

# Top 10 Percent of Fields for Quality 2006 & 2009 Crop Years

Your Way to Grow  
2010

# The Road to Sugarbeet Success



Michigan Sugar Company Goal

19% Average Sugar Percent

What's Achievable For ACSC

18.0%, 18.5%, 19.0%

# What Practices Lead to High RST – Low SLM

- Fertility Management?
- Stands?
- Variety Selection?
- Pest Management?
- Harvest Practices?
- Disease Management?
- Other?

# The Old Adage States “Quality Is All About The Weather”

- 10% variety selection
- 40% nitrogen management
- 50% weather



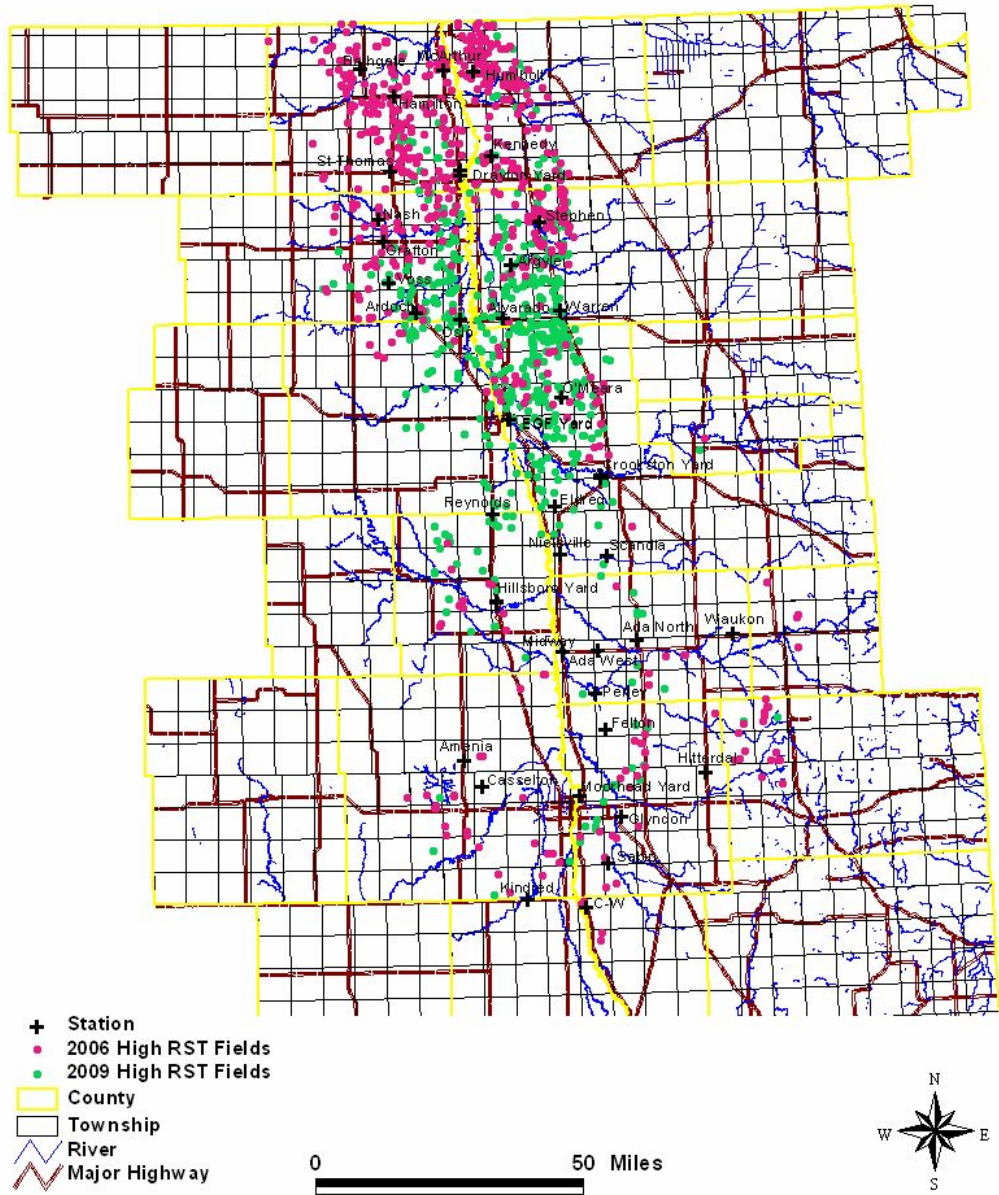
# 90<sup>th</sup> Percentile for RST Representative Fields

	<u>2006</u>	<u>2009</u>
High RST	50,088 Acres 367 Lbs/Ton	45,862 Acres 330 Lbs/Ton
Low RST	405,388 Acres 335 Lbs/Ton	345,932 Acres 310 Lbs/Ton

# What Were Differences Between High RST and Low RST Groups

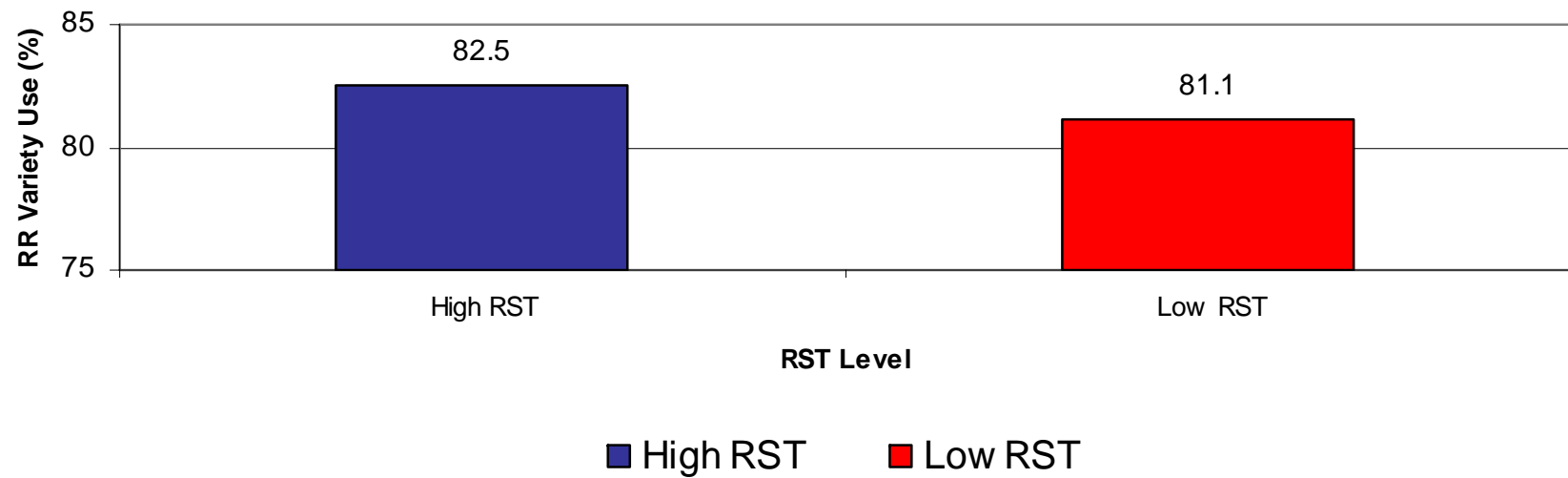
<b>Parameter</b>	<b>2006 Difference</b>	<b>2009 Difference</b>
Sugar (%)	+1.57	+1.45
SLM (%)	-.03	-.01
Yield (Tons)	-1.6	-1.2
RST (lbs)	+32	+20
RSA (lbs)	+238	+254
Rev/A (\$)	+\$118	+\$126

# 2006 and 2009 Crop High RST Locations



Which Practices Didn't Effect  
Quality Based on This Grower  
Practices Database Summary?

