

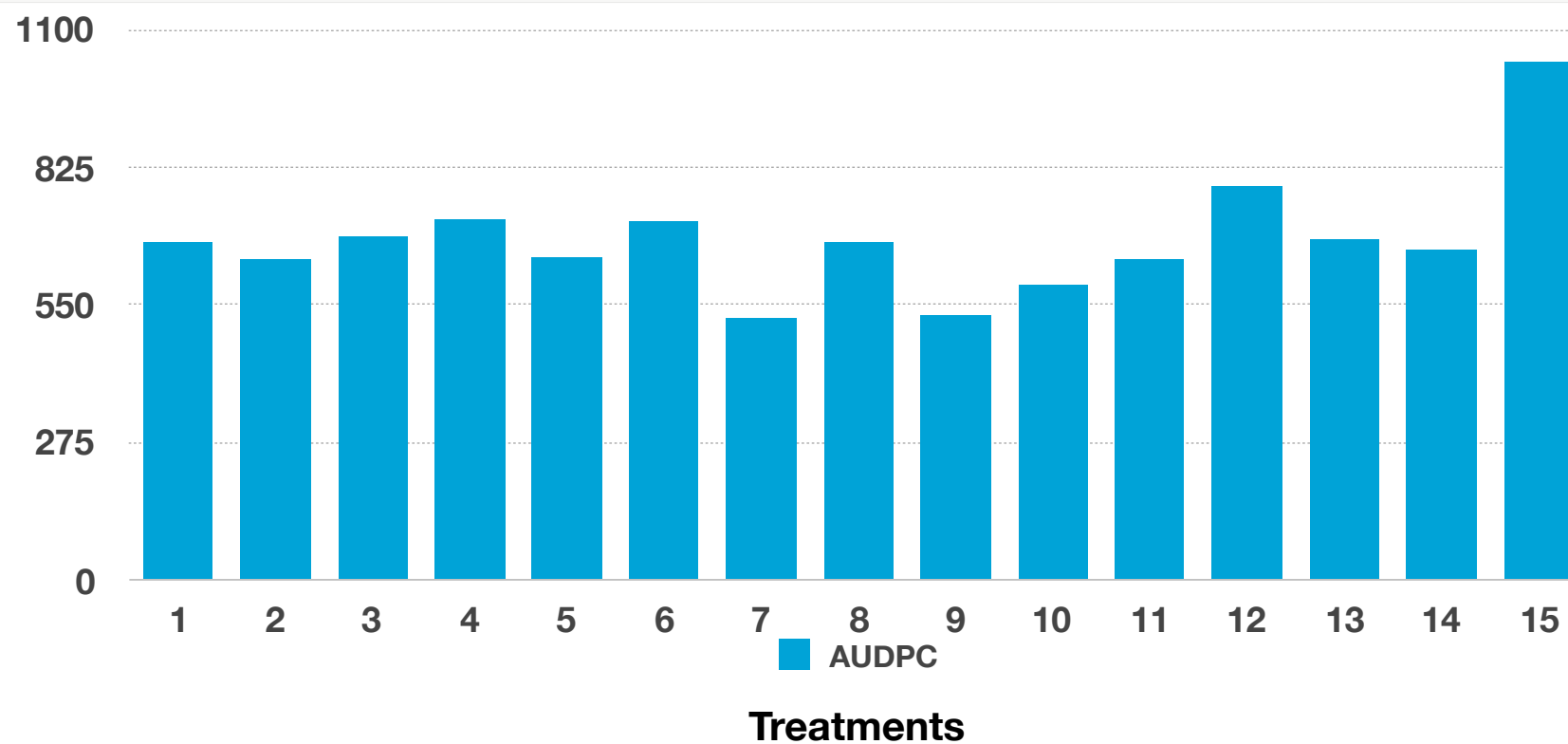
2011-2018 Tomato Bacterial spot research trial data. University of Florida, NFREC, Quincy, FL
Research conducted by: Susannah Da Silva, Mathews Paret, Maxwell Sawyer, and Josh Freeman

Disease severity (AUDPC) and yield of tomato - Fall 2018

| TREATMENT (RATE/A) | | AUDPC |
|--------------------|---|---------|
| 1 | Vacciplant (14 oz/A) (weeks 1-3) and (22 oz/A) (weeks 4-8) + Mankocide (2 lb/A) (weeks 1,3,5,7) | 674 abc |
| 2 | Vacciplant (14 oz/A) (weeks 1-3) and (22 oz/A) (weeks 4-8) + Phosphite (weeks 1,3,5,7) alternated with Manzate () (weeks 2,4,6,8) | 639 abc |
| 3 | Agriphage (weeks 1-8) | 686 abc |
| 4 | Agriphage + Vacciplant (14 oz/A) and (22 oz/A) (weeks 1-8) | 723 bc |
| 5 | CNT 50 ug/ml (week 1) | 643 abc |
| 6 | CNT 100 ug/ml (week 1) | 716 abc |
| 7 | Actigard (0.33 oz/A) (weeks 1-3) and (0.5 oz/A) (weeks 4-5) followed by Vacciplant (22 oz/A) (weeks 6-8) | 524 a |
| 8 | Vacciplant (14 oz/A) (weeks 1-3) and (22 oz/A) (weeks 4-8) | 678 abc |
| 9 | Actigard (0.33 oz/A) (weeks 1-3) and (0.5 oz/A) (weeks 4-5) | 530 ab |
| 10 | Phosphite (weeks 1-8) | 589 ab |
| 11 | K-Phite (1 qt/A) (weeks 1-8) | 640 abc |
| 12 | Kocide 3000 (1.25 lb/A) (weeks 1-8) | 788 c |
| 13 | Mankocide (2 lb/A) (weeks 1-8) | 681 abc |
| 14 | Non treated control (water) (weeks 1-8) | 660 abc |
| 15 | Non-treated control + surfactant (Silwet 0.025%) (weeks 1-8) | 1037 d |

AUDPC: Area Under Disease Progress Curve. Higher the AUDPC, higher the disease severity over the period of the trial.

