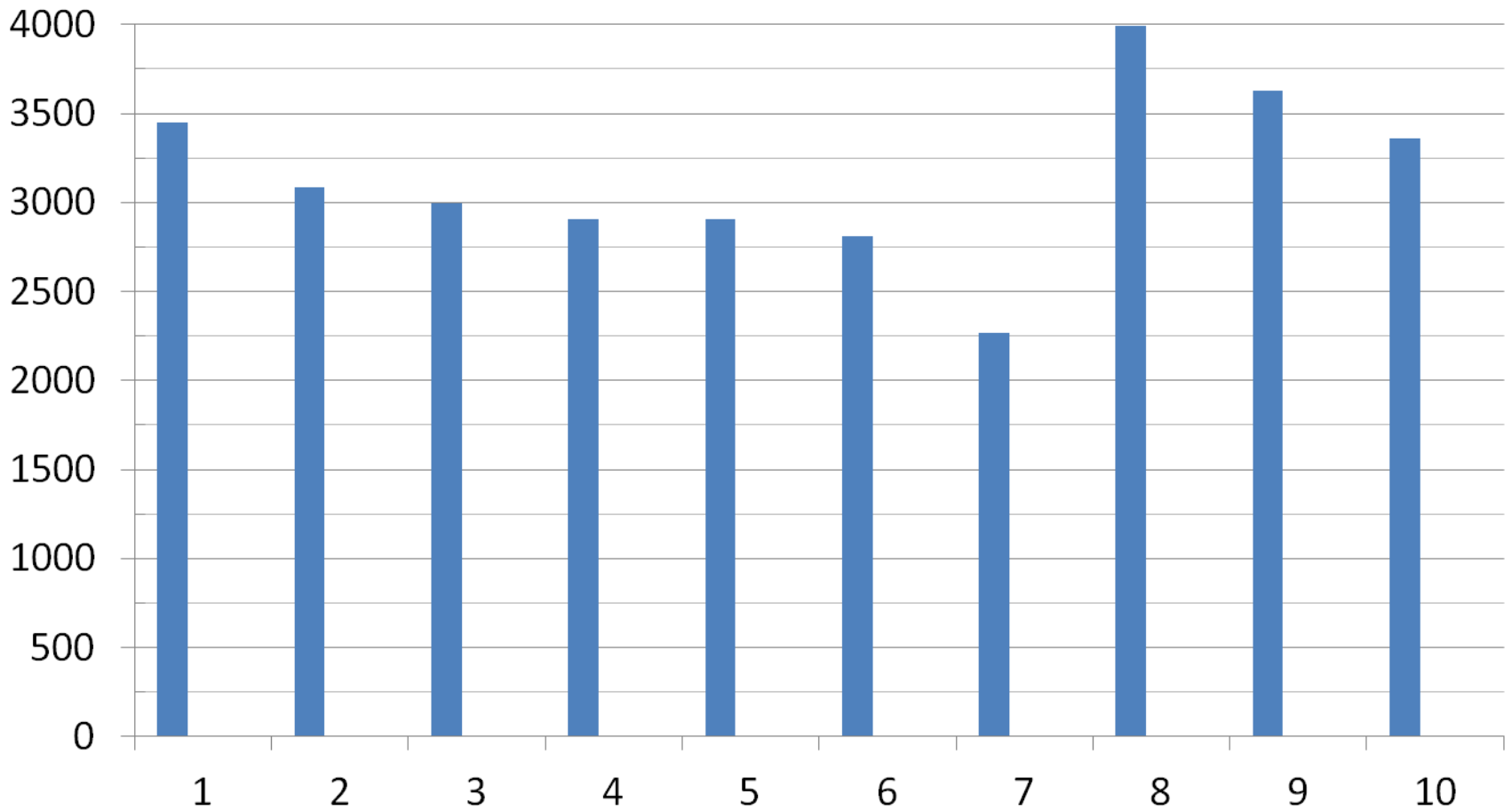
## Montgomery County



# Immature Fruit – % Montgomery County

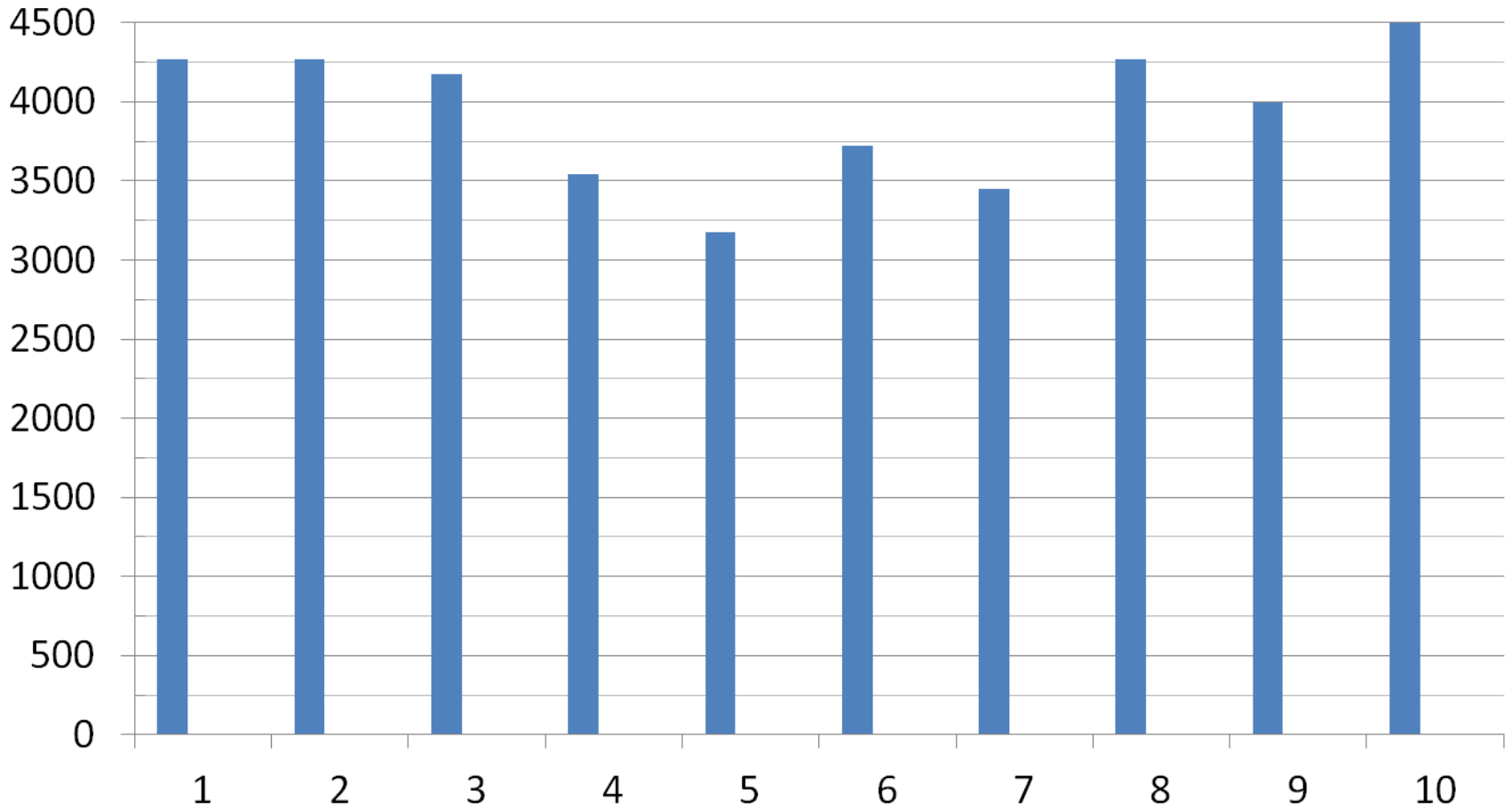


# Plant Stand – no./A Allegheny County, NC



# Yield – no./A