# 2009 RR® Variety Use



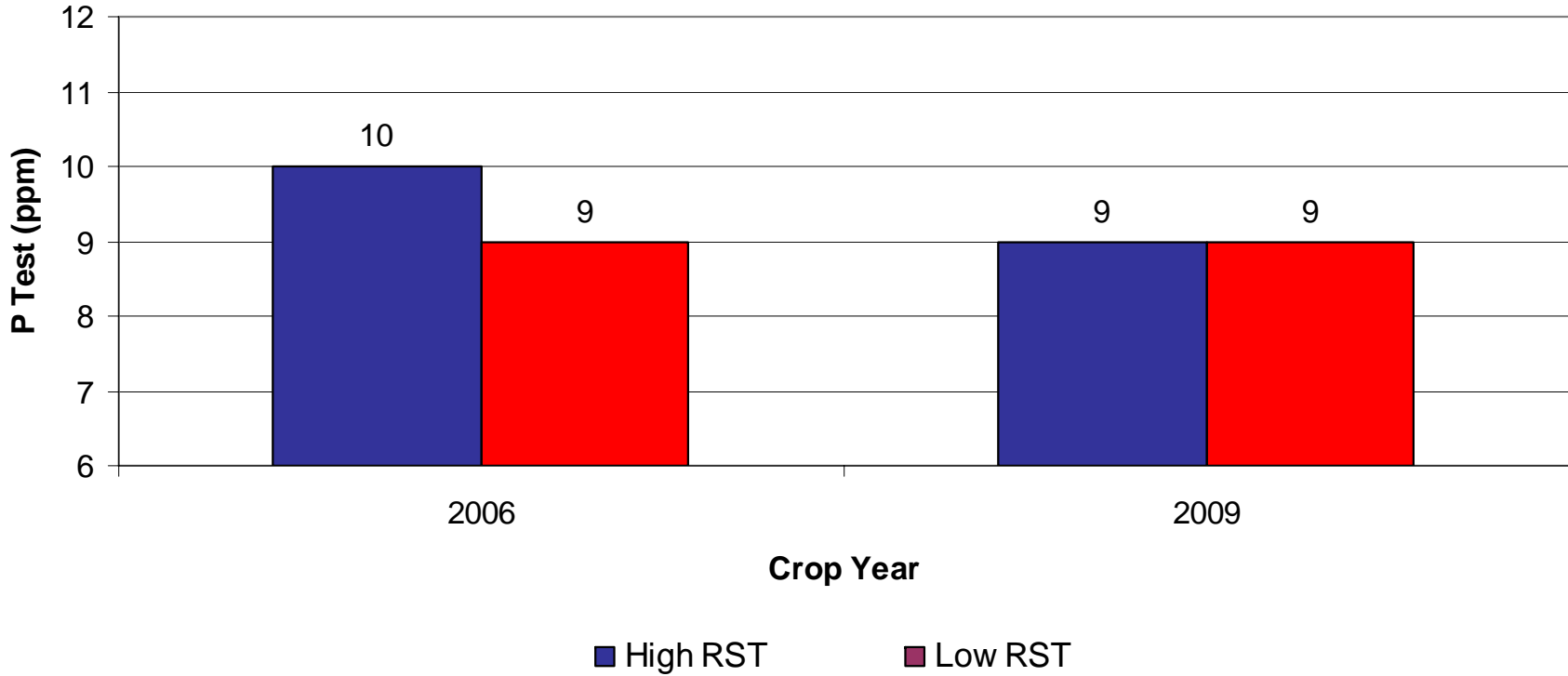
# Variety Selection

No difference in acres planted of top 10 coded trial varieties by:

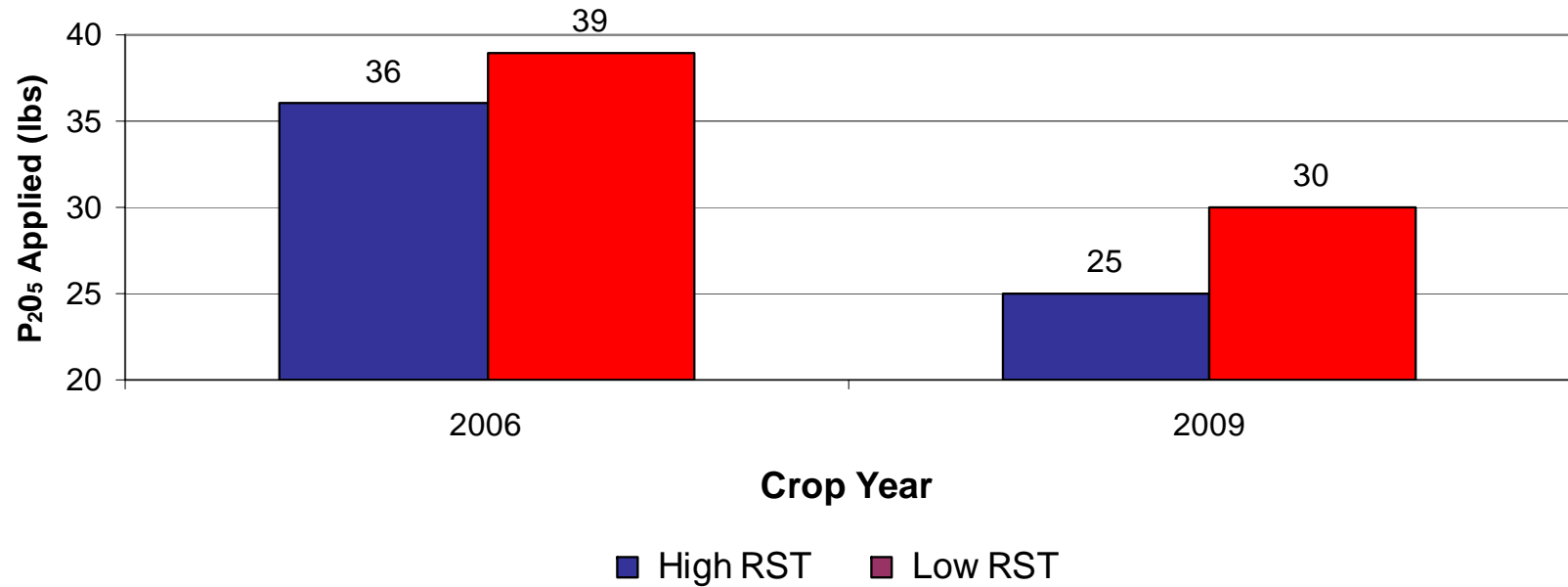
- Rev/A

- RSA

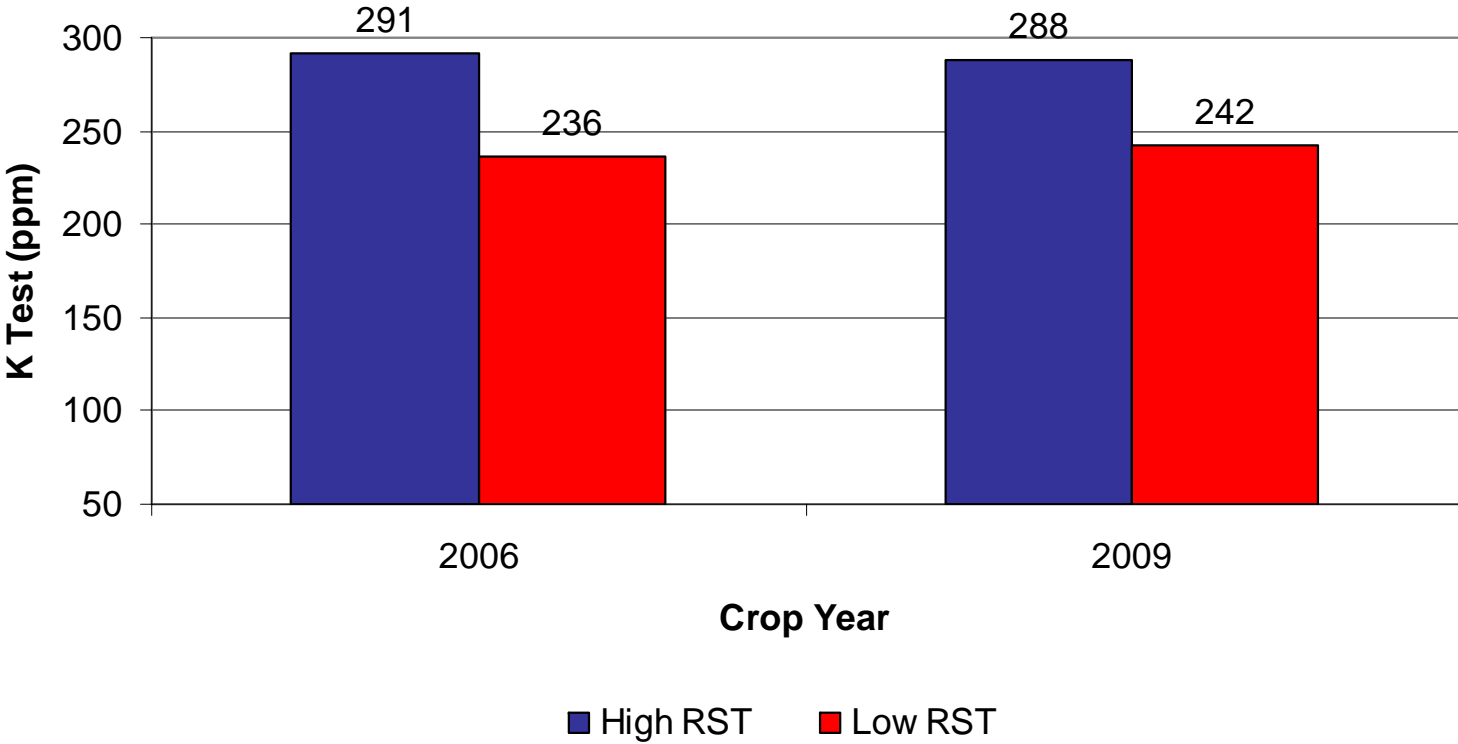
# Soil Test P



# Applied Fertilizer P

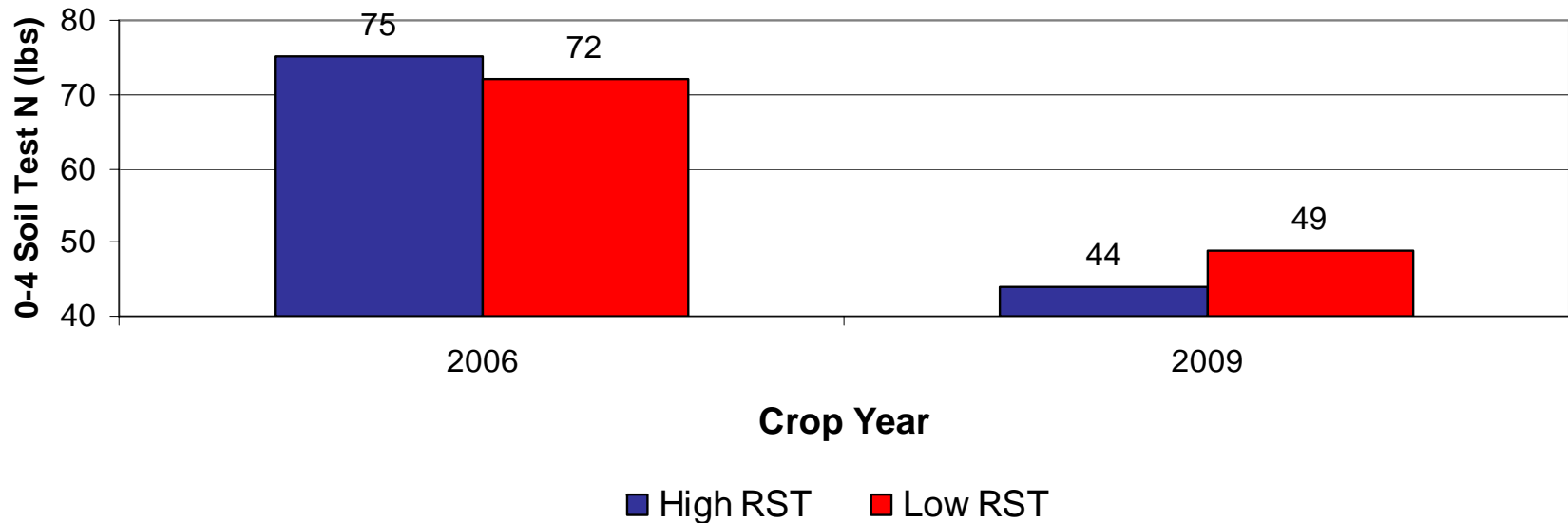


# K Soil Test



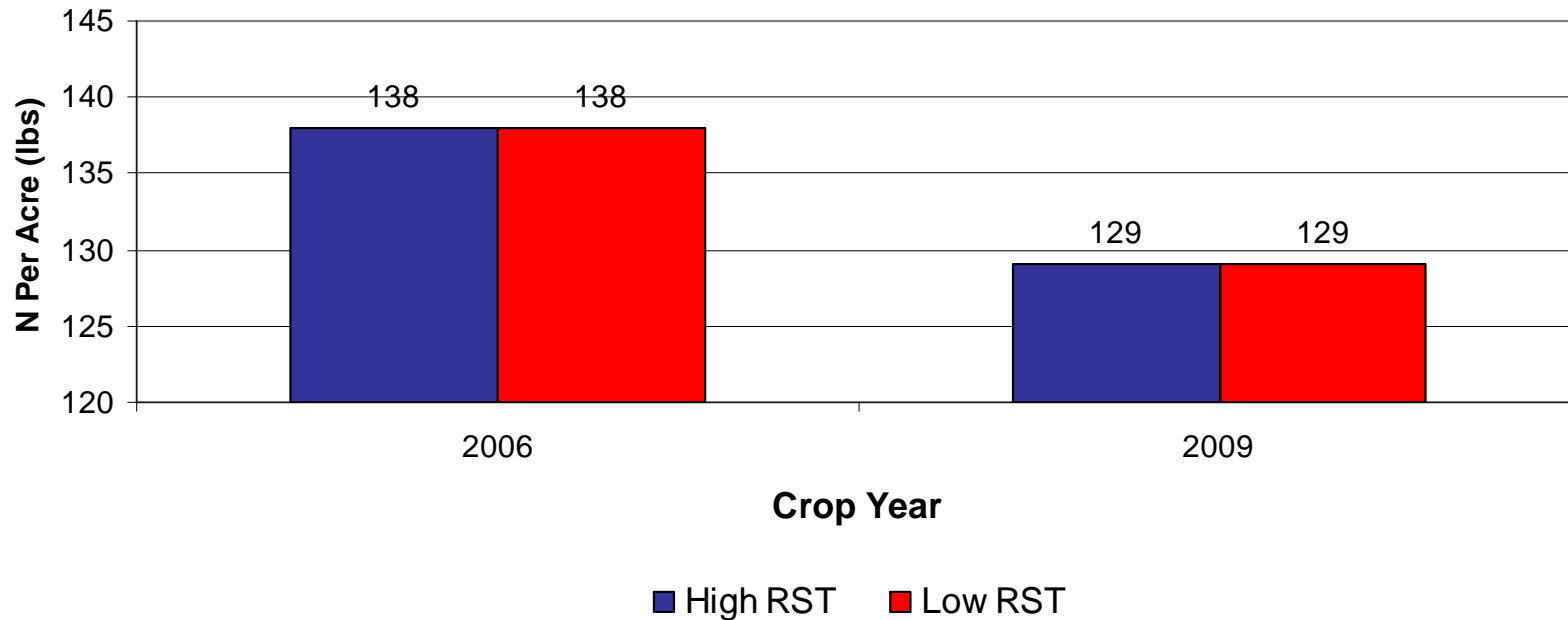