Different letters next to the treatments means that they are statistically different ($Pr > F = 0.05$; LSD)



Variety: Grand Marshall
 Plot length: 22 feet
 Number of plants per plot: 12
 Plant spacing: 20 inches
 Number of reps: 4
 Transplanted: 8/10
 Inoculation: 8/17
 Fungicide application dates: 8/16, 8/21, 8/30, 9/6, 9/11, 9/19, 9/27, 10/2
 Disease assessment dates: 8/23, 8/30, 9/6, 9/12, 9/20, 9/27, 10/4

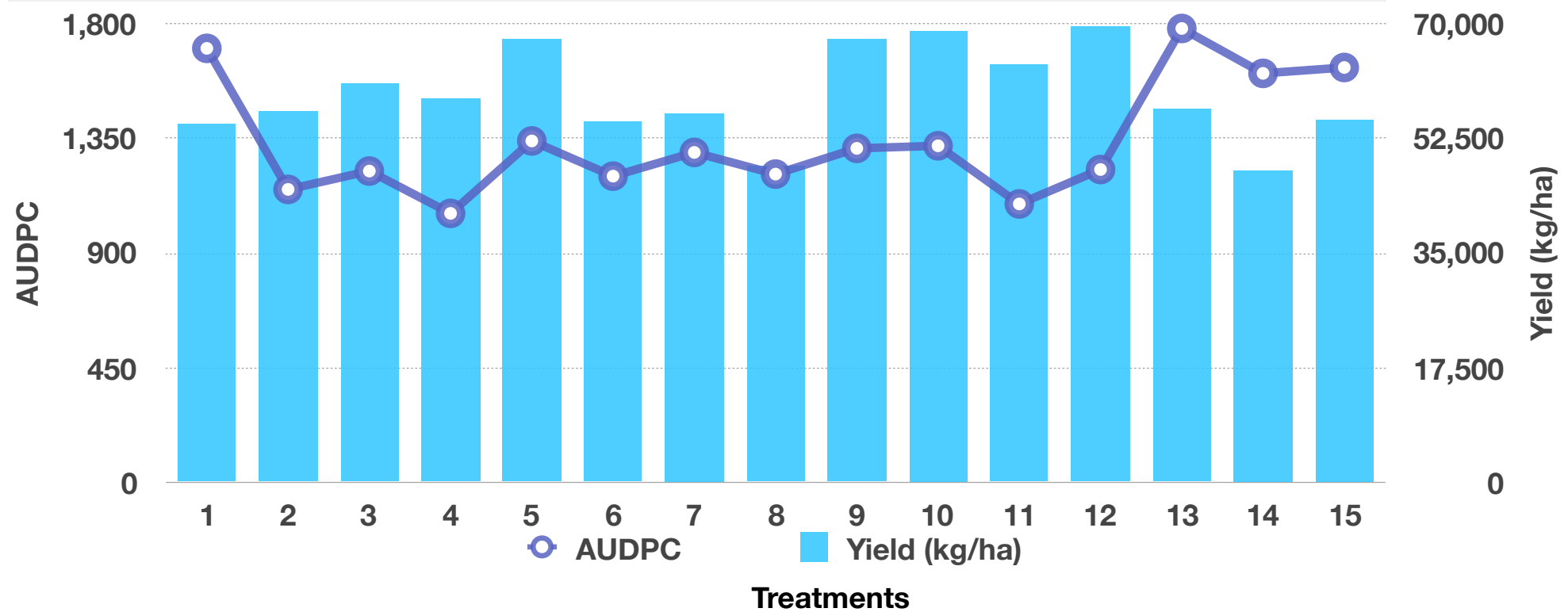
2011-2018 Tomato Bacterial spot research trial data. University of Florida, NFREC, Quincy, FL
Research conducted by: Mathews Paret, Laura Ritchie, Drey Clark, and Josh Freeman