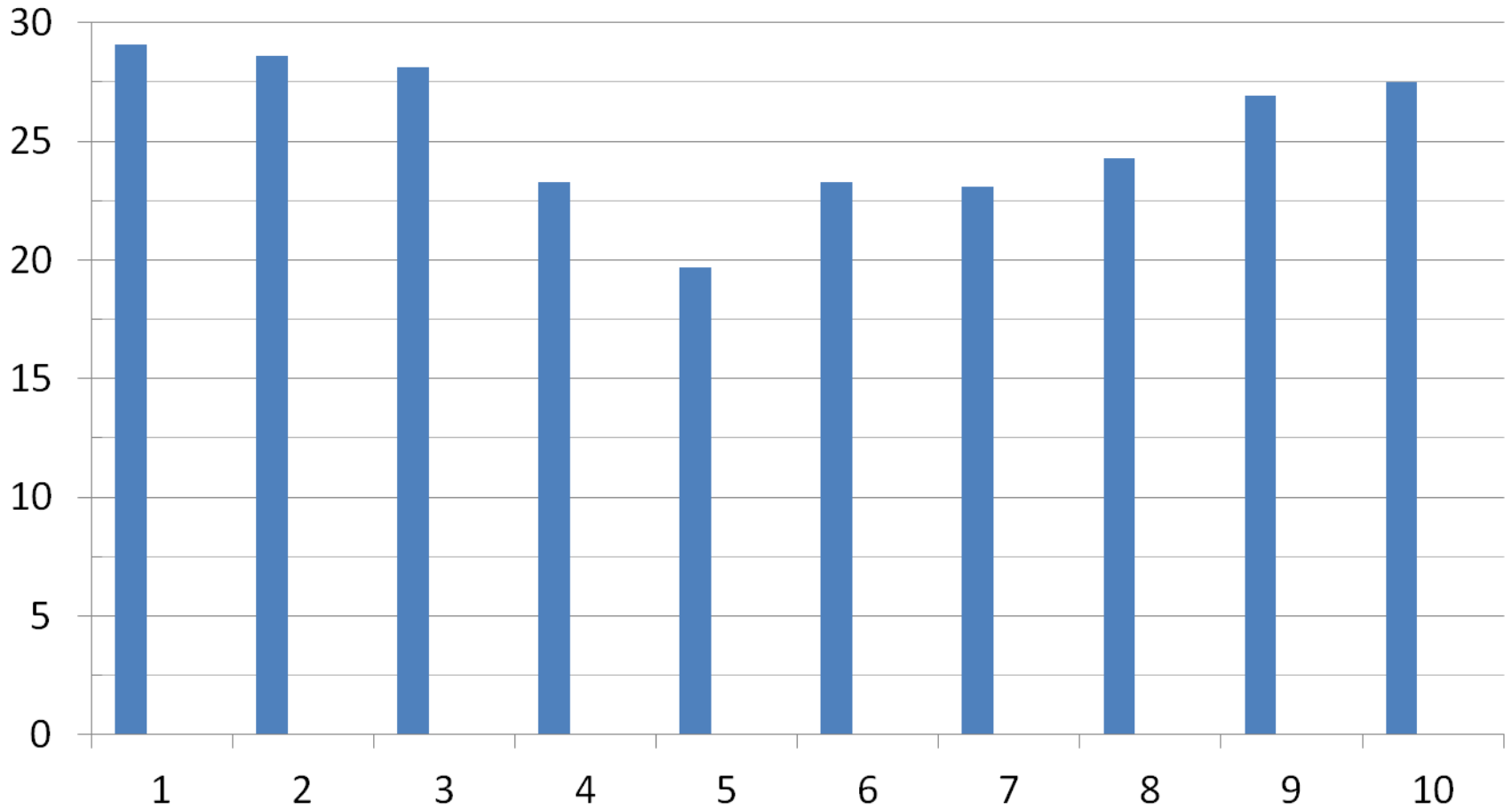
## Allegheny County, NC





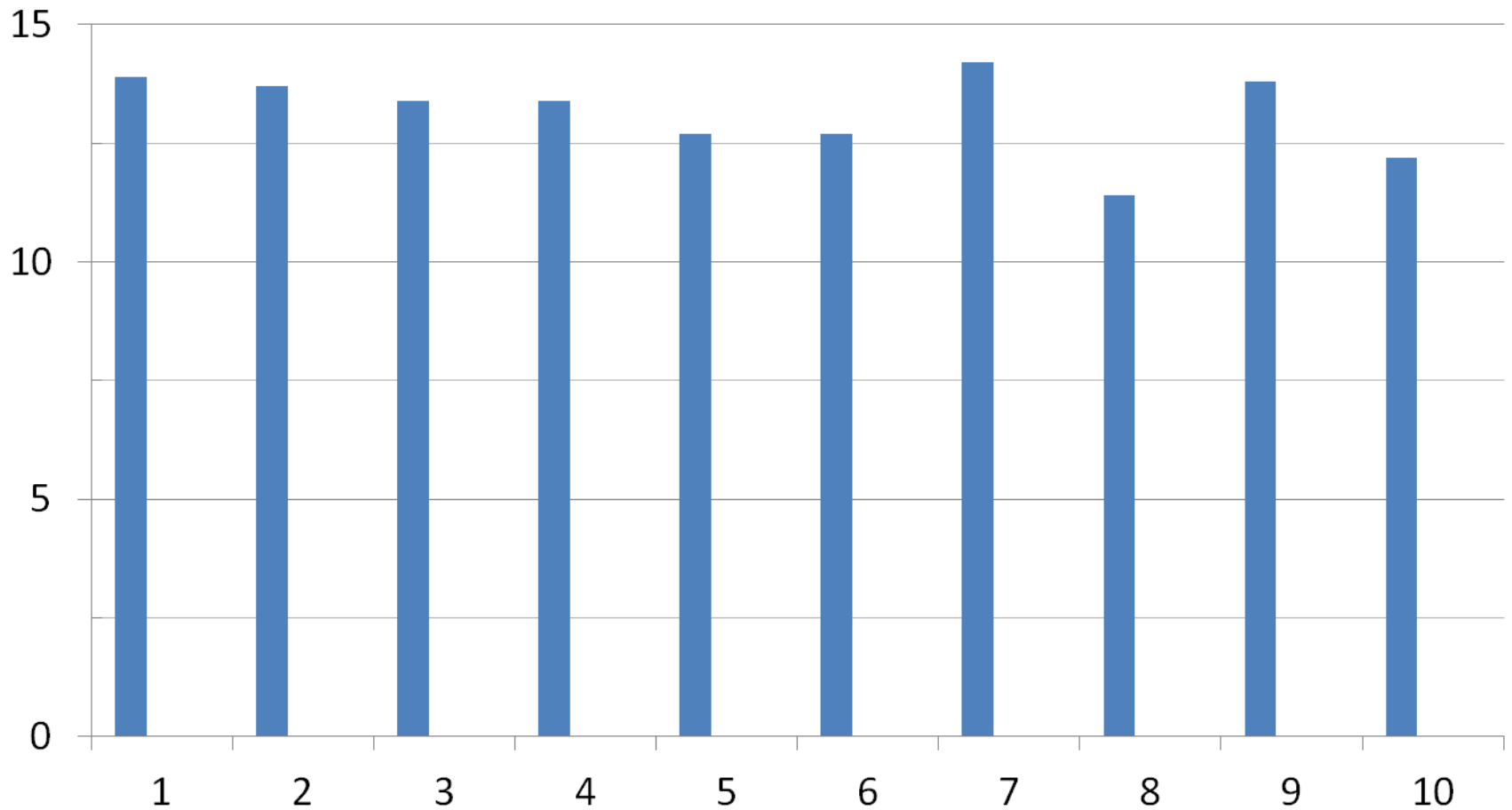
# Yield – tons/A

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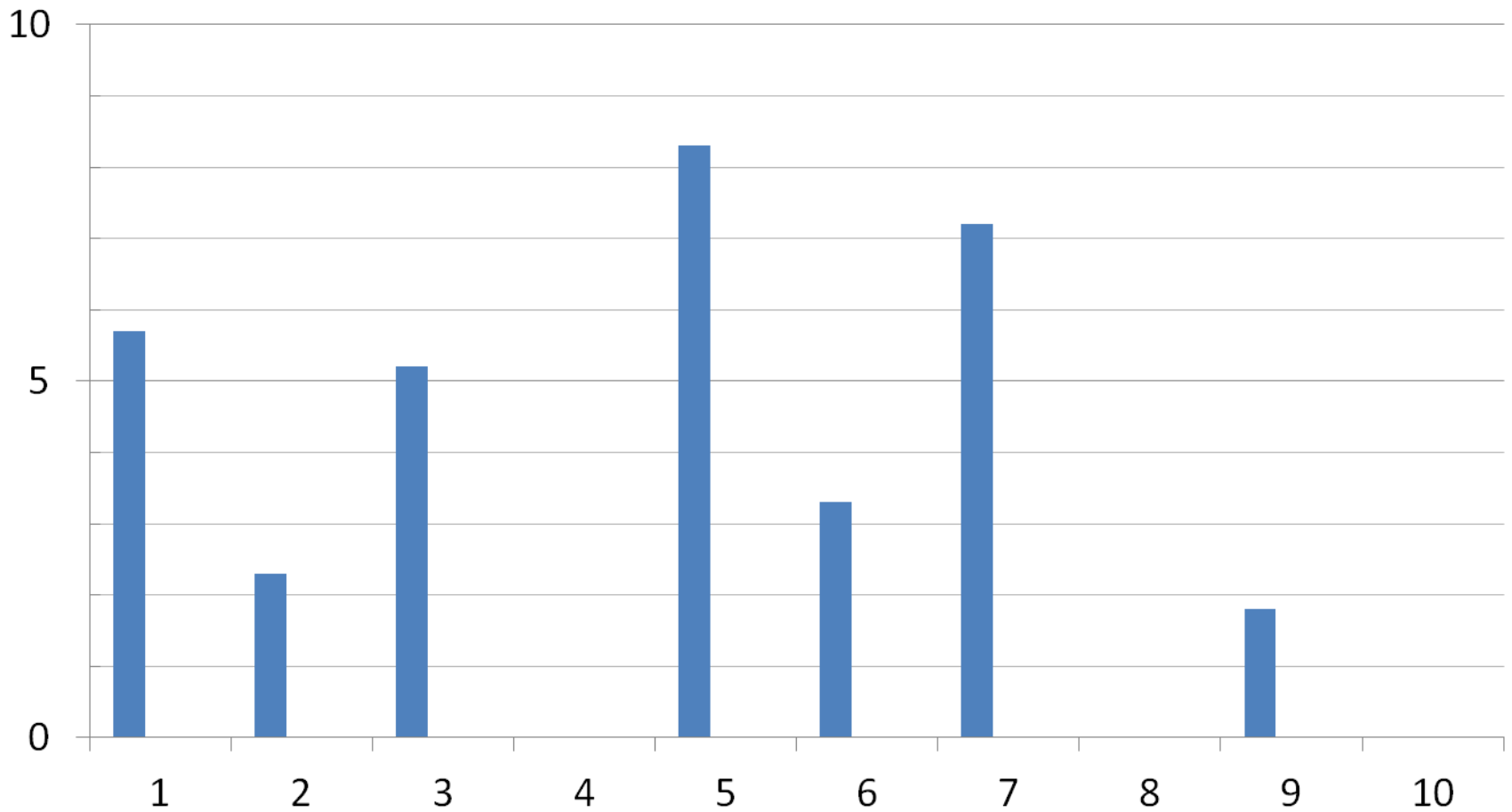