# Nitrogen Management

## 0-4' Soil Test

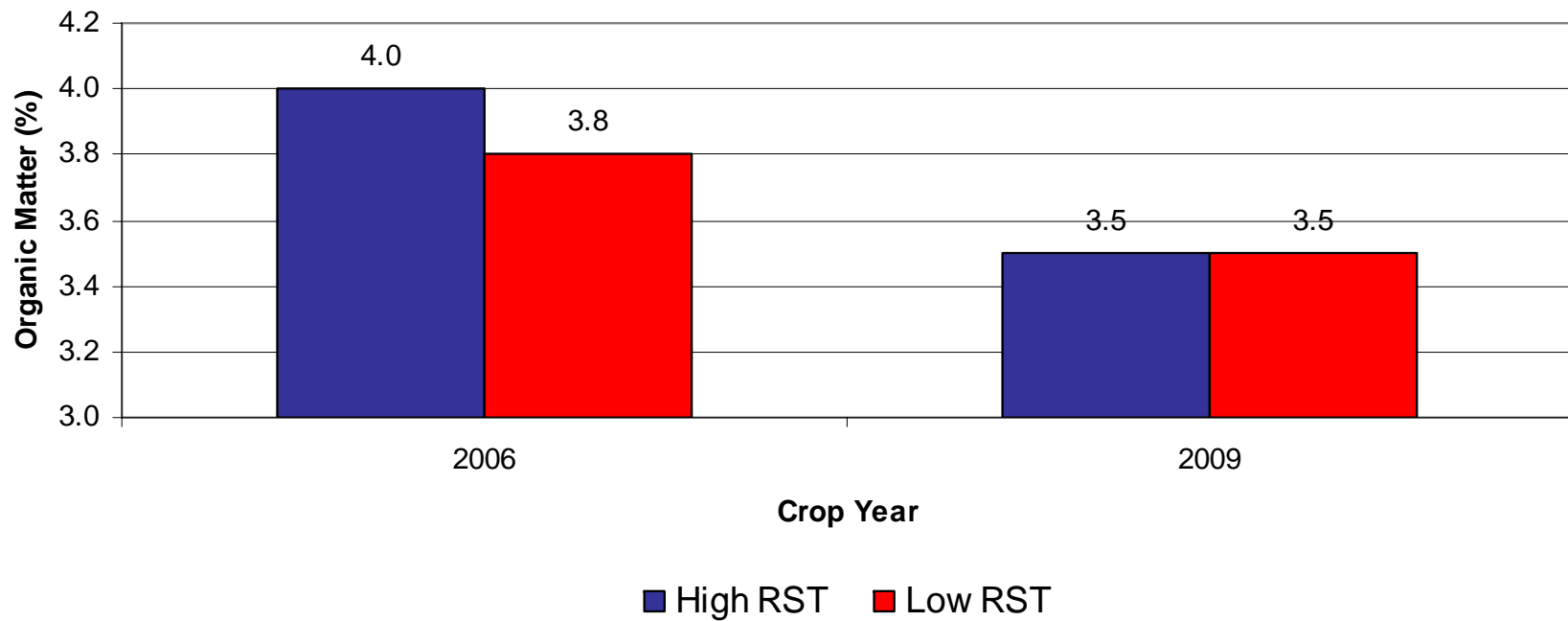


# Nitrogen Management

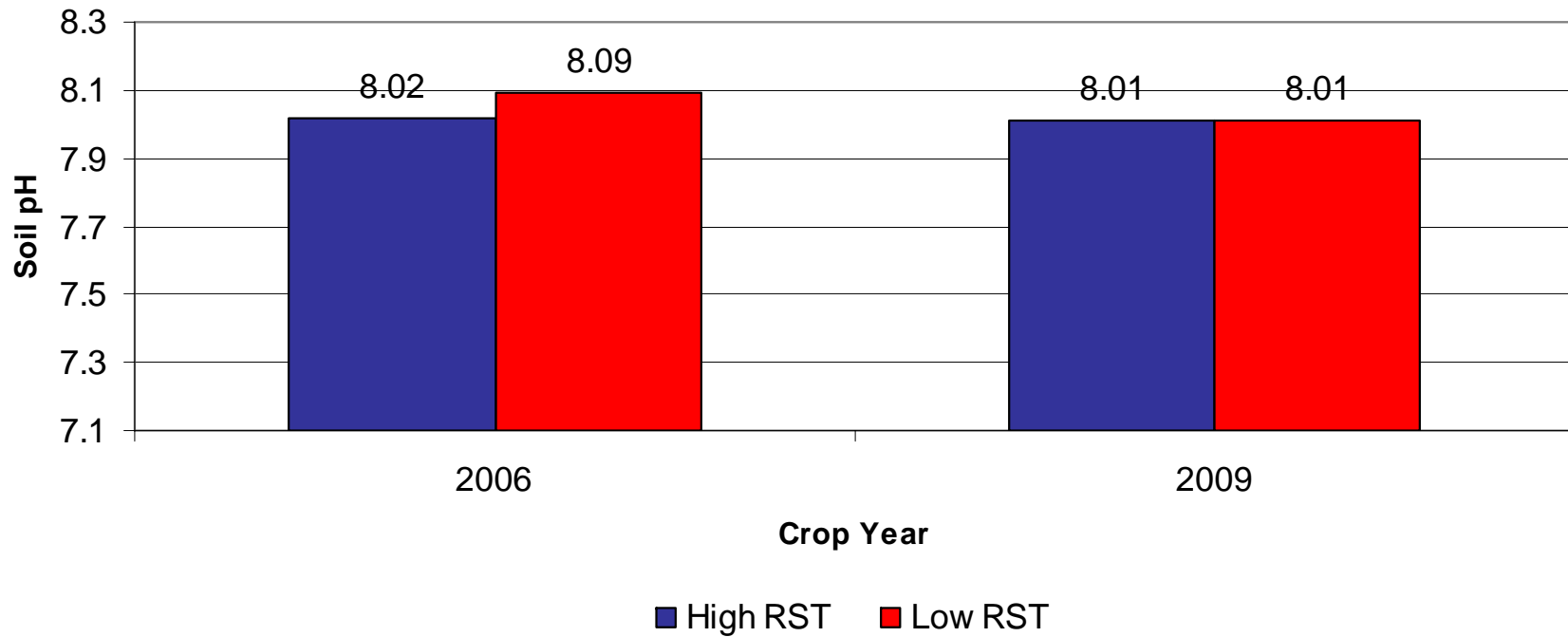
## Total Available Nitrogen



# Organic Matter Level



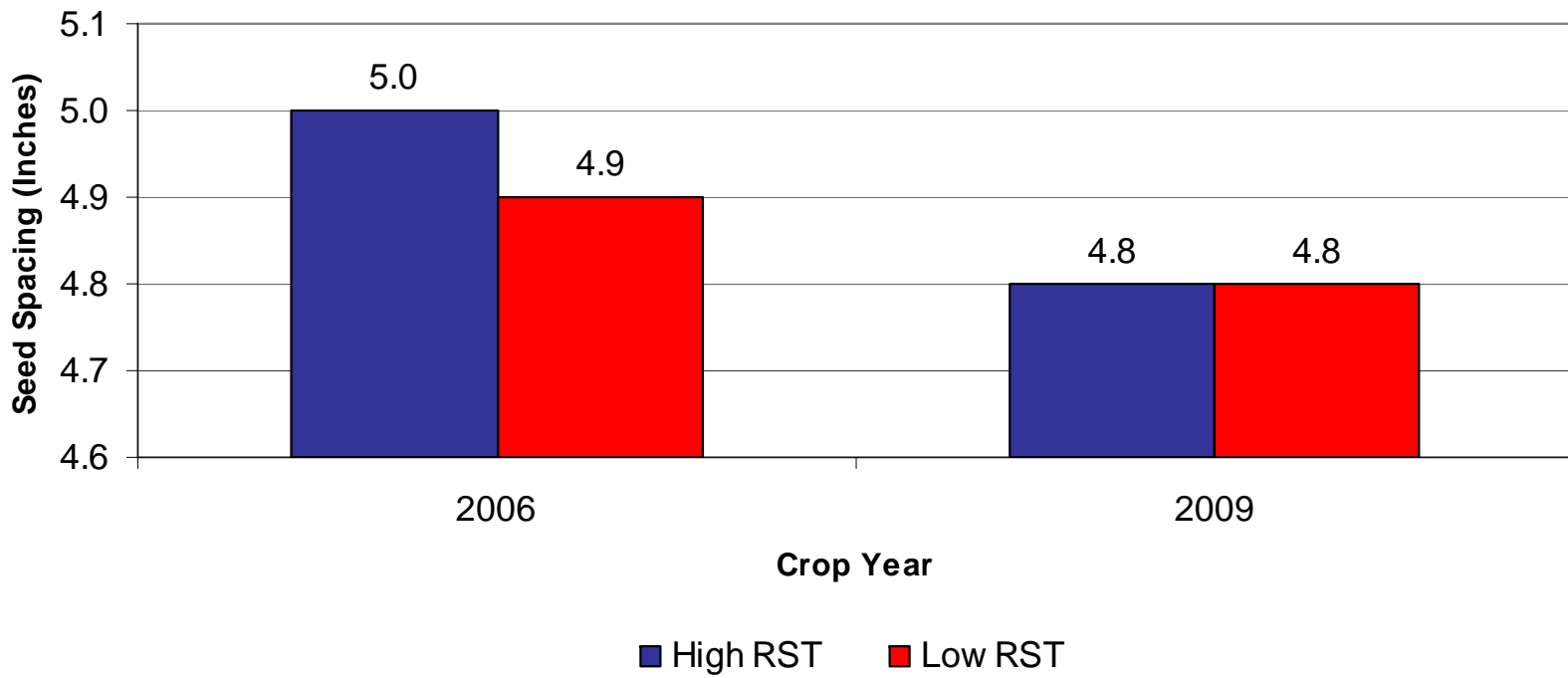
