



2016
Pecan Disease Management
Update

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Fungicide Use Survey



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2016 PECAN FUNGICIDE SURVEY

COUNTY: _____ ACRES: _____

- | | | |
|----------------------|----------------------------------|------------------|
| A) TPTH (Tin) | B) Strobilurin (Group 11) | C) Elast |
| D) phosphite | E) DMI (Group 3) | F) Topsin |

Pre-pollination: _____
(Bud break through nut set)

Post-pollination: _____
(Nut set to shell hardening)

After shell hardening: _____

- Importance when planning program: 1 (none) – 10 (most important)
 - Efficacy (how well it works): _____
 - Resistance management: _____
 - Cost: _____



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• Did you use aerial application of fungicides? YES NO

○ If yes, approximately how many? _____

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- What is your preferred timing for fungicide sprays? DAY NIGHT

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| A) TPTH (Tin) | B) Strobilurin (Group 11) | C) Elast |
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Pre-pollination: <i>(Bud break through nut set)</i>	<u> B </u>	<u> B+D </u>	<u> E </u>	_____	_____
Post-pollination: <i>(Nut set to shell hardening)</i>	<u> E </u>	<u> E+A </u>	<u> A </u>	_____	_____
After shell hardening:	_____	_____	_____	_____	_____

- Importance when planning program: 1 (none) – 5 (most important)
 - Efficacy (how well it works): 5
 - Resistance management: 5
 - Cost 5



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Did you use aerial application of fungicides?

YES NO

• If yes, approximately how many?

• What is your preferred timing for fungicide sprays?

DAY NIGHT

Phosphite Residues



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Phosphite Residues

- The European Union (EU) recently revised the definition of the residues included under the limits for the pesticide fosetyl-al (Aliette).
- The expanded EU definition includes phosphite-containing products registered as foliar fertilizers & fungicides as well as.



Phosphite Residues

- The default MRL in Europe is **2 ppm**.
- Temporary MRL of **75 ppm** expired December 31, 2015.



Phosphite Residues

- This affects only nuts exported to the EU; growers who know their crop is going to that market may want to consider not using phosphite fungicides until this issue is resolved.



Dormant Fungicide Applications

Kyle Brown

EVALUATE THE USE OF DORMANT SPRAY APPLICATIONS IN
PECAN FOR THE REDUCTION OF OVERWINTERING
INOCULUM



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Dormant Fungicide Applications

Dormant Applications (March)

- Elast
- Sulforix
- Sulforix + Elast



Dormant Fungicide Applications

- Reduction in sporulation.
 - Elast provided the more consistent reductions.
- Reductions in disease no significant.



Dormant sprays

- Not enough data to recommend true dormant sprays.
- The use of Elast as a first spray could be beneficial.
 - Reduce initial inoculum
 - Take burden off systemic fungicides (DMIs, strobilurins, phosphites).

UGA Pecan Scab Fungicide Sensitivity Screening Program



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Pecan Scab Fungicide Sensitivity Summary - 2015

- 24 counties
- 78 samples

Supported by grant from the Georgia
Agricultural Commodity Commission for Pecans



2016 Fungicide Sensitivity Testing

- Do not send routing samples; only when there is a potential resistance issue.