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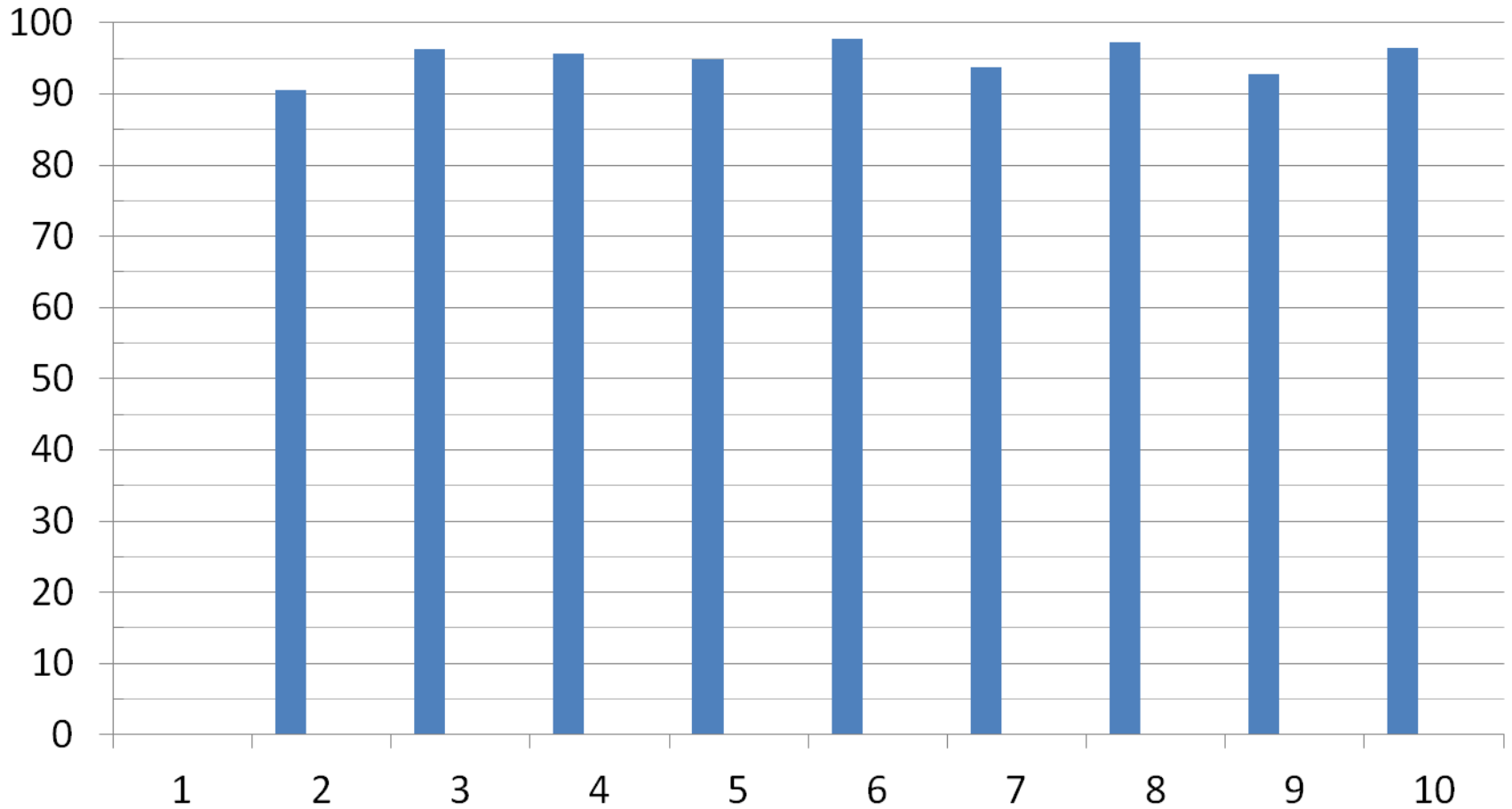
## Allegheny County, NC



# Immature Fruit – % Allegheny County, NC



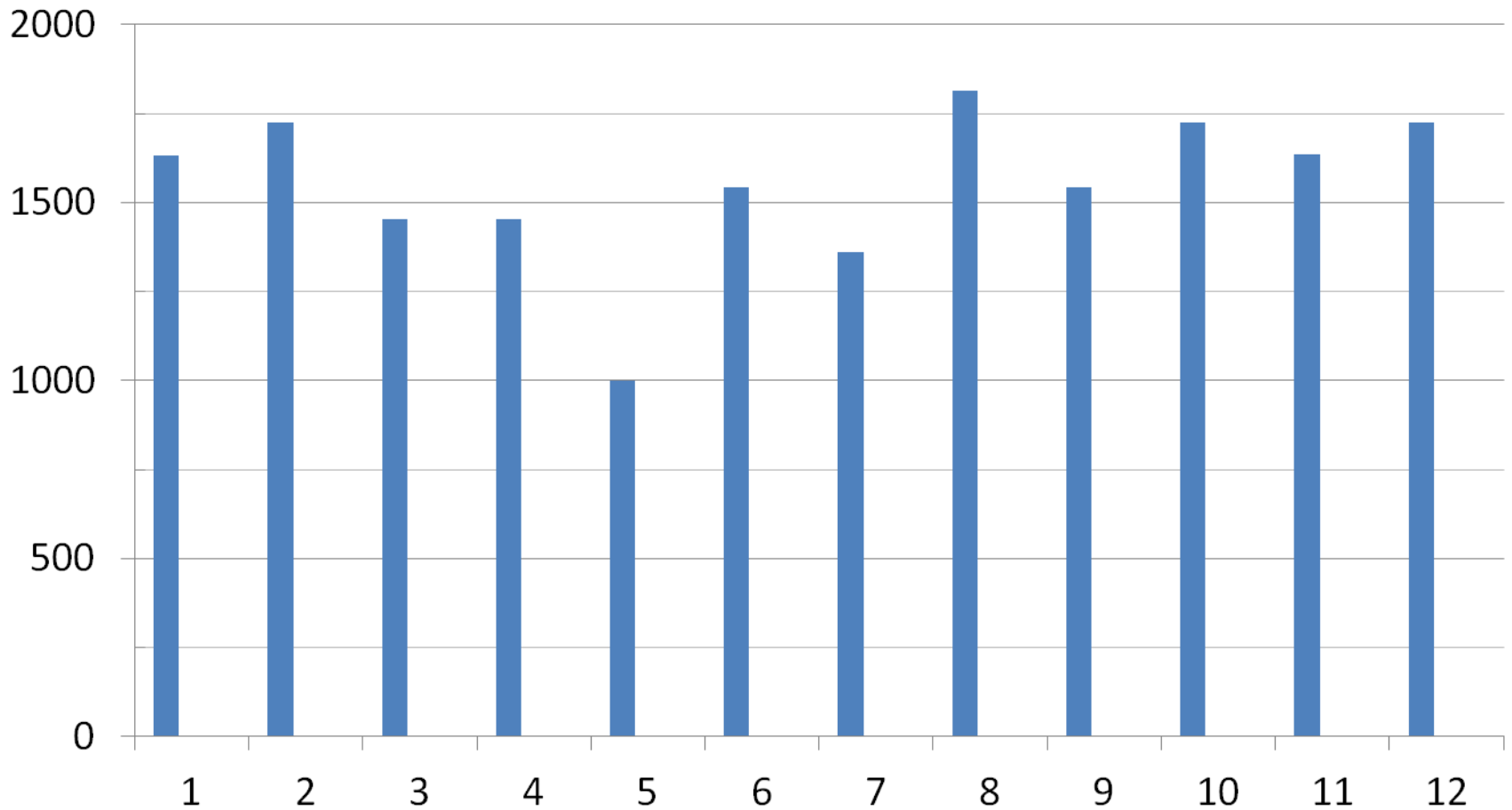
# Overall Weed Control – % Allegheny County, NC