# Soil pH Level



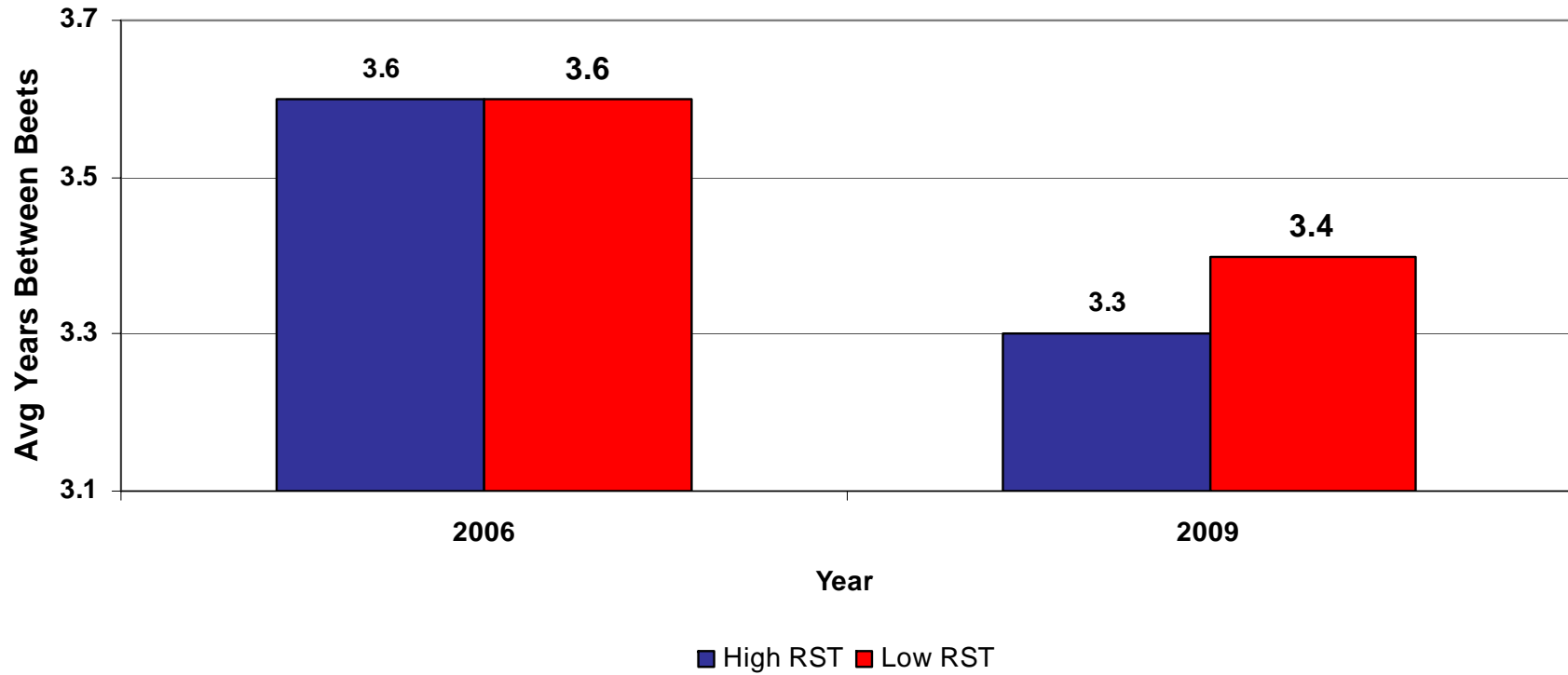
# Preceding Crop Percent of Acres

	<b>Small Grain</b>	<b>Edible Beans</b>	<b>Potato</b>	<b>Soybean</b>	<b>Other?</b>
2006 High	78	5	3	2	12
2006 Low	82	5	4	3	6
2009 High	89	6	1	2	2
2009 Low	83	6	4	6	1