Disease severity (AUDPC) and yield of tomato - Fall 2016

| TREATMENT (RATE/A) | | AUDPC | | YIELD (KG/HA) | |
|--------------------|---|-------|----|---------------|----|
| 1 | Control (Untreated) | 1,704 | a | 54,681 | ab |
| 2 | Actigard (0.5 oz) | 1,151 | c | 56,809 | ab |
| 3 | Mankocide (2 lb) | 1,223 | c | 60,887 | ab |
| 4 | S-2310 468 G/L SC (5.86 fl oz) [week 1,4,7] | 1,057 | c | 58,438 | a |
| 5 | S-2310 468 G/L SC (2.93 fl oz) [week 1,4,7] | 1,341 | bc | 67,505 | ab |
| 6 | S-2310 468 G/L SC (1.46 fl oz) [week 1,4,7] | 1,203 | c | 54,931 | ab |
| 7 | S-2310 468 G/L SC (2.93 fl oz) [week 1,4,7] + Actinovate AG (8 oz) [week 1-8] | 1,296 | bc | 56,492 | b |
| 8 | Actinovate AG (8 oz) | 1,211 | c | 48,269 | a |
| 9 | Leap (1 qt) | 1,312 | bc | 67,516 | a |
| 10 | Leap (1 qt) + Actinovate AG (8 oz) | 1,322 | bc | 68,919 | ab |
| 11 | Leap (1 qt) alt Mankocide (2 lb) | 1,094 | c | 63,676 | a |
| 12 | Serenade Opti (8 oz) | 1,229 | c | 69,405 | ab |
| 13 | Kocide 3000 (1.25 lb) [week 1,3,5,7] alt Serenade Opti (8oz) [week 2,4,6,8] | 1,782 | a | 56,917 | b |
| 14 | Kocide 3000 (1.25 lb) [week 1,3,5,7] | 1,606 | ab | 47,734 | ab |
| 15 | Kocide 3000 (1.25 lb) | 1,629 | ab | 55,531 | ab |

AUDPC: Area Under Disease Progress Curve. Higher the AUDPC, higher the disease severity over the period of the trial.

Different letters next to the treatments means that they are statistically different ($P > F = 0.05$; LSD)



Variety: Quincy
 Plot length: 25 feet
 Number of plants per plot: 14
 Plant spacing: 20 inches
 Number of reps: 4
 Transplanted: 08/08
 Inoculation: 08/29
 Fungicide application dates: 8/23, 8/30, 9/06, 9/13, 9/20, 8/27, 10/6
 Disease assessment dates: 8/26, 9/6, 9/12, 9/19, 9/26, 10/3, 10/10, 10/17
 Harvest date: 10/20, 10/27, 11/02

2011-2018 Tomato Bacterial spot research trial data. University of Florida, NFREC, Quincy, FL

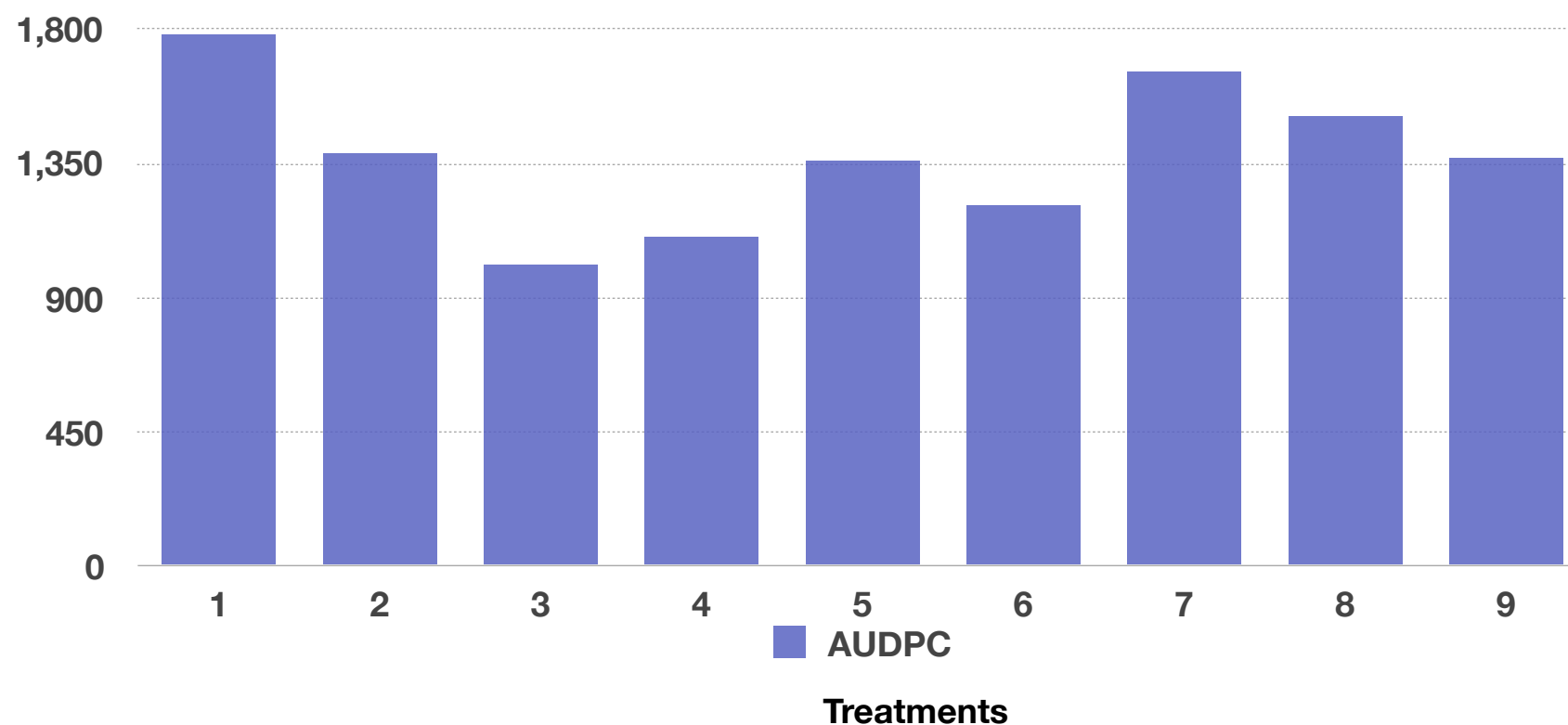
Research conducted by: Mathews Paret, Laura Ritchie, Drey Clark, Josh Freeman