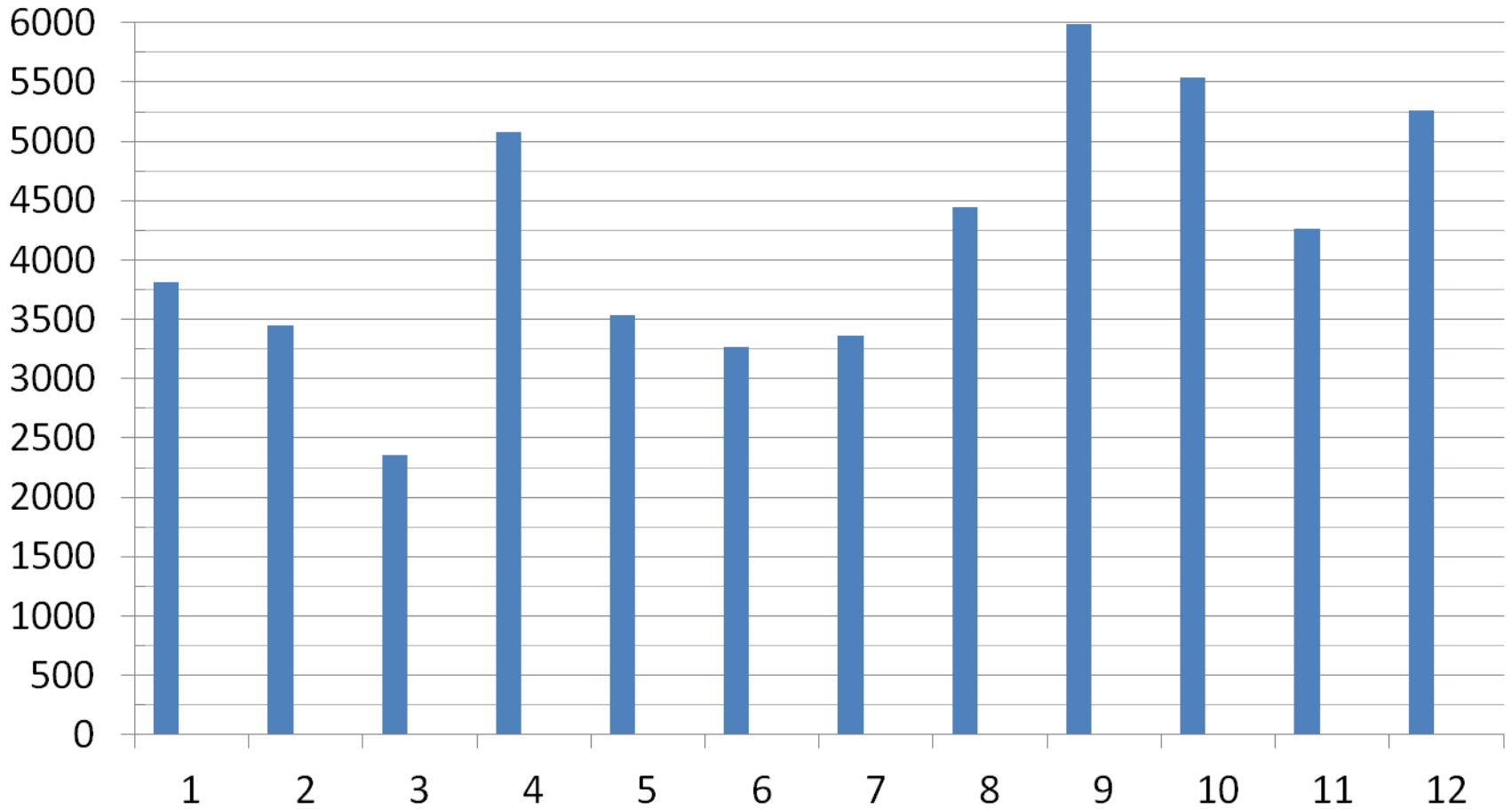
# Additional Treatments in Chowan County