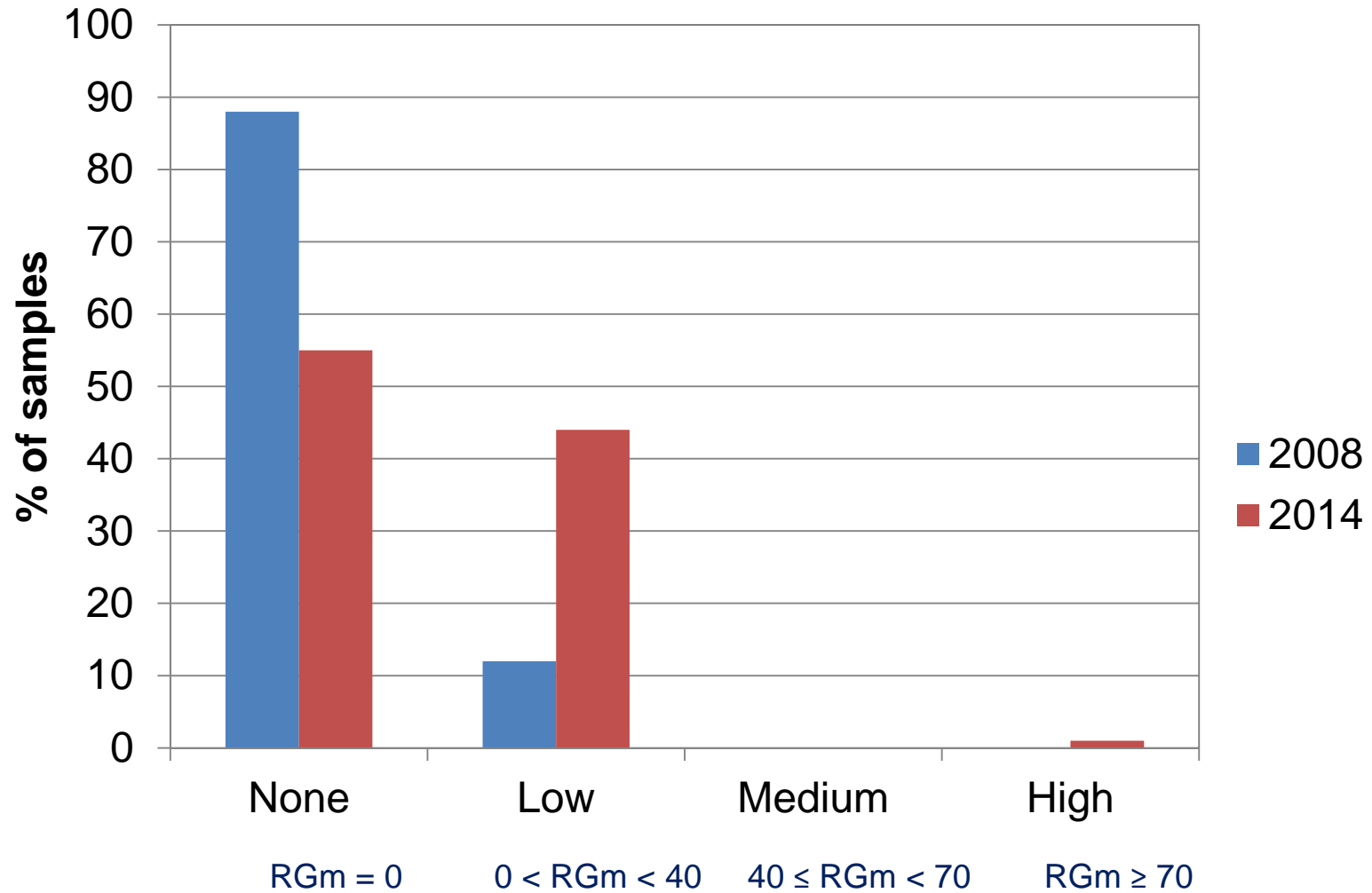
What have we learned?