Disease severity (AUDPC) on tomato - Spring 2015

| TREATMENT (RATE/A) | | AUDPC |
|--------------------|--|-----------|
| 1 | Control (Untreated) | 1,786 a |
| 2 | Actinovate (6 oz) (1-6 wk) | 1,381 b-d |
| 3 | Actinovate (6 oz) + Actigard (0.5 oz) 1-6 wk) | 1,012 d |
| 4 | Actinovate (9 oz) + Actigard (0.5 oz) 1-6 wk) | 1,103 cd |
| 5 | Actigard (0.5 oz) 1-6 wk) | 1,357 b-d |
| 6 | Serenade Optimum (8 oz) (1-6 wk) | 1,210 b-d |
| 7 | Serenade Optimum (8 oz) + Kocide 3000 (1.25 lb) (1-6 wk) | 1,655 ab |
| 8 | Kocide 3000 (1.25 lb) (1-6 wk) | 1,510 ab |
| 9 | Mankocide (2 lb) (1-6 wk) | 1,370 b-d |

AUDPC: Area Under Disease Progress Curve. Higher the AUDPC, higher the disease severity over the period of the trial.

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Variety: BHN 602

Plot length: 25 feet

Number of plants per plot: 15

Plant spacing: 20 inches

Number of reps: 4

Transplanted: 04/04

Inoculation: Natural

Fungicide application dates: 5/21, 5/28, 6/3, 6/9, 6/17, 6/24

Disease assessment dates: 5/19, 5/27, 6/2, 6/9, 6/15, 6/22, 6/29

Harvest date: N/A

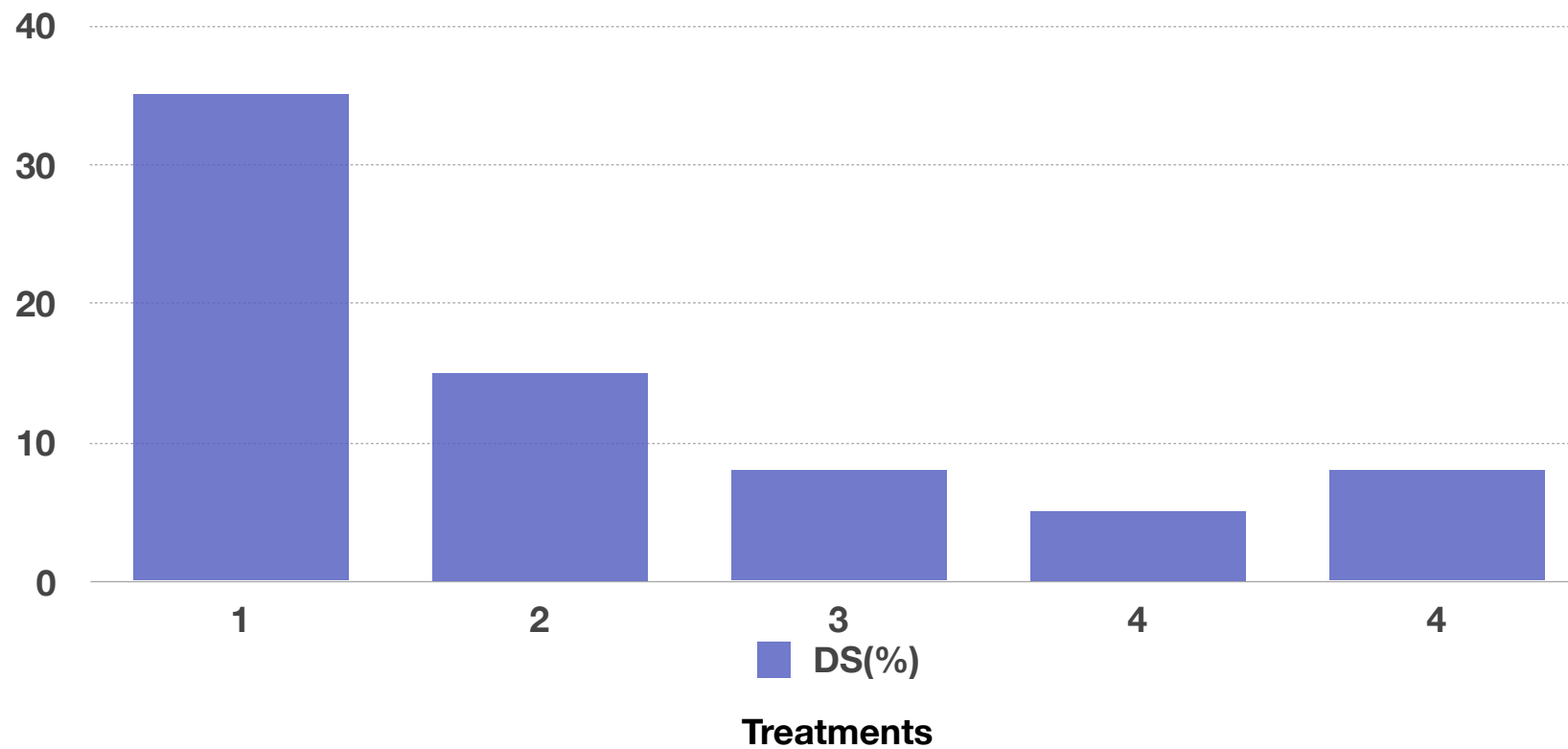
2011-2018 Tomato Bacterial spot research trial data. University of Florida, SWREC, Immokalee, FL
Research conducted by: Pam Roberts