11. Alachlor @ 2 pints/A plus Command 3ME  
@ 1 pint/A
12. Alachlor @ 4 pints/A plus Command 3ME  
@ 21 fl oz/A

# Plant Stand – no./A Chowan County, NC

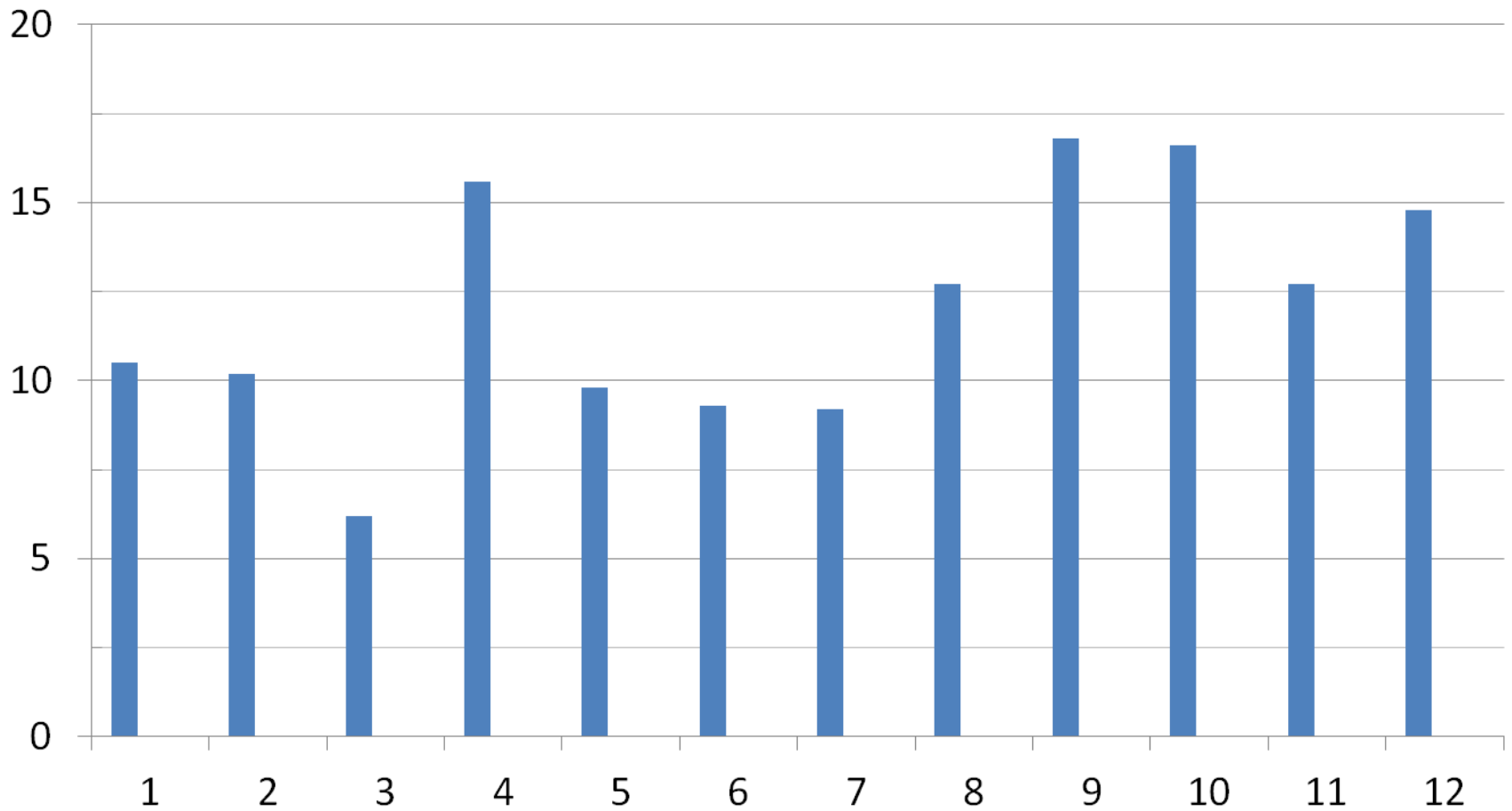


# Yield – no./A Chowan County, NC



# Yield – tons/A

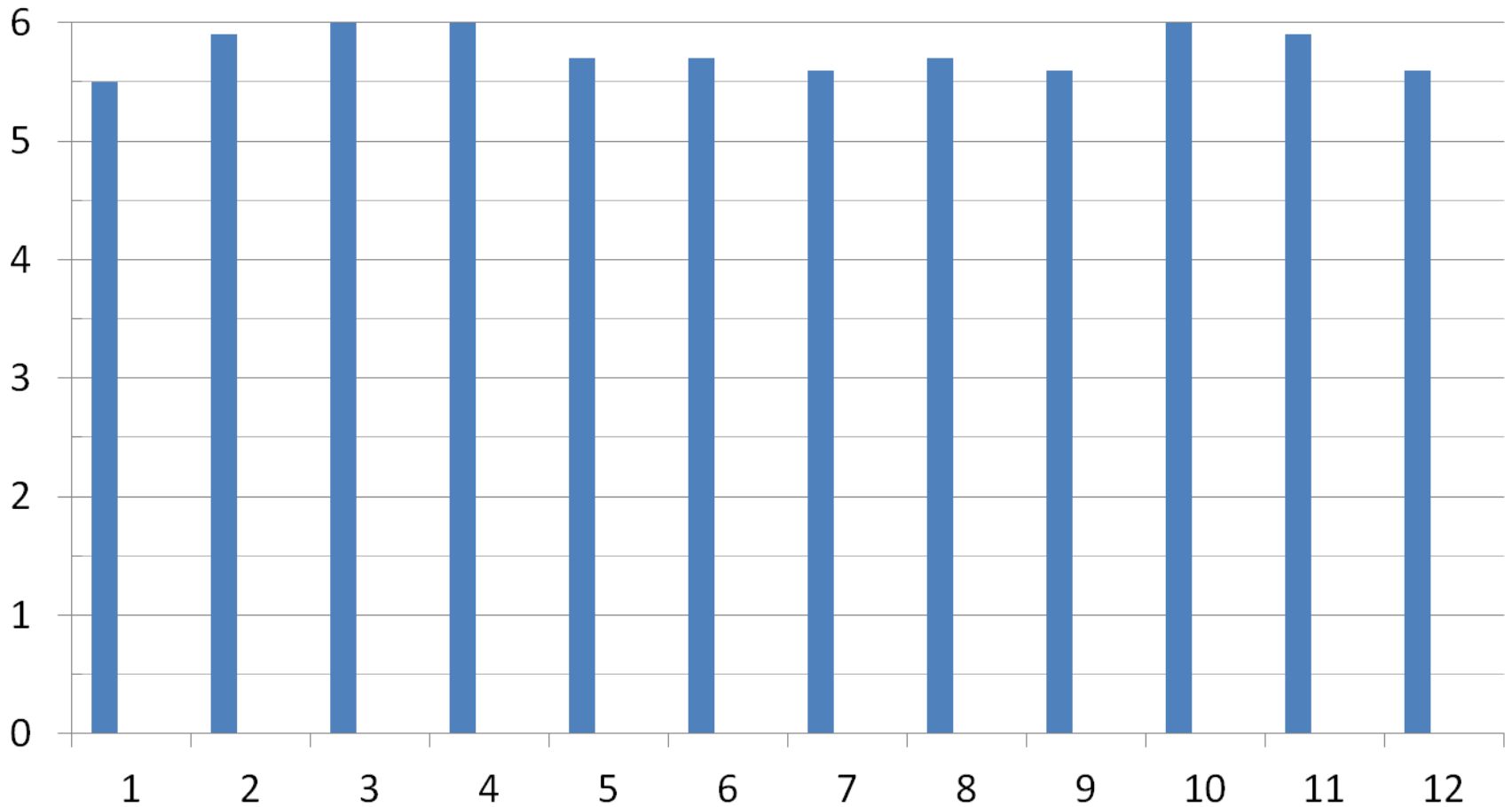
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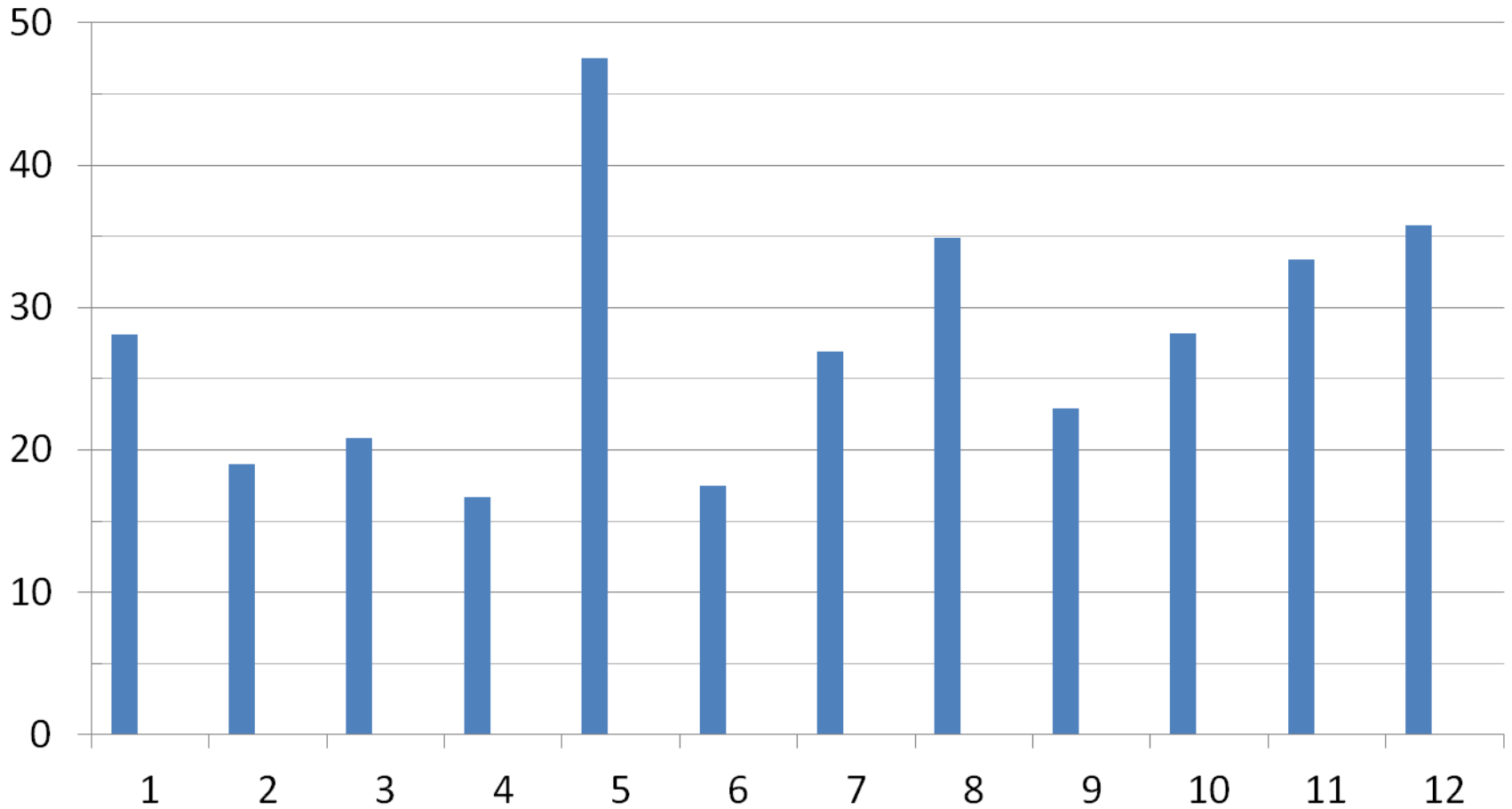


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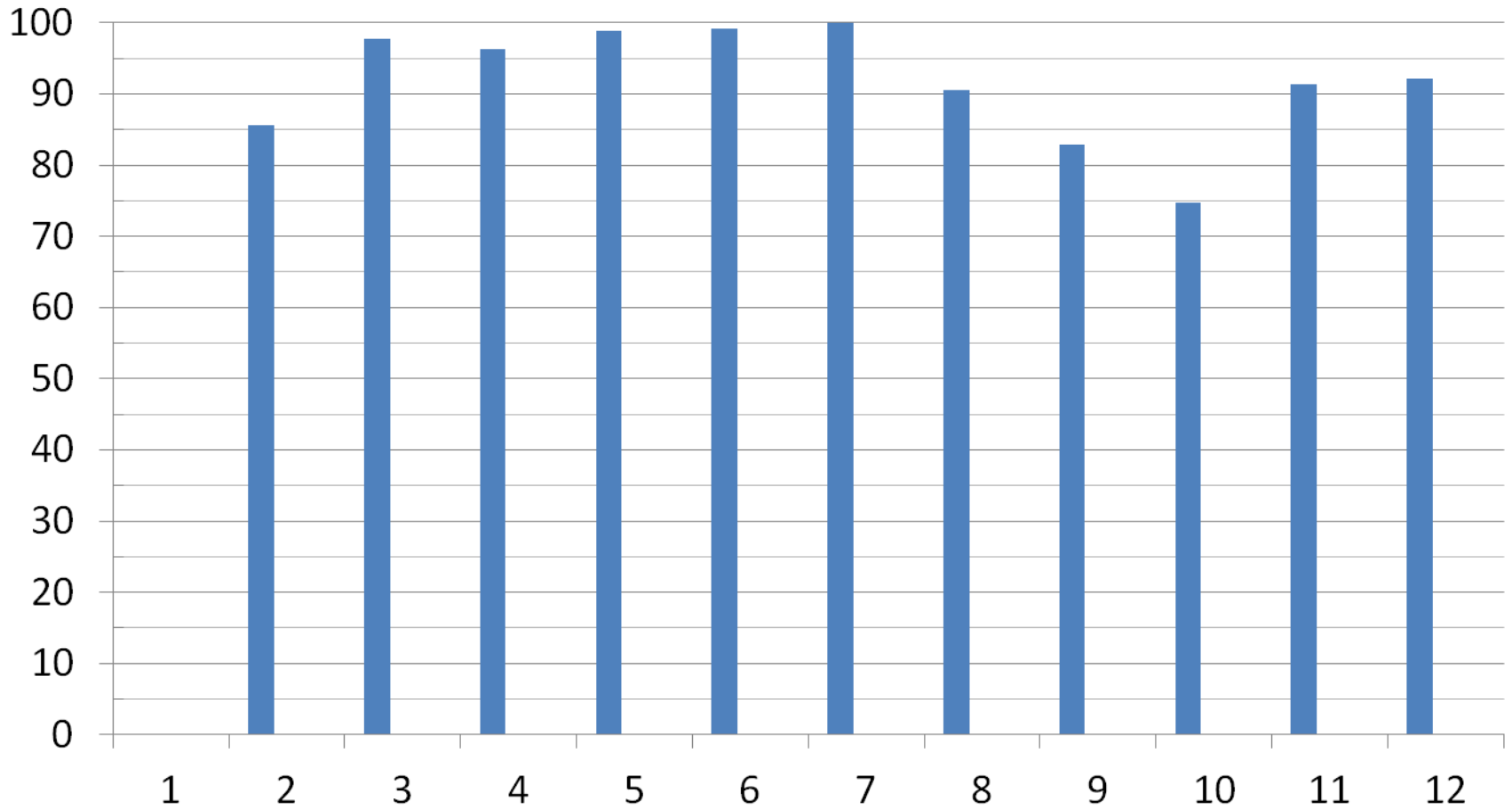
## Chowan County, NC



# Immature Fruit – % Chowan County, NC



# Overall Weed Control – % Chowan County, NC



# Locations in 2013

- Montgomery County
  - NT
  - Variety
    - ‘Apollo’
  - Did not get yield
    - Already windrowed part of the plot area.
  - No stand differences among treatments
  - Essentially 100% weed control from all treatments
  - Some late season ground cherry.
- Chowan County, NC
  - NT
  - Variety
    - Rep 1
      - ‘Apollo’
    - Rep 2
      - ‘Cronus’
    - Rep 3
      - ‘Field Trip’
    - Rep 4
      - ‘Magic Wand’