2008, 2014, 2015

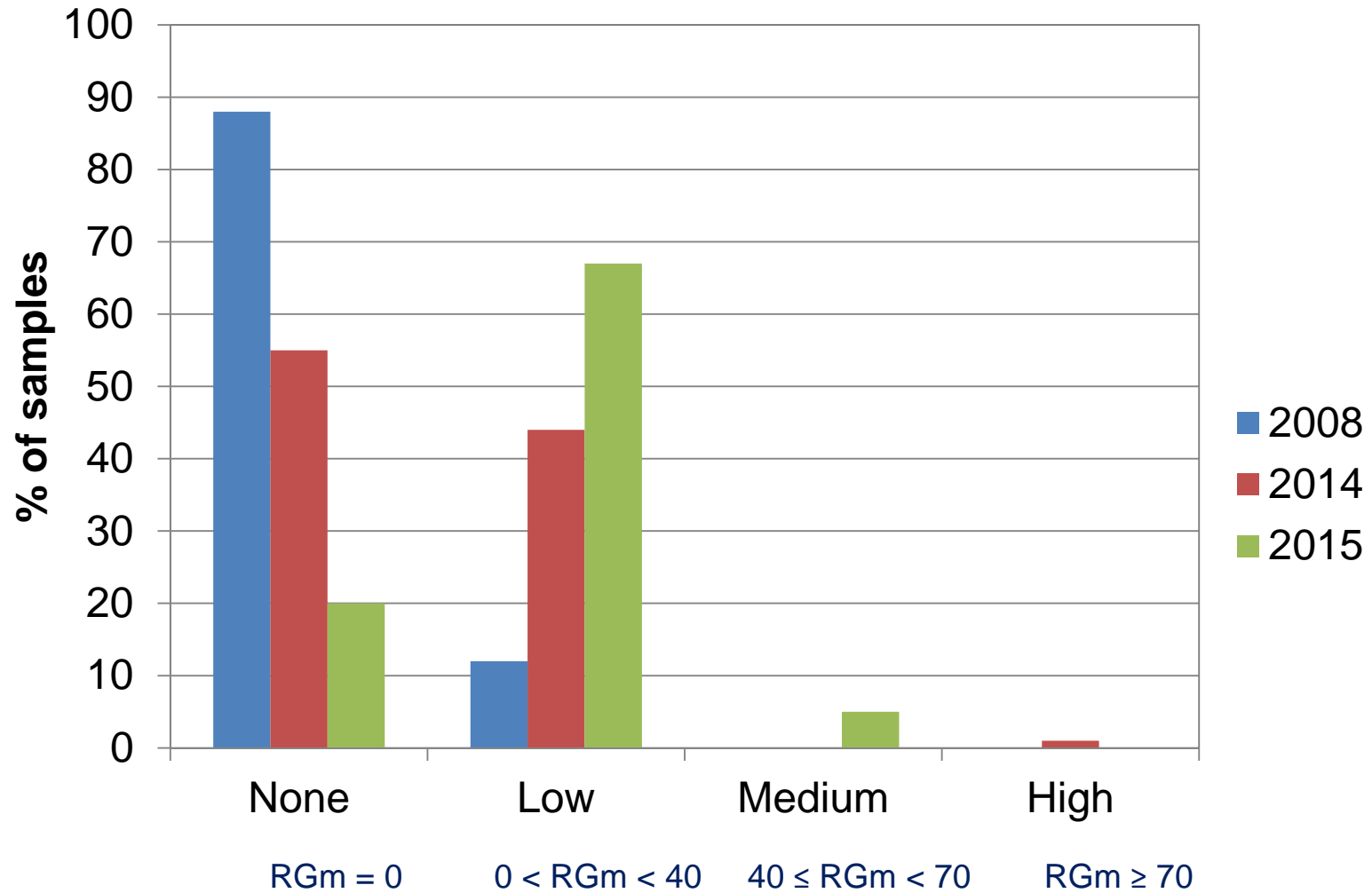