# Seed Spacing



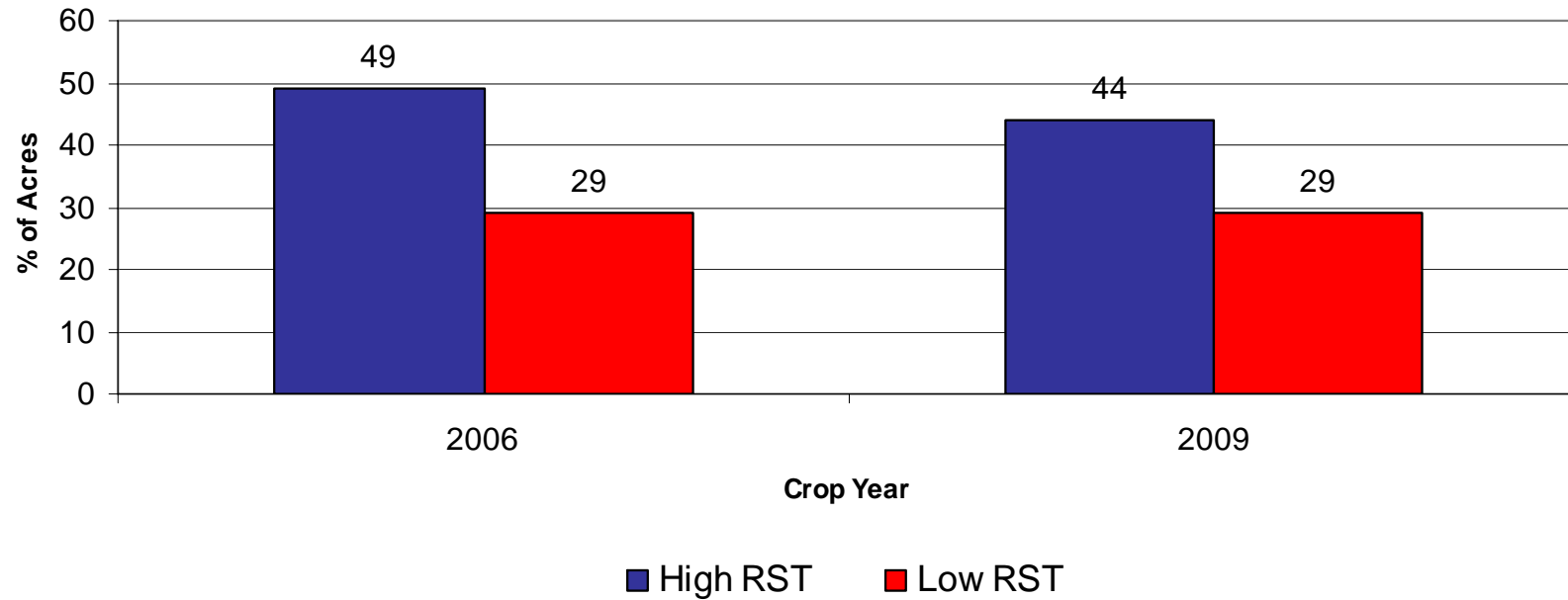
# Rotation Length



# Factors That Influenced Quality

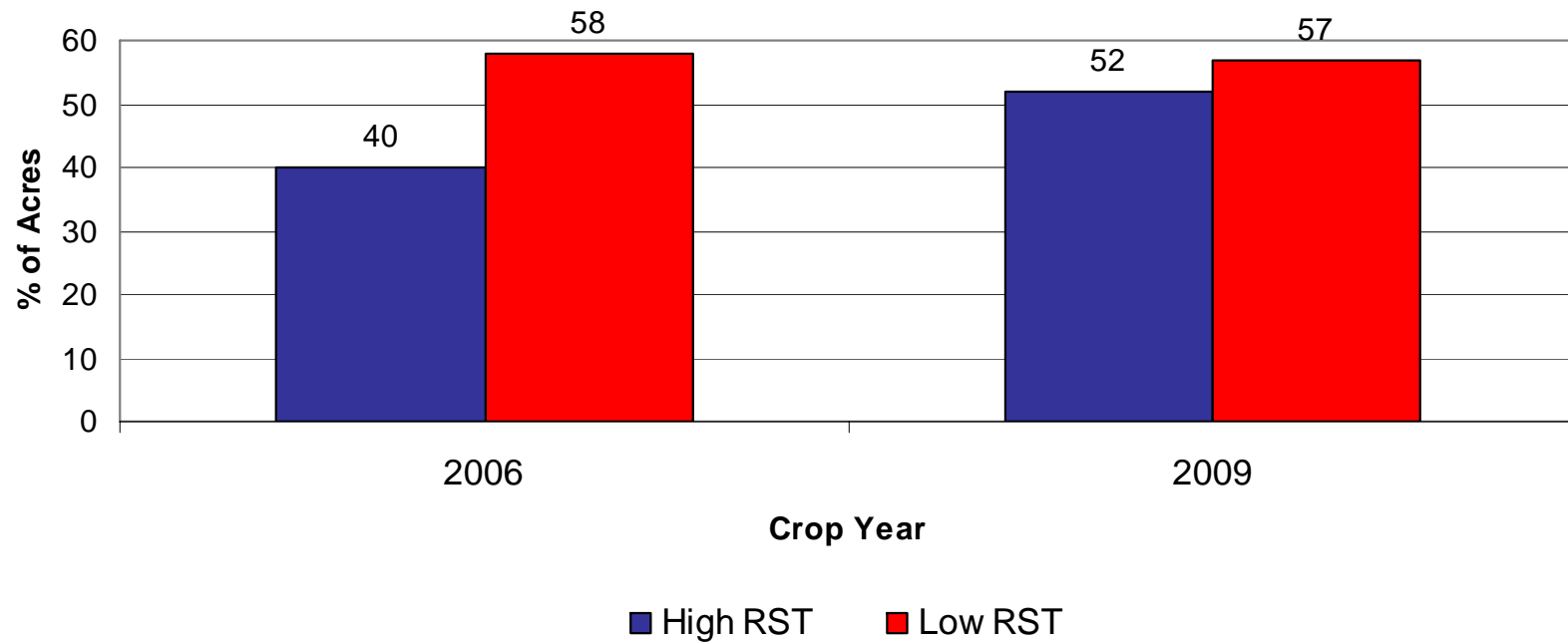
# Soil Type

## Heavy Textured Soils - Clays

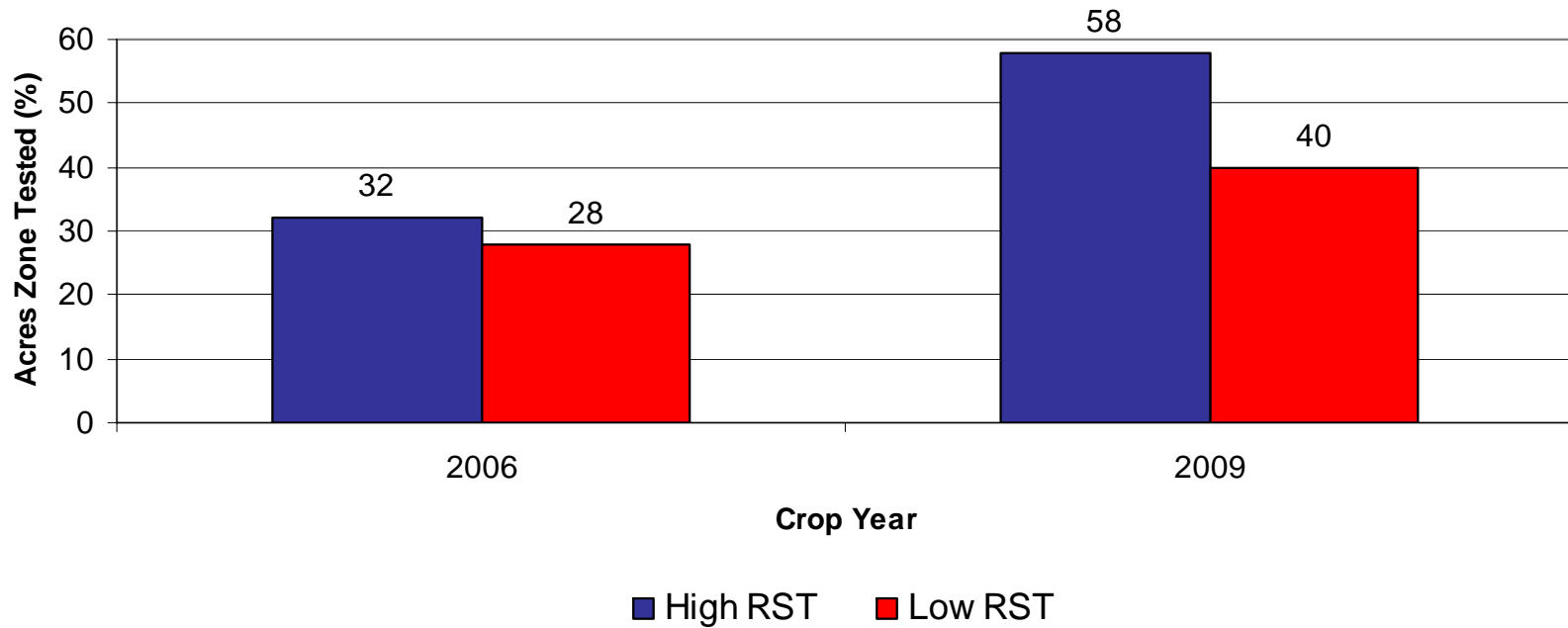


# Soil type

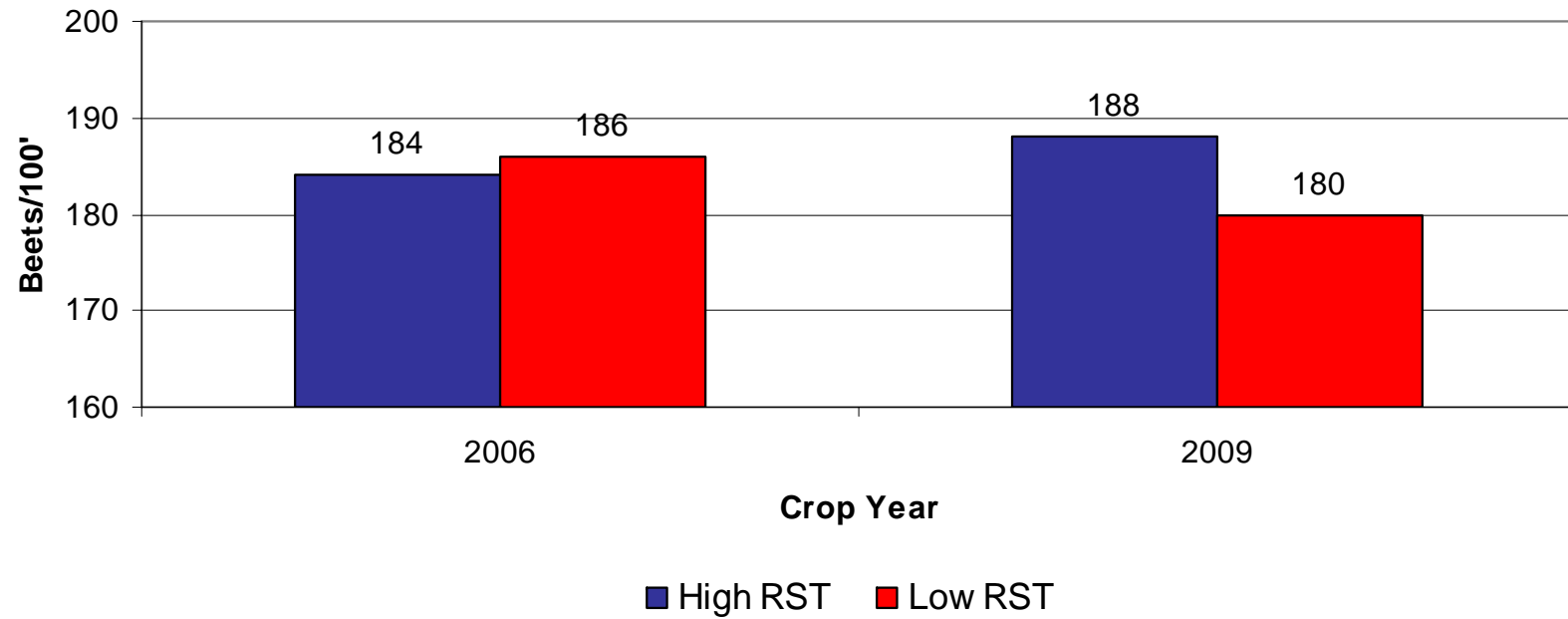
## Silt – Silt Loams



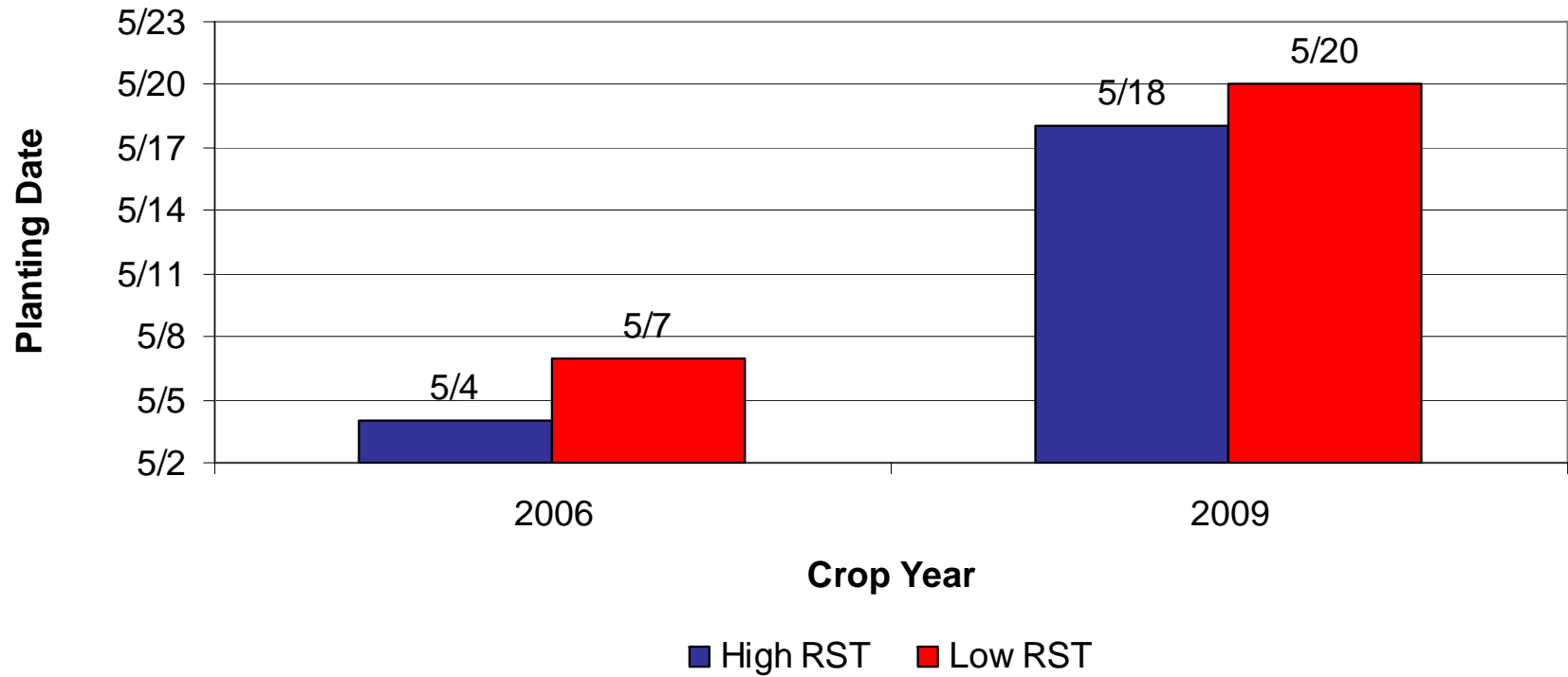
# Zone Fertility Management



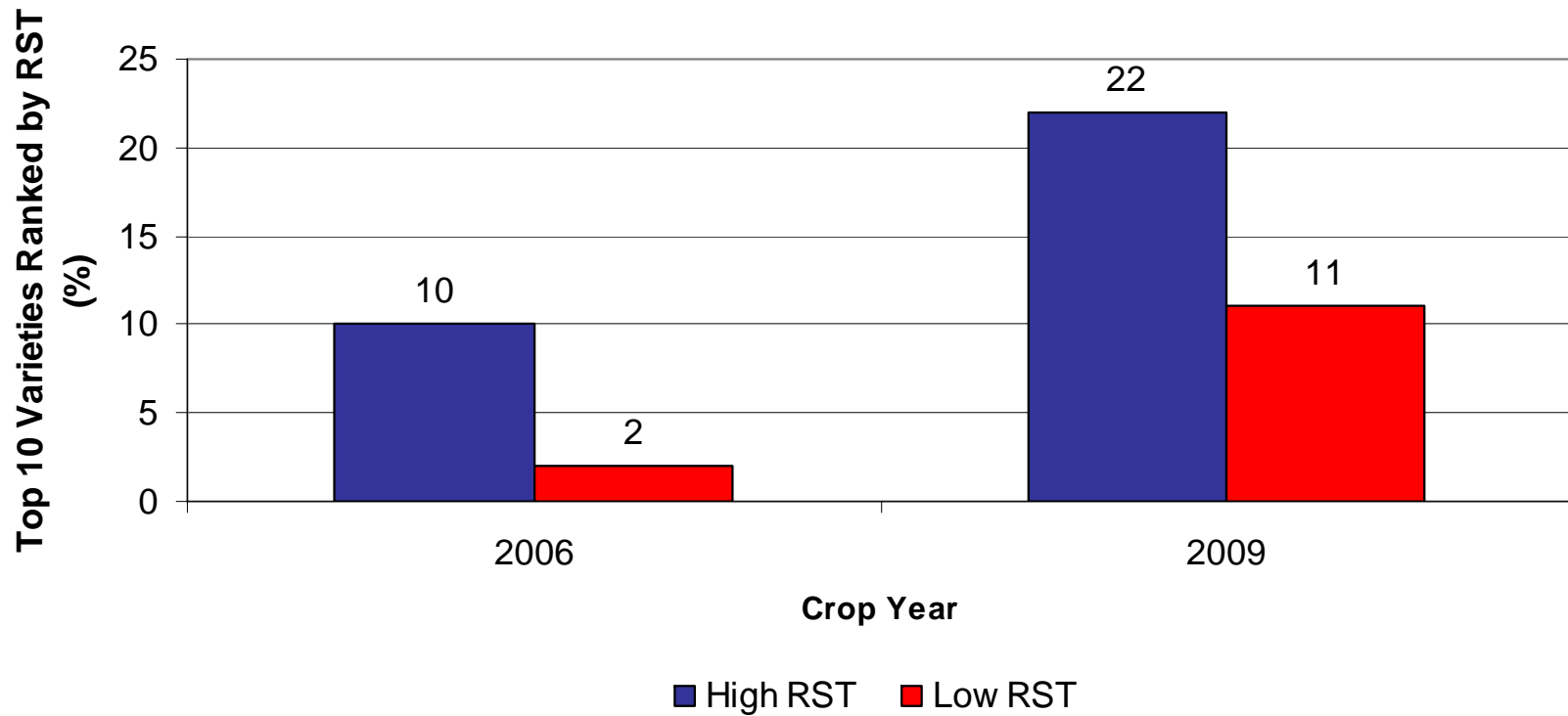
# Plant Population



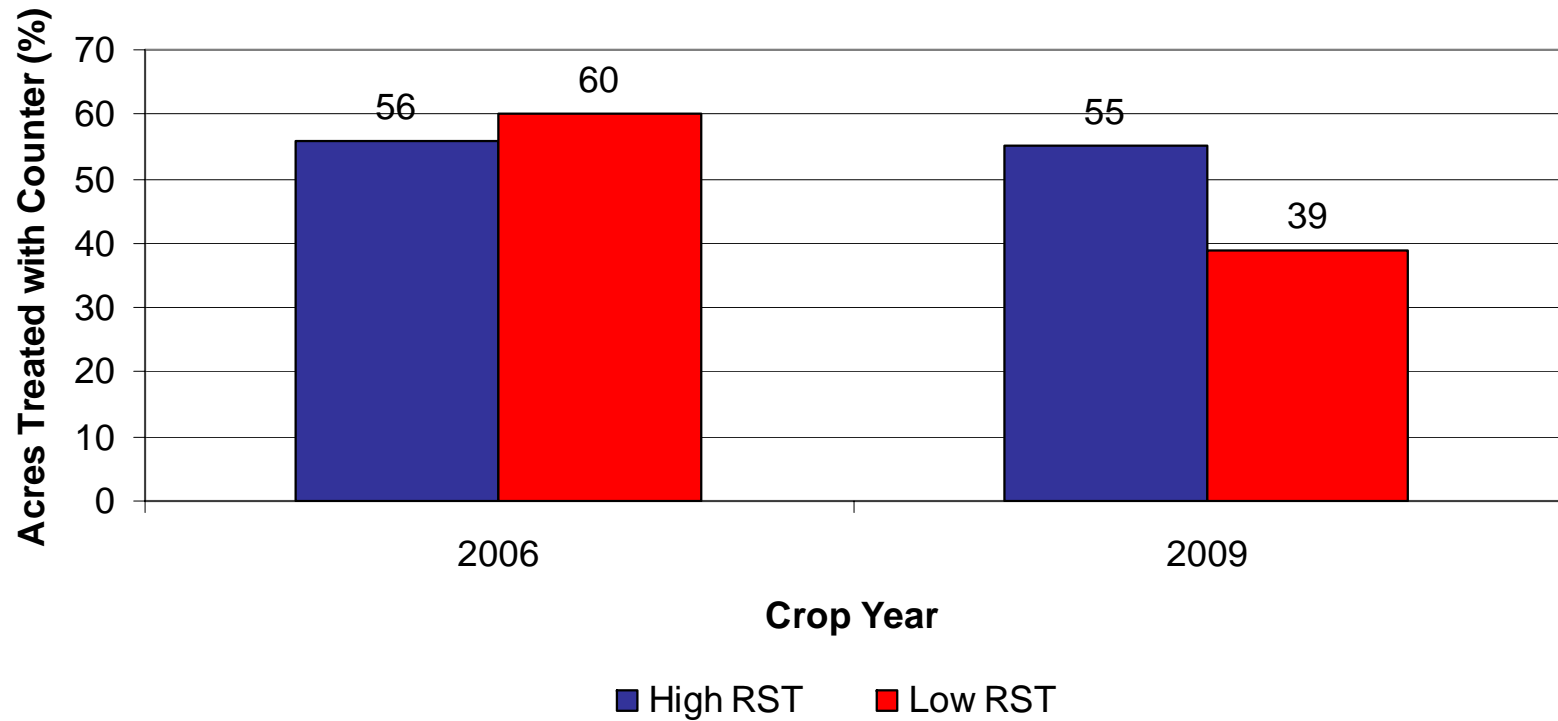