Disease severity (AUDPC) on tomato - Spring 2013

| TREATMENT (RATE/A) | | DS(%) |
|--------------------|---|-------|
| 1 | Control (Untreated) | 35 a |
| 2 | Actinovate (6 oz) (1-6 wk) | 15 b |
| 3 | Actinovate (6 oz) + Actigard (0.5 oz) 1-6 wk) | 8 c |
| 4 | Actigard (0.5 oz) 1-6 wk) | 5 c |
| 5 | Kocide 3000 (1.75 lb) + Manzate ProStik (1 lb) (1-6 wk) | 8 c |

DS: Disease severity

Different letters next to the treatments means that they are statistically different (Pr>F=0.05; LSD)



Variety: FL47

Plot length: 15 feet

Number of plants per plot: 10

Plant spacing: 18 inches

Number of reps: 4

Transplanted: 03/04

Inoculation: Artificial

Fungicide application dates: 3/19, 3/29, 4/02, 4/09, 4/16, 4/23, 4/30, 5/07, 5/15

Disease assessment date: 5/11

Harvest date: N/A

2011-2018 Tomato Bacterial spot research trial data. University of Florida, NFREC, Quincy, FL

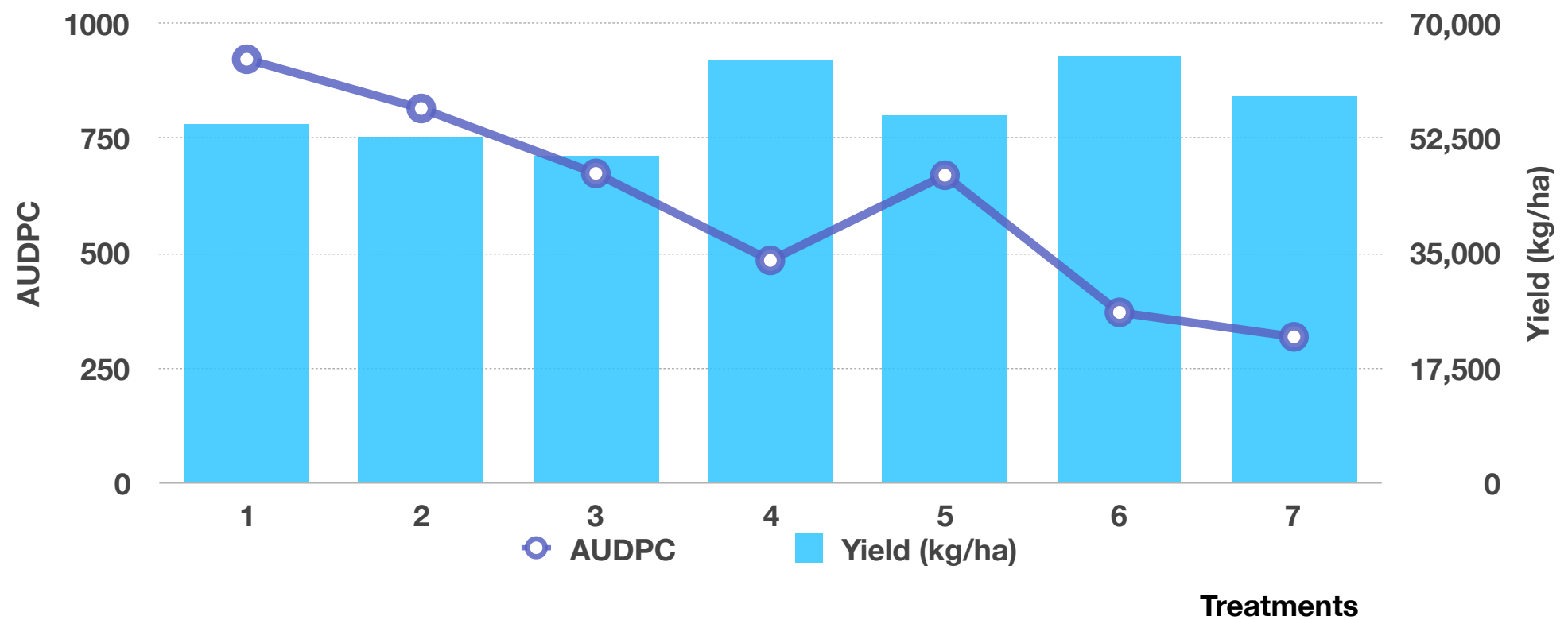
Research conducted by: Mathews Paret, Laura Ritchie, Jackie Snell, Steve Olson

Disease severity (AUDPC) and yield of tomato - Spring 2013

| TREATMENT (RATE/A) | | AUDPC | YIELD (KG/HA) |
|--------------------|---|--------|---------------|
| 1 | Control (Untreated) | 922 a | 54,681 b |
| 2 | Actinovate (6 oz) (1-6 wk) | 815 ab | 52,736 b |
| 3 | Actinovate (6 oz) + Actigard (0.5 oz) 1-6 wk) | 674 b | 49,732 b |
| 4 | Actinovate (6 oz) + Kocide 3000 (1 lb) (1-6 wk) | 485 c | 64,331 a |
| 5 | Actigard (0.5 oz) 1-6 wk) | 670 b | 55,982 ab |
| 6 | Kocide 3000 (1.75 lb) (1-6 wk) | 372 cd | 65,158 a |
| 7 | Kocide 3000 (1.75 lb) + Penncozeb 75 DF (1 lb) (1-6 wk) | 319 d | 59,075 ab |

AUDPC: Area Under Disease Progress Curve. Higher the AUDPC, higher the disease severity over the period of the trial.