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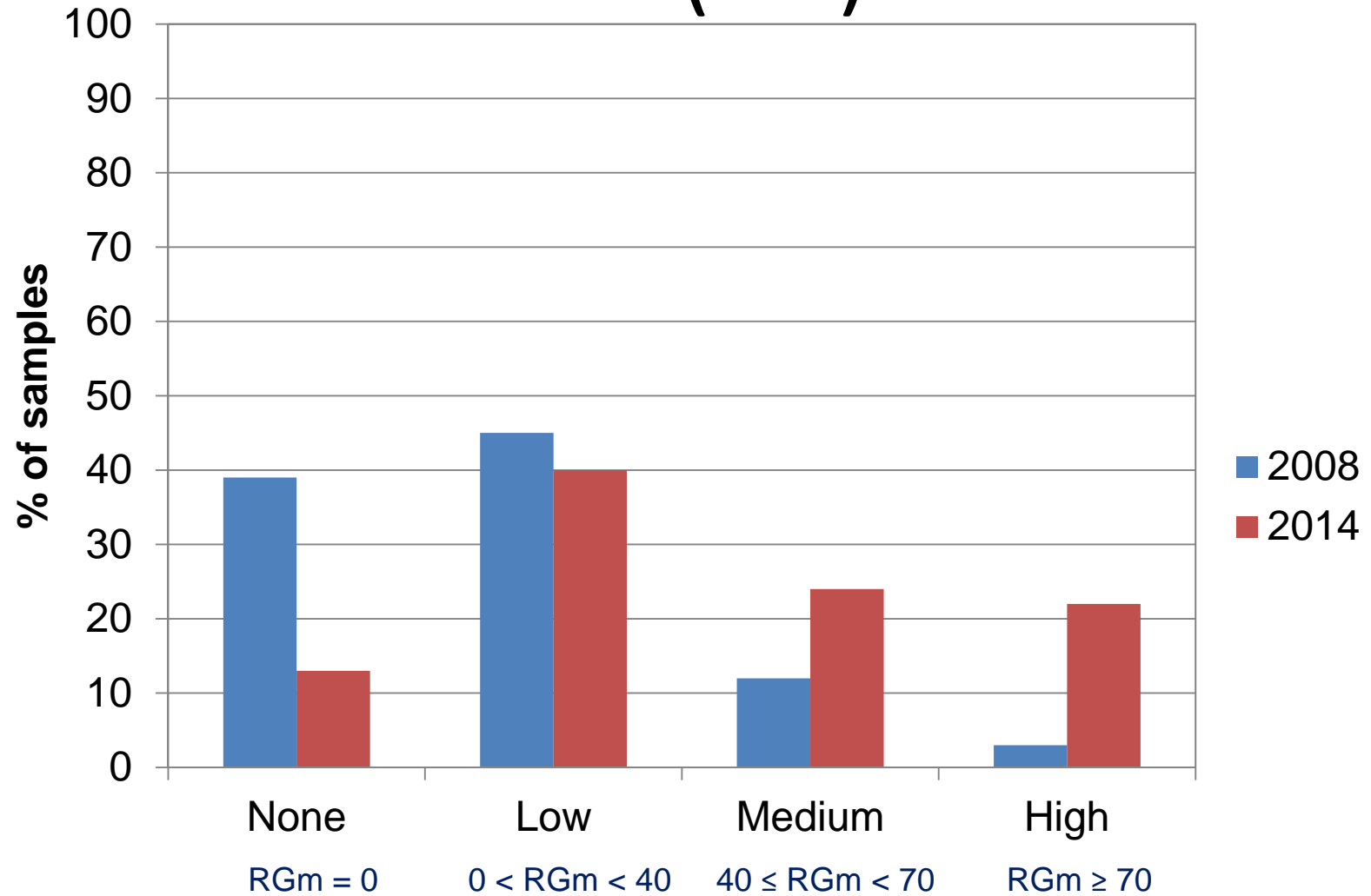
dodine