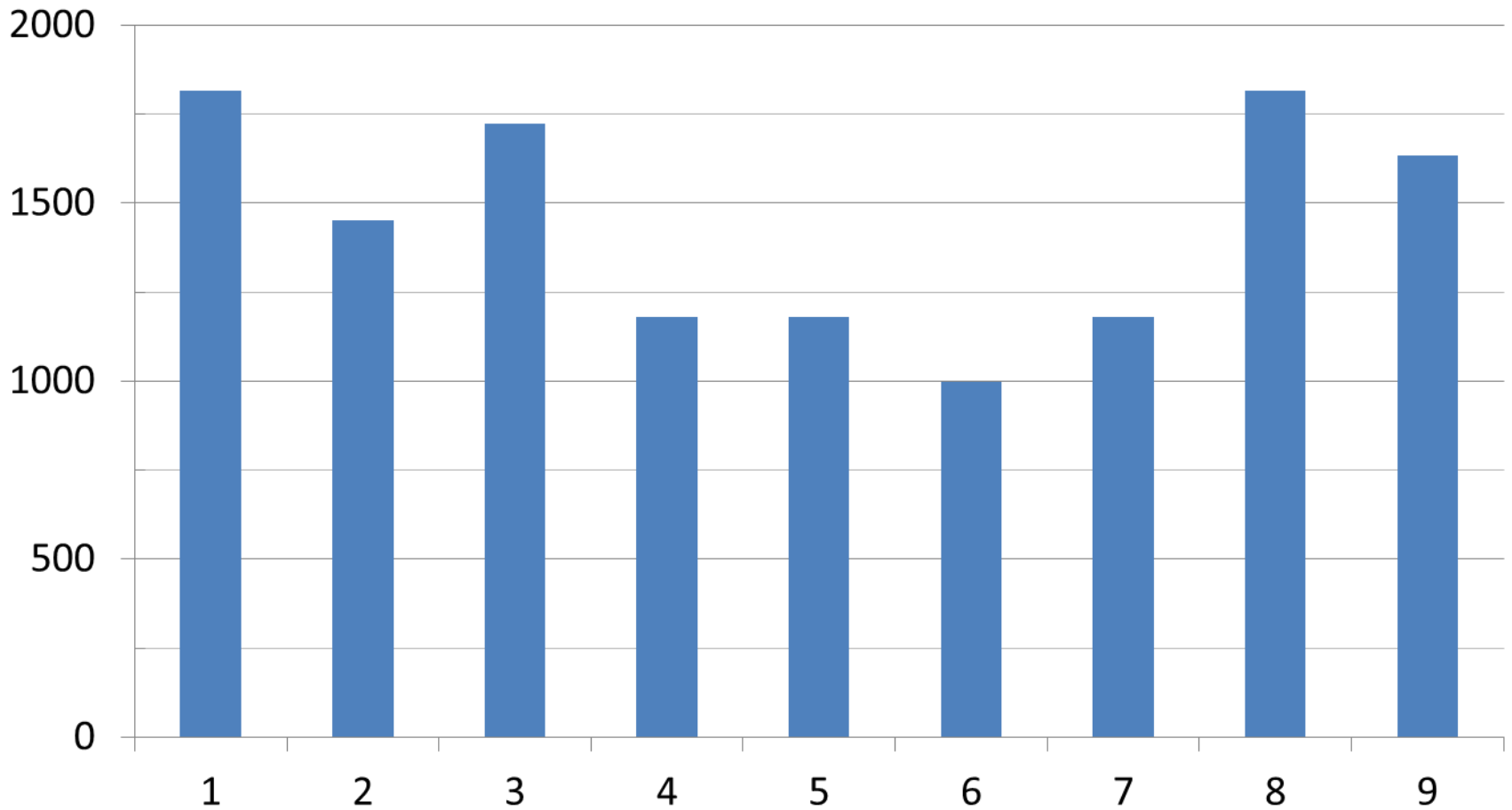
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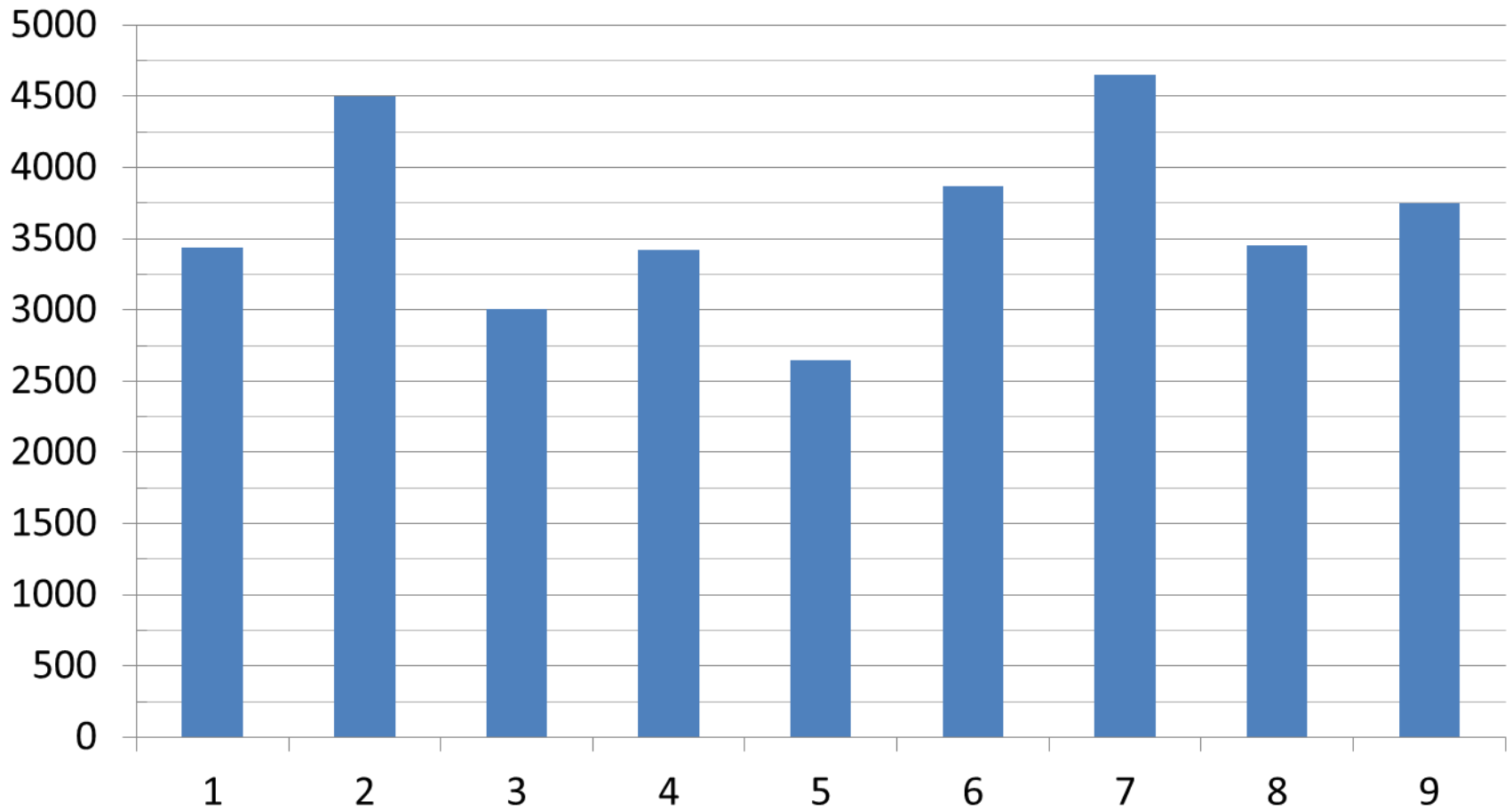
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# Plant Stand – no./A Chowan County, NC