Different letters next to the treatments means that they are statistically different ($P > F = 0.05$; LSD)



Variety: BHN 602

Plot length: 35 feet

Number of plants per plot: 15

Plant spacing: 20 inches

Number of reps: 5

Transplanted: 4/9

Inoculation: Natural

Fungicide application dates: 5/6, 5/13, 5/21, 5/28, 6/4, 6/11, 6/18

Disease assessment dates: 5/6, 5/13, 5/20, 5/28, 6/3, 6/17, 6/28

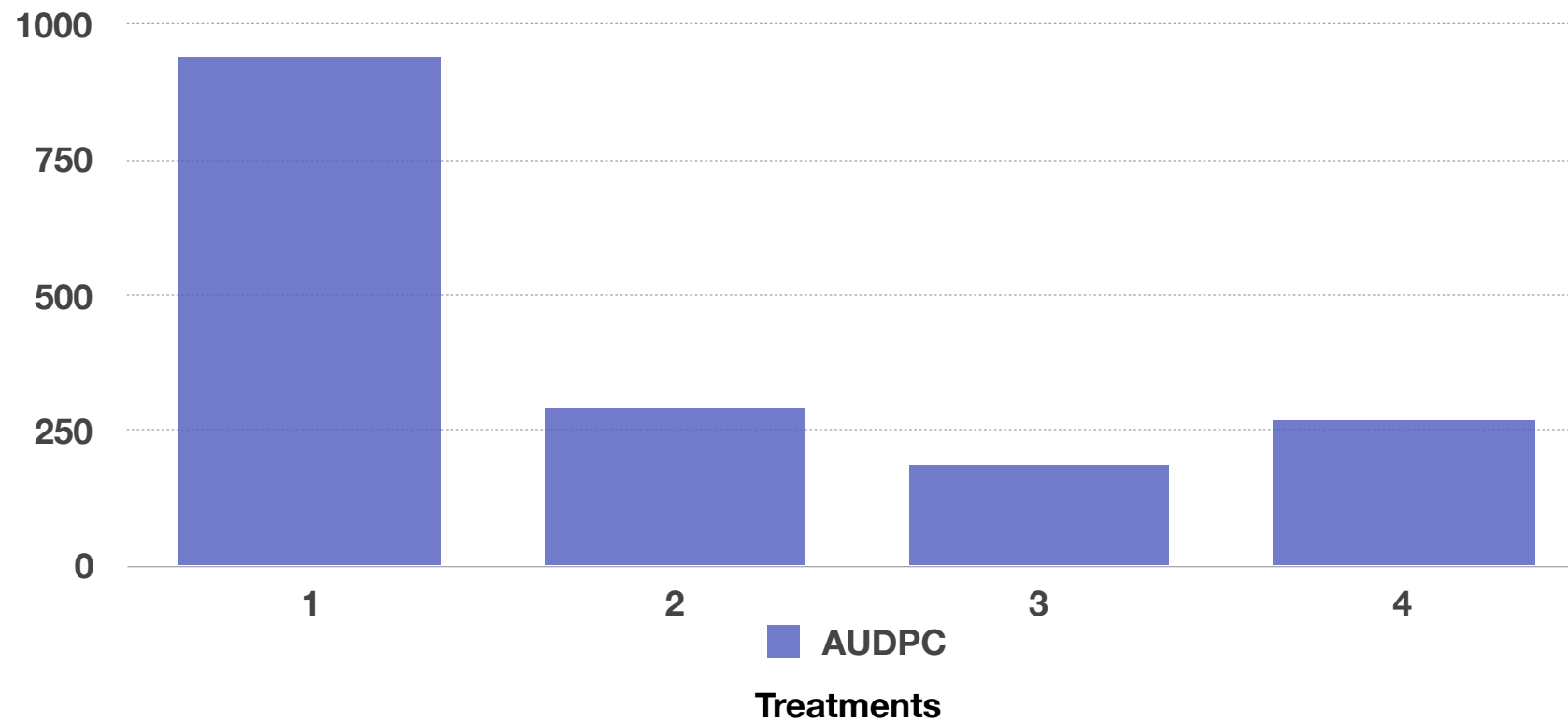
Harvest date: 7/1, 7/15

2011-2018 Tomato Bacterial spot research trial data. University of Florida, SWREC, Immokalee, FL
Research conducted by: Pam Roberts

Disease severity (AUDPC) on tomato - Fall 2012

| TREATMENT (RATE/A) | | AUDPC |
|--------------------|---|--------|
| 1 | Control (Untreated) | 939 a |
| 2 | Actinovate (6 oz) (1-6 wk) | 288 bc |
| 3 | Actinovate (6 oz) + Actigard (0.5 oz) 1-6 wk) | 183 c |
| 4 | Kocide 3000 (1.75 lb) + Manzate ProStik (2 lb) (1-6 wk) | 267 bc |