# Planting Date



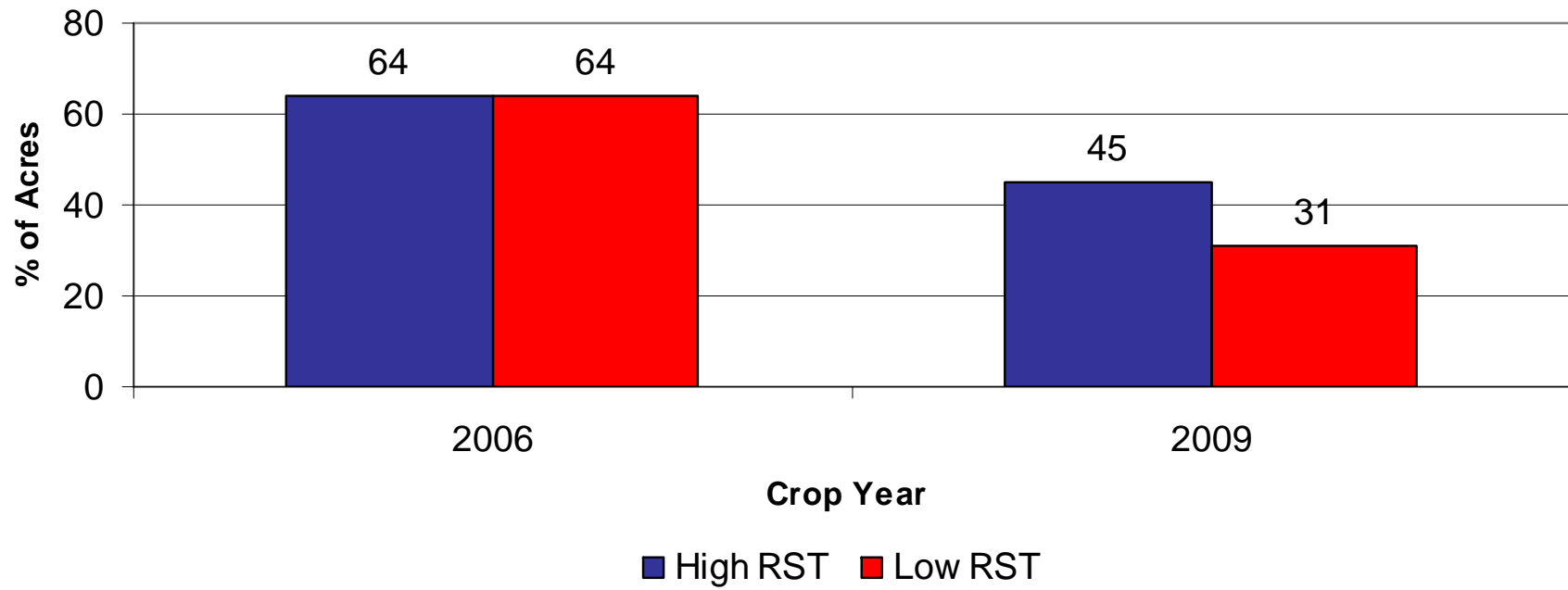
# Variety Selection



# Insecticide Usage (Counter)



# Acres With 2 or 3 Fungicide Applications



# Controllable Factors Most Influencing Quality

- Soil Type/Field Selection/Land Rent
- Zone Fertility Management
- Planting Date – Planting Capacity
- Variety Selection
- Number of Fungicide Applications
- Plant Population
- Harvest Operations
- Headlands Management

# Uncontrollable Factors Influencing Quality (Weather)



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# Why Excellent Quality in 2006?

## 25.4 TPA, 18.2%, 1.26 SLM

- Early planting – May 6<sup>th</sup> average
- Excellent stands
- Below average rainfall
- Average growing degree days
- No frost until October 11

# Why Poor Quality In 2009?

## 22.3 TPA, 16.7 %, 1.05 SLM

- Late planting
- Below average growing degree days
- Above average rainfall
- Very warm September
- Very cold October
- Multiple October frosts
- Very wet October

# Questions