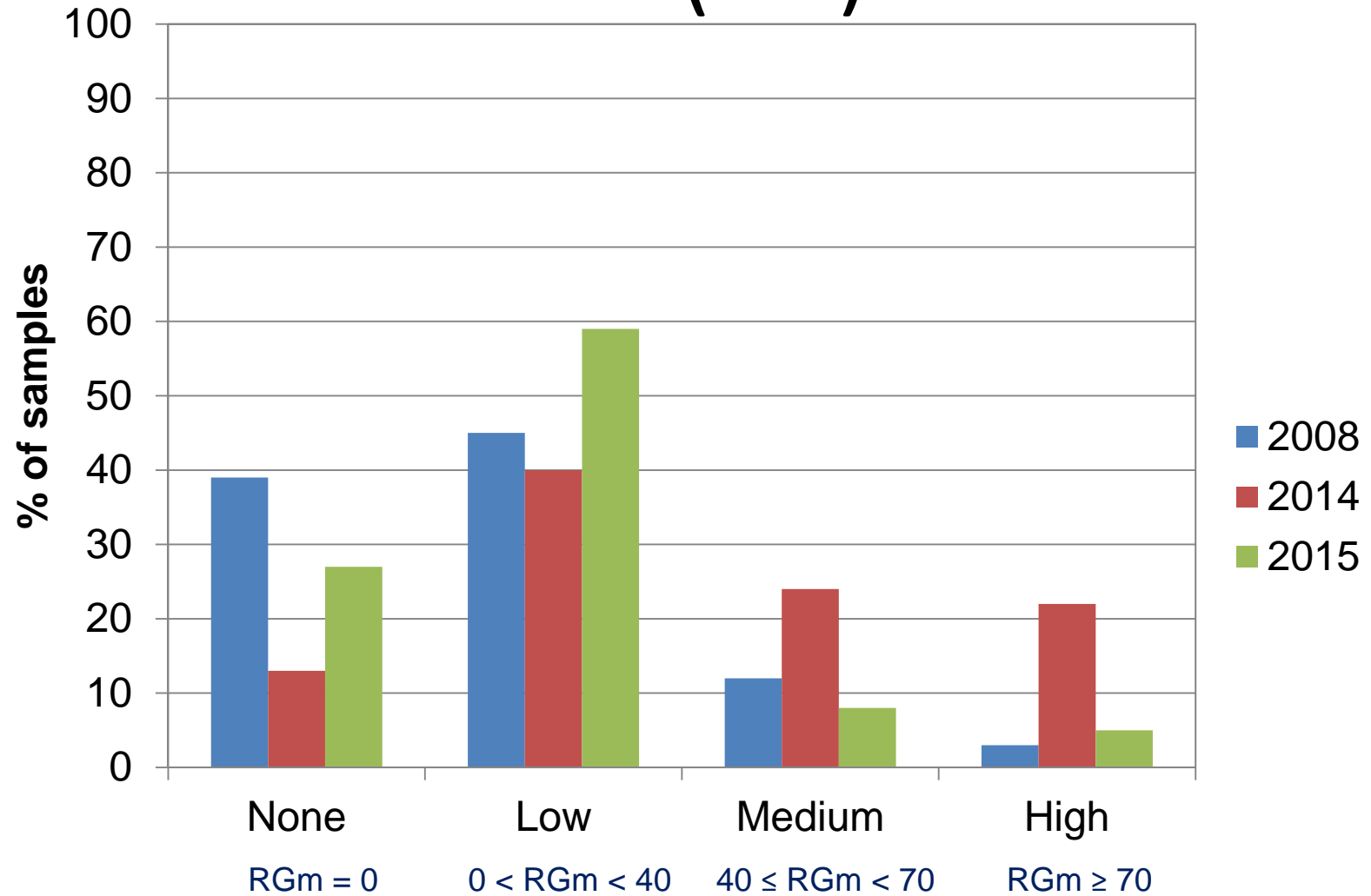
dodine



TPTH (Tin)



TPTH (Tin)