AUDPC: Area Under Disease Progress Curve. Higher the AUDPC, higher the disease severity over the period of the trial.
 Different letters next to the treatments means that they are statistically different ($P > F = 0.05$; LSD)



Variety: FL47
 Plot length: 15 feet
 Number of plants per plot: 10
 Plant spacing: 18 inches
 Number of reps: 4
 Transplanted: 9/5
 Inoculation: Artificial (09/28, 10/19)
 Fungicide application dates: 9/19, 9/26, 10/03, 10/10, 10/17, 10/25, 11/01, 11/14, 11/21
 Disease assessment date: 10/18, 10/28, 11/04, 11/18
 Harvest date: N/A

2011-2018 Tomato Bacterial spot research trial data. University of Florida, NFREC, Quincy, FL

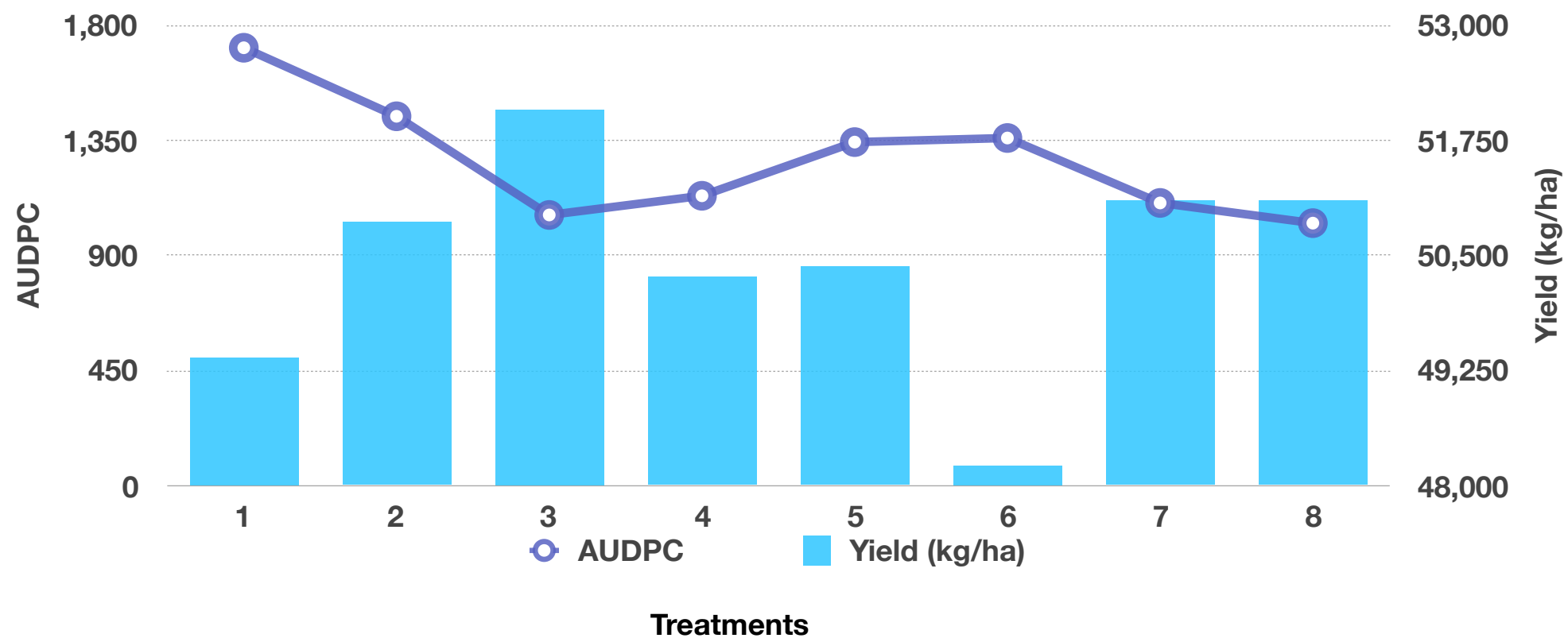
Research conducted by: Mathews Paret, Laura Ritchie, Jackie Snell, Steve Olson

Disease severity (AUDPC) and yield of tomato - Fall 2012

| TREATMENT (RATE/A) | | AUDPC | YIELD (KG/HA) |
|--------------------|---|---------|---------------|
| 1 | Control (Untreated) | 1,712 a | 49,390 a |
| 2 | Actinovate (6 oz) (1-6 wk) | 1,444 b | 50,859 a |
| 3 | Actinovate (6 oz) + Actigard (0.5 oz) 1-6 wk) | 1,058 c | 52,075 a |
| 4 | Actinovate (6 oz) + Kocide 3000 (1 lb) (1-6 wk) | 1,133 c | 50,269 a |
| 5 | Serenade Optimum (2 lb) (1-6 wk) | 1,343 b | 50,388 a |
| 6 | Actinovate (6 oz) + Serenade Optimum (2 lb) (1-6 wk) | 1,359 b | 48,226 a |
| 7 | Actigard (0.5 oz) 1-6 wk) | 1,105 c | 51,083 a |
| 8 | Kocide 3000 (1.75 lb) + Penncozeb 75 DF (1 lb) (1-6 wk) | 1,026 c | 51,087 a |

AUDPC: Area Under Disease Progress Curve. Higher the AUDPC, higher the disease severity over the period of the trial.