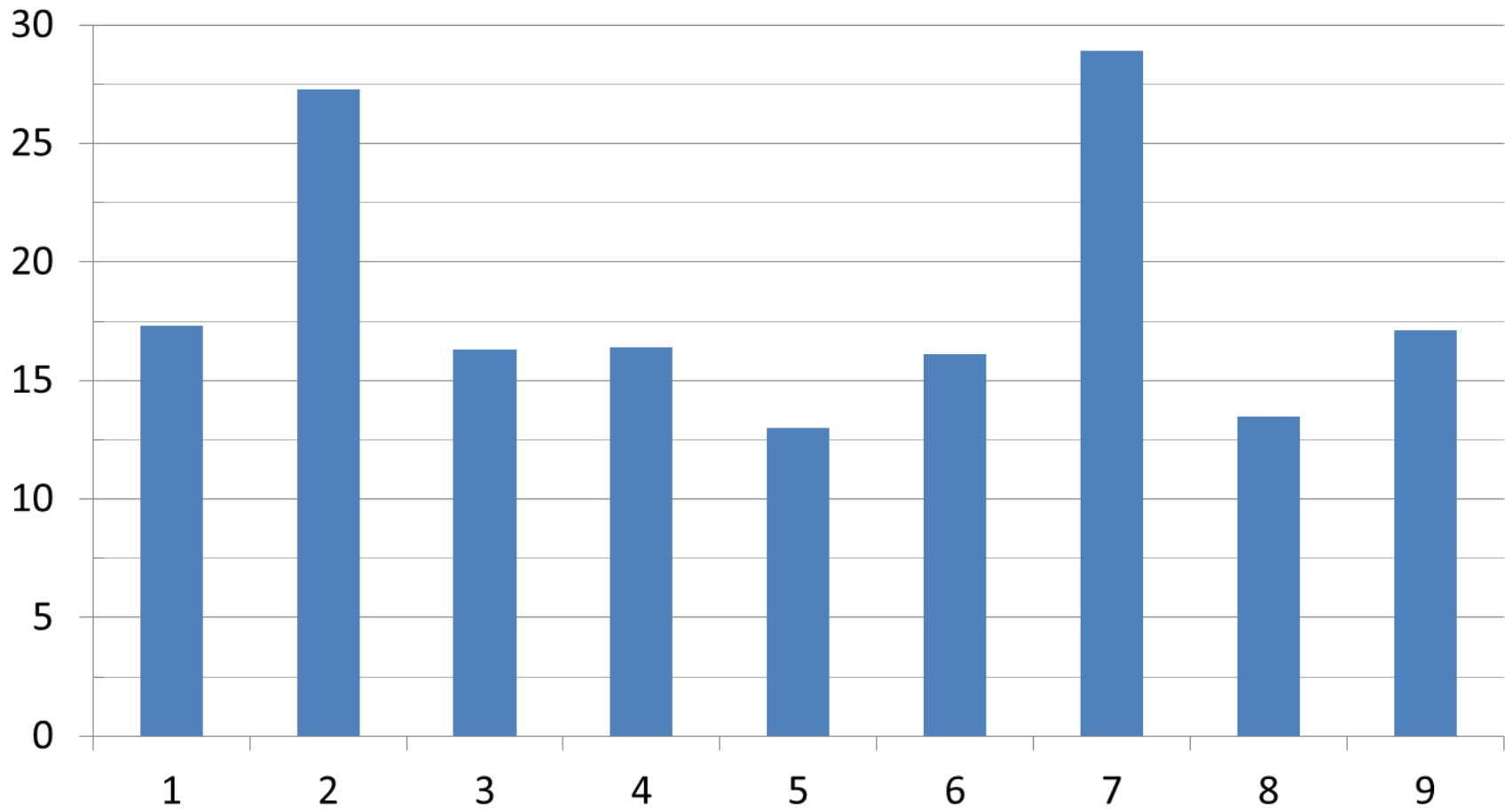
# Yield – no./A Chowan County, NC





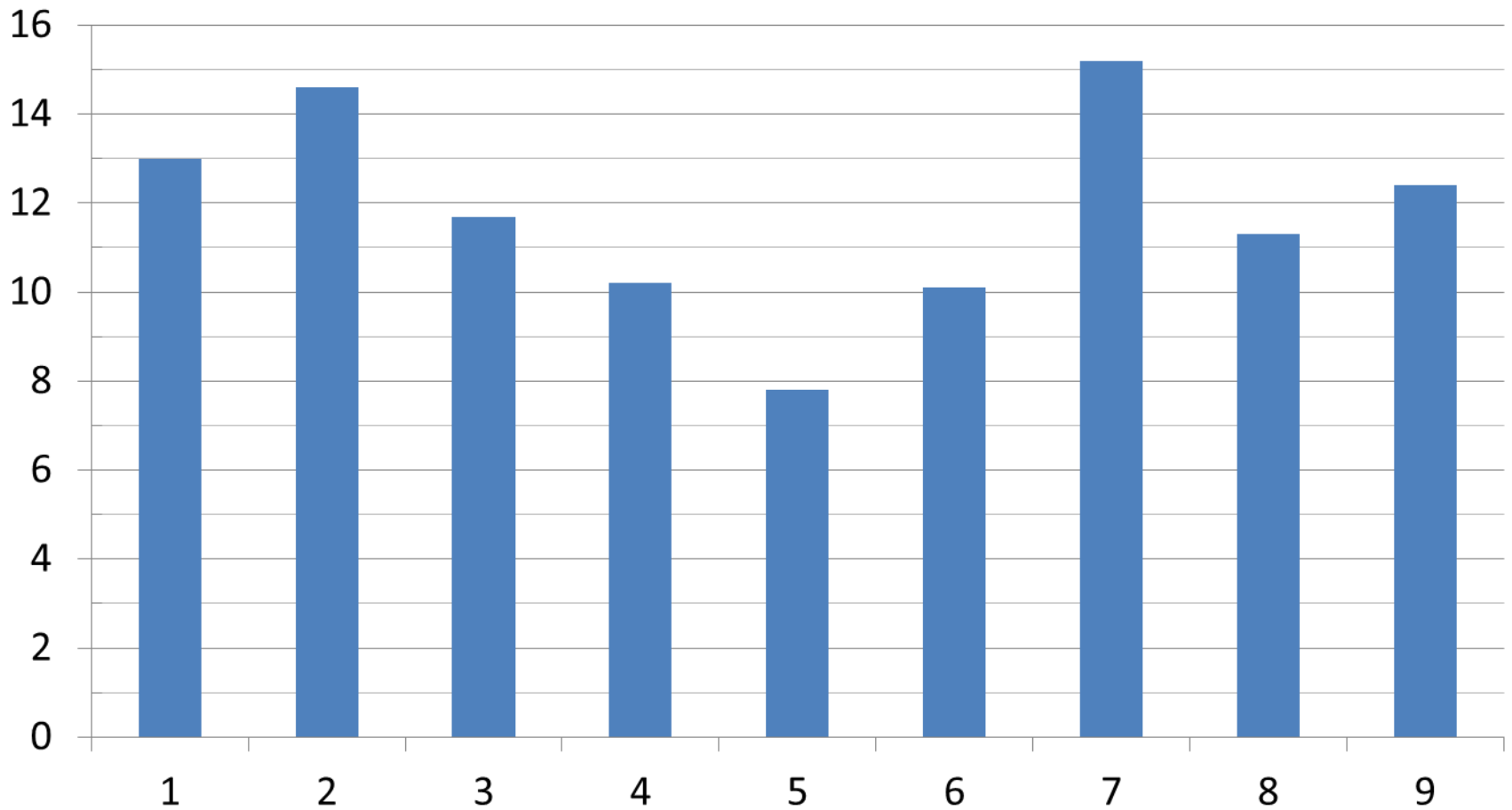
# Yield – tons/A

## Chowan County, NC

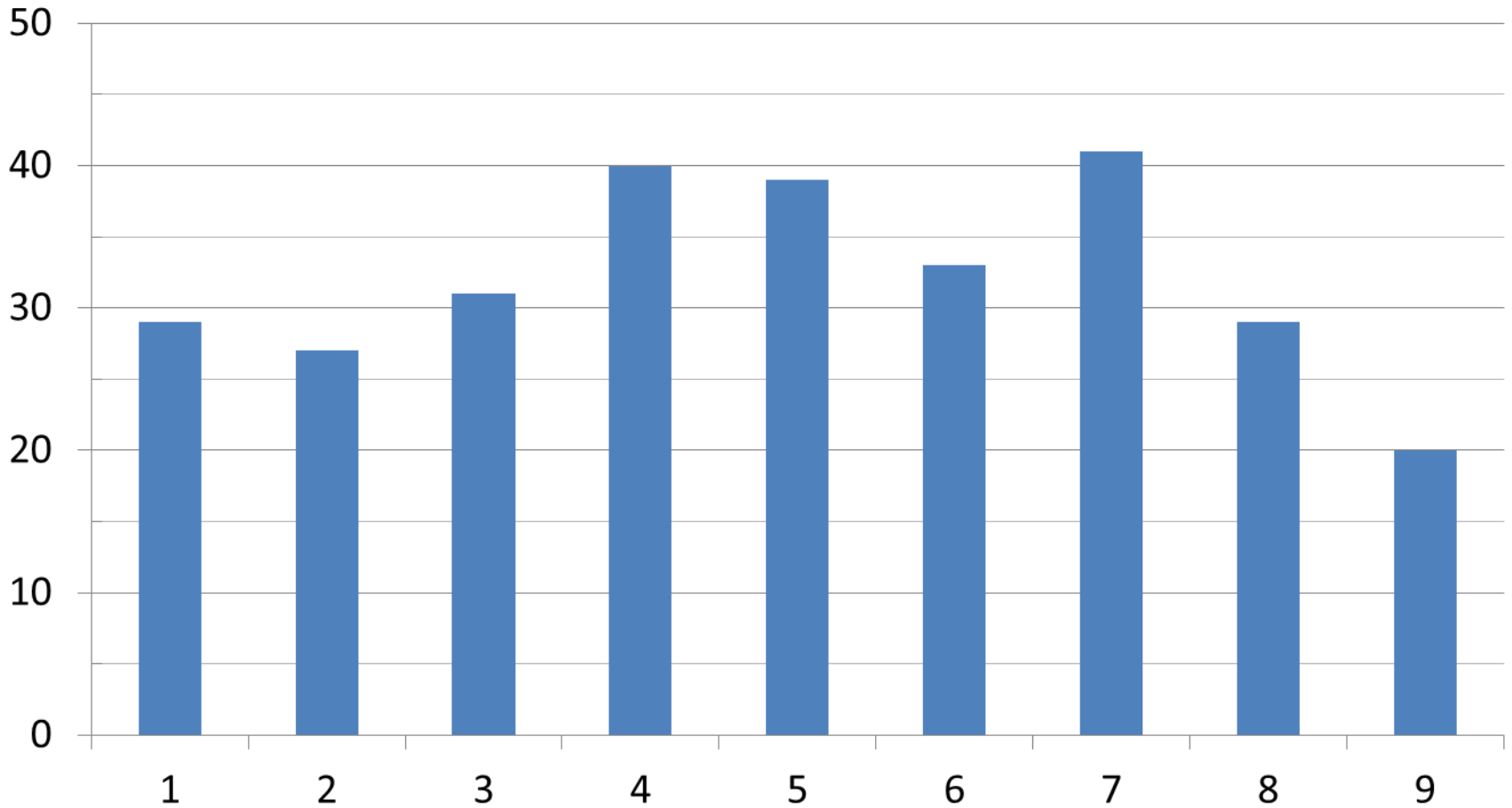


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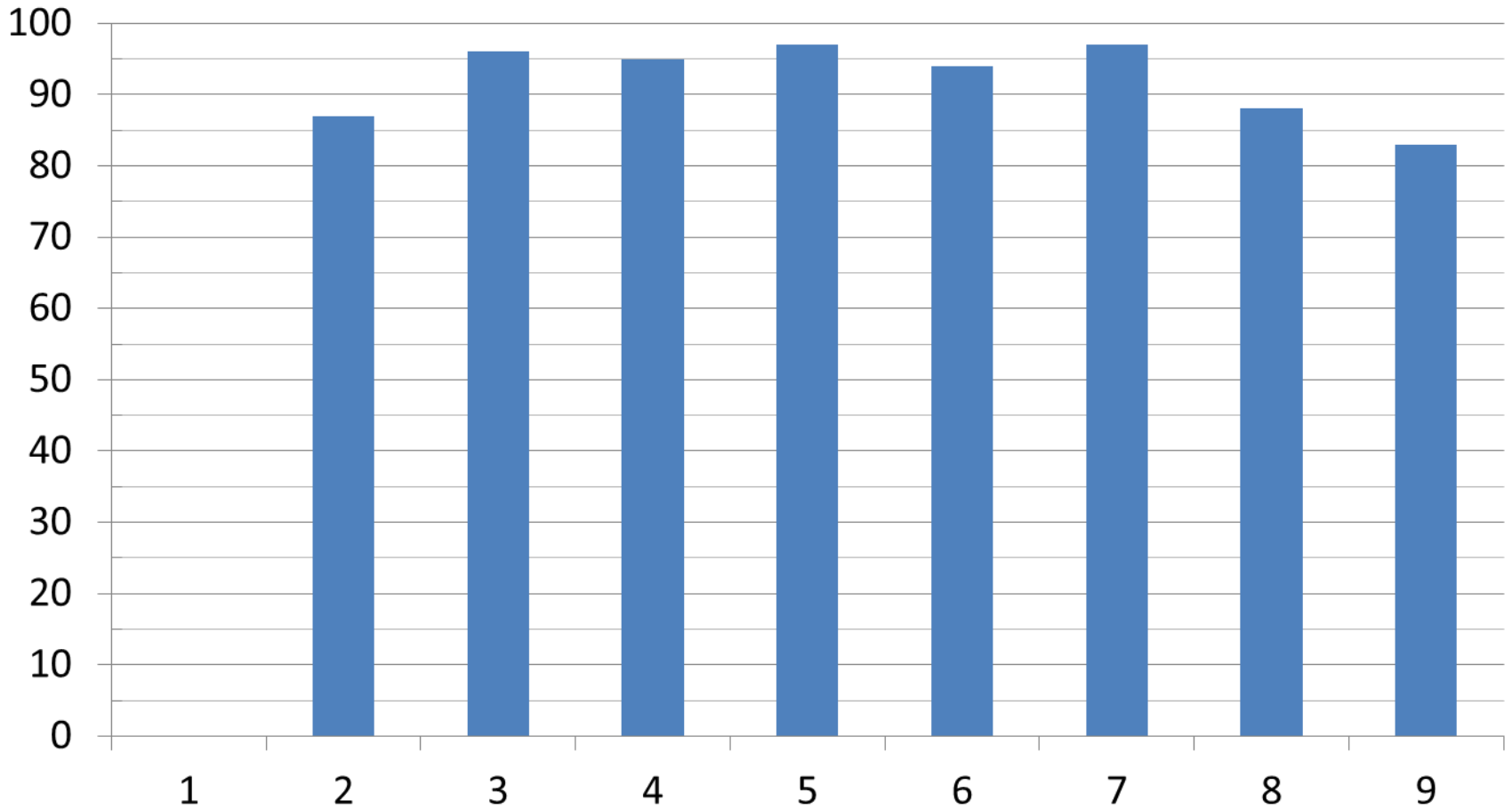
## Chowan County, NC



# Immature Fruit – % Chowan County, NC



# Overall Weed Control – % Chowan County, NC



# Conclusions

- Reflex @ 1.5 and 2 pints/A appears to relatively safe.
- Reflex @ 3 pints/A appears to cause some yield reduction.
- The three way combinations provided excellent weed control.
- Alachlor appears to be relatively safe and gave very good weed control.

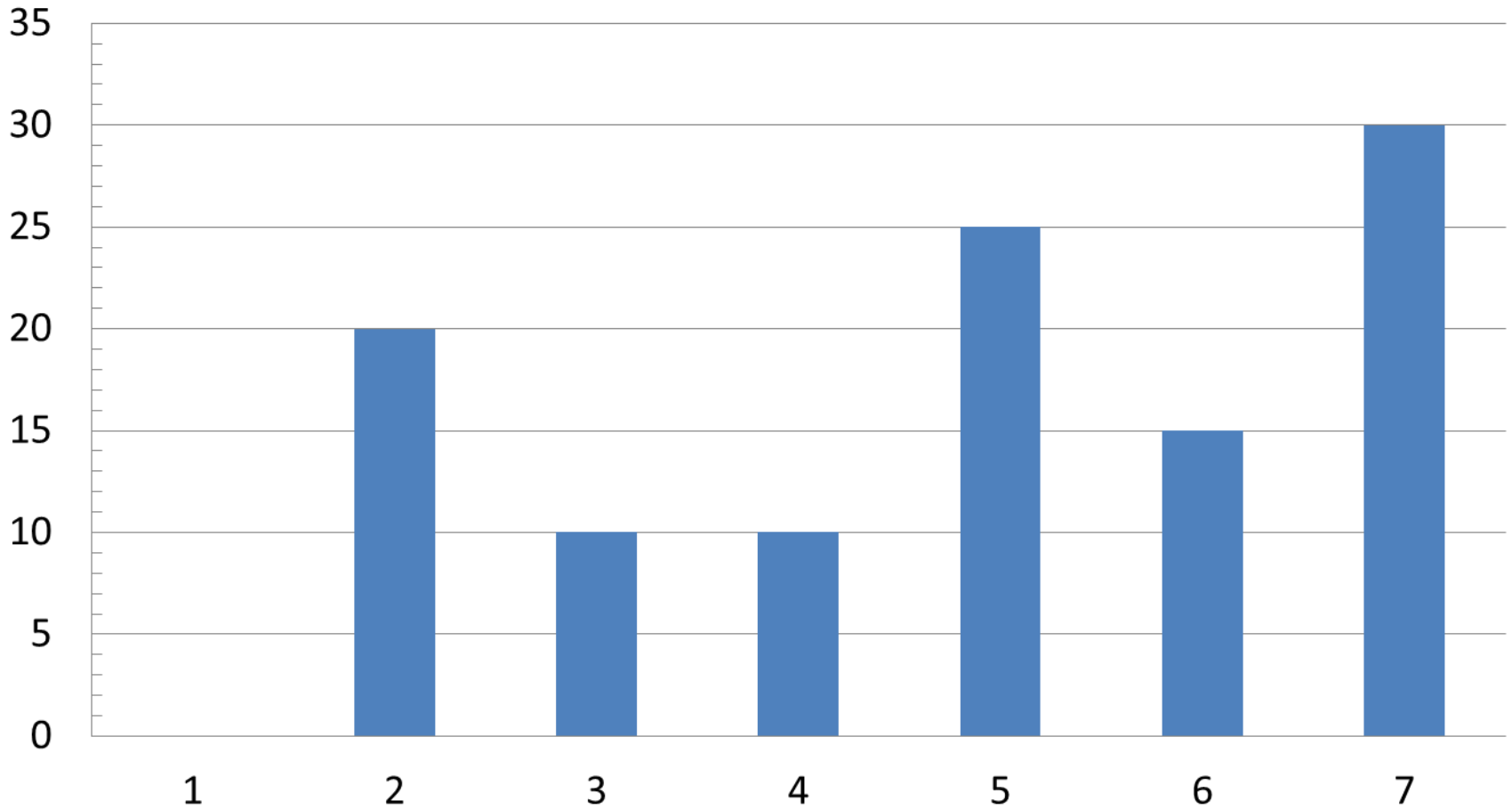
# Postemergence Trial, 2013

- Even with our best herbicide treatments we are always going to have some escapes.
- Postemergence Products
  - Sandea
  - Poast
  - Select Max
  - Generics
- Over the past couple of years we have toyed with the idea of Basagran.
- Grower friend in MS that had tried it a couple of years ago with good success.
- So we tried in 2013.

# Basagran Trial, 2013

1. UTC
2. Basagran @ 1 pint/A plus NIS @  $\frac{1}{4}\%$  v/v
3. Basagran @ 1.5 pints/A plus NIS @  $\frac{1}{4}\%$  v/v
4. Basagran @ 2 pints/A plus NIS @  $\frac{1}{4}\%$  v/v
5. Basagran @ 1 pint/A plus COC @ 1% v/v
6. Basagran @ 1.5 pints/A plus COC @ 1% v/v
7. Basagran @ 2 pints/A plus COC @ 1% v/v

# Basagran % Injury Results, 2013



Injury ratings taken 7 days after treatment



# Basagran Results, 2013

- Crop oil concentrate caused more injury than non-ionic surfactant.
- By 21 days, almost no injury was observed.
- No differences in yields among treatments.
- Appears to be fine on Jack-O-Lanterns.
- Do not use on C. Maxima – Prize Winner
- **Remember Basagran is not labeled for Pumpkins.**

# Questions?

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