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Variety: BHN 602

Plot length: 35 feet

Number of plants per plot: 15

Plant spacing: 20 inches

Number of reps: 5

Transplanted: 8/6

Inoculation: Natural

Fungicide application dates: 8/22, 8/31, 9/6, 9/13, 9/20, 9/26, 10/4, 10/11

Disease assessment dates: 8/22, 8/29, 9/7, 9/12, 9/19, 9/26, 10/3, 10/10, 10/17

Harvest date: 10/25, 11/7

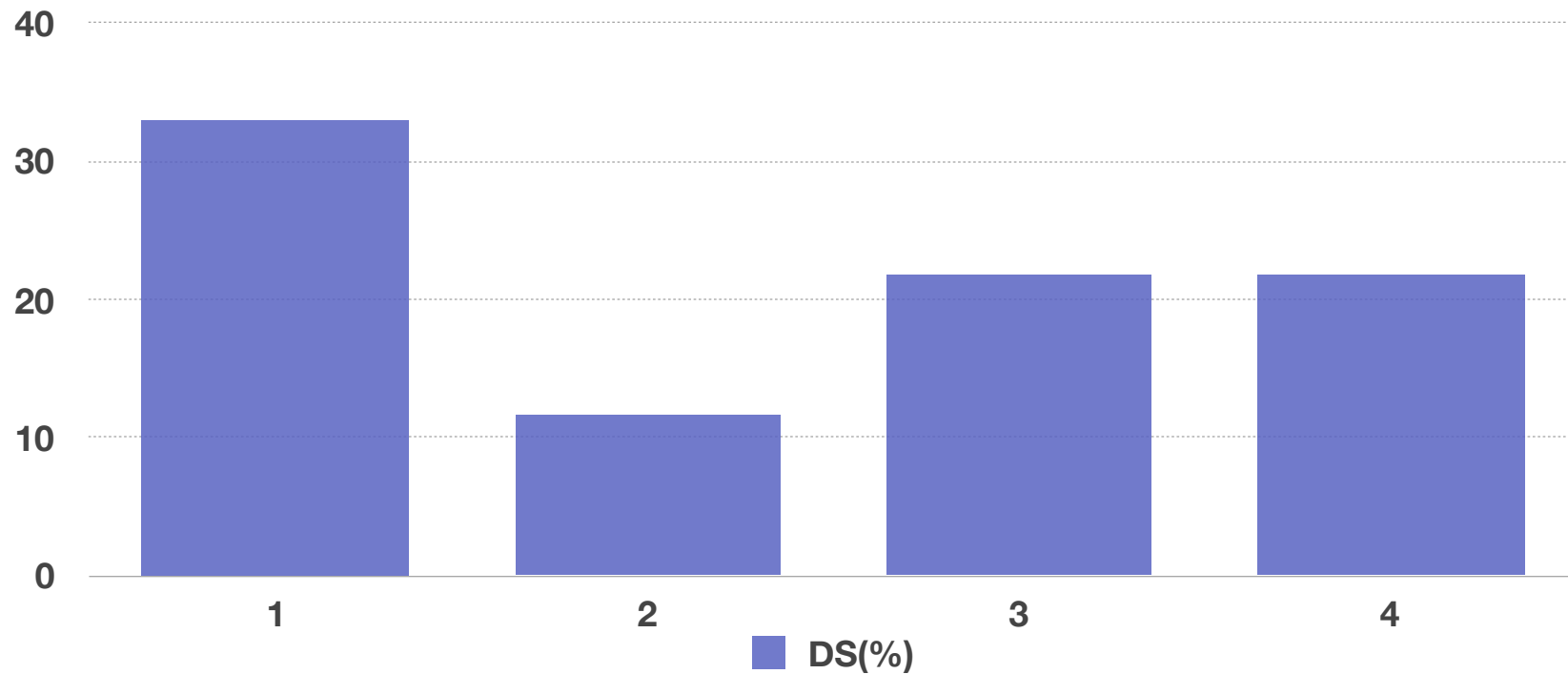
2011-2018 Tomato Bacterial spot research trial data. University of Florida, SWREC, Immokalee, FL
Research conducted by: Pam Roberts

Disease severity (AUDPC) on tomato - Fall 2011

| TREATMENT (RATE/A) | | DS(%) |
|--------------------|---|---------|
| 1 | Control (Untreated) | 33 a |
| 2 | Actinovate (6 oz) (1-6 wk) | 11.7 b |
| 3 | Actinovate (6 oz) + Actigard (0.5 oz) (1-6 wk) | 21.7 ab |
| 4 | Kocide 3000 (1.75 lb) + Manzate ProStik (2 lb) (1-6 wk) | 21.7 ab |

DS: Disease severity

Different letters next to the treatments means that they are statistically different (Pr>F=0.05; LSD)



Treatments

Variety: FL47

Plot length: 22.5 feet

Number of plants per plot: 15

Plant spacing: 18 inches

Number of reps: 4

Transplanted: 9/12

Inoculation: Artificial (9/21, 10/4)

Fungicide application dates: 09/19, 09/26, 10/03, 10/10, 10/17, 10/25, 11/01, 11/14, 11/21

Disease assessment date: 12/08

Harvest date: N/A