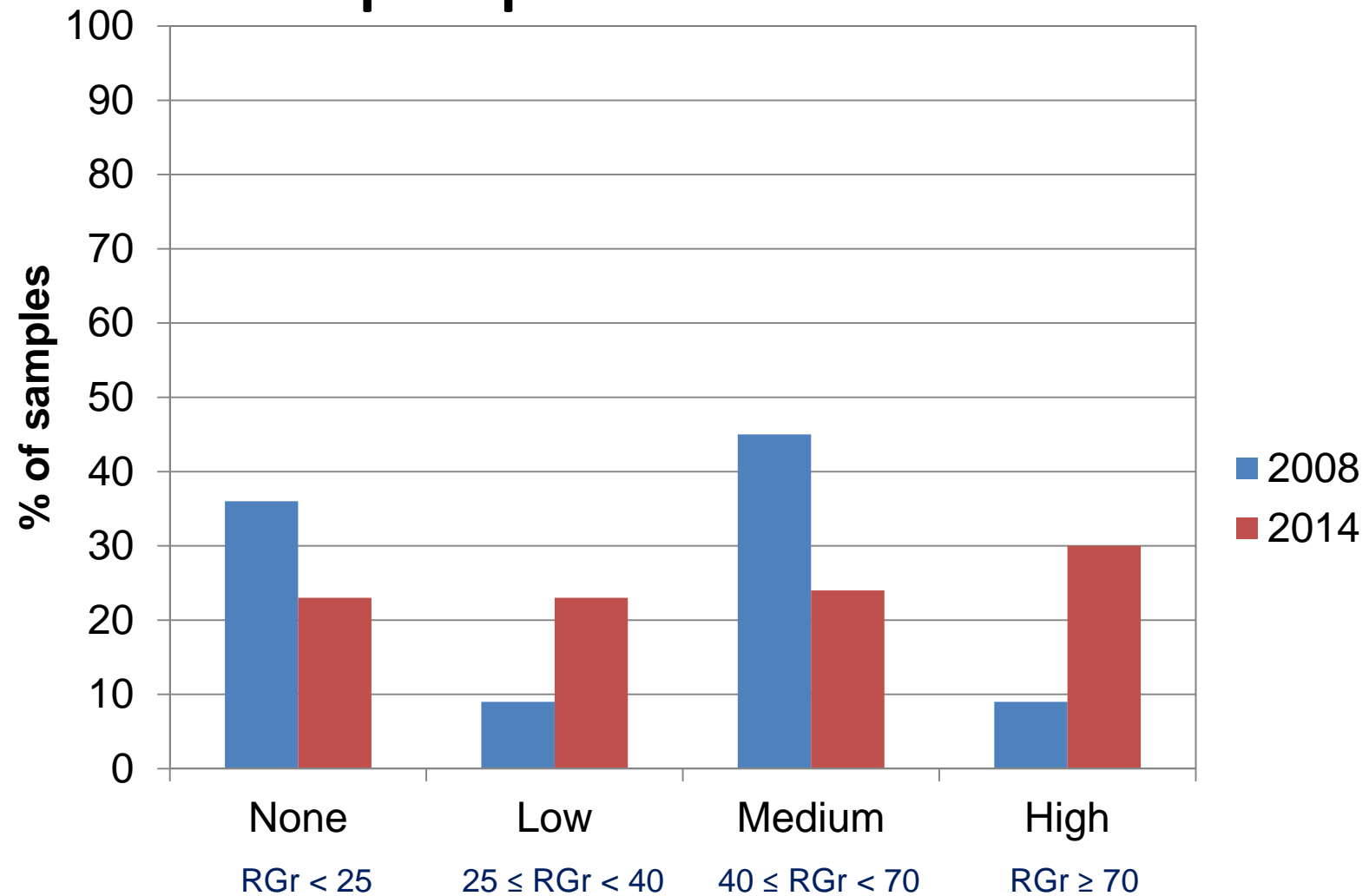


Tin and Elast

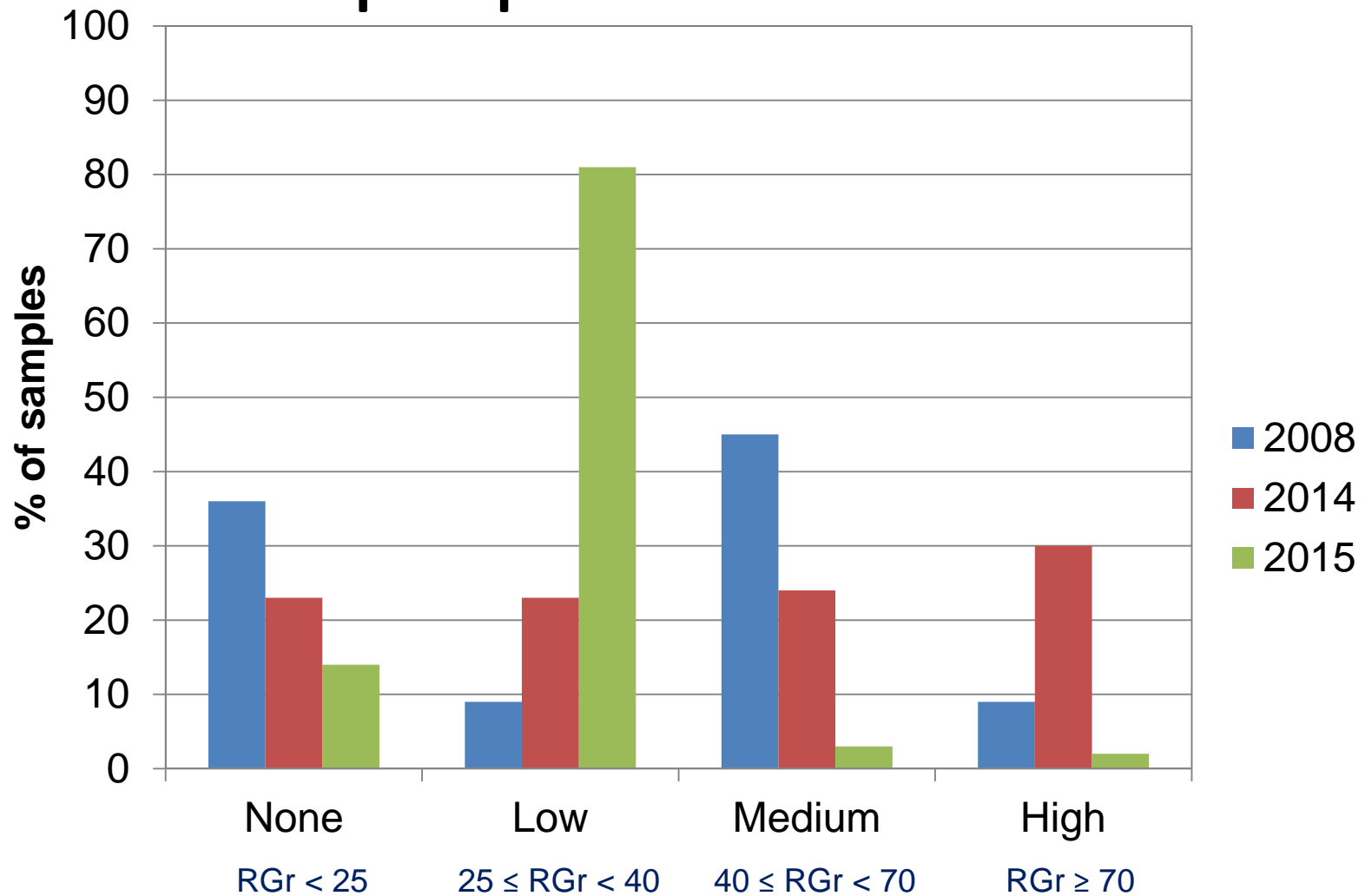
- Relatively good shape, but sensitivity issues are real.
- Do not use full season.
- Best fit is summer cover sprays



propiconazole



propiconazole



azoxystrobin

- do not have a reliable bioassay for Qols (Group 11)
- No confirmed resistance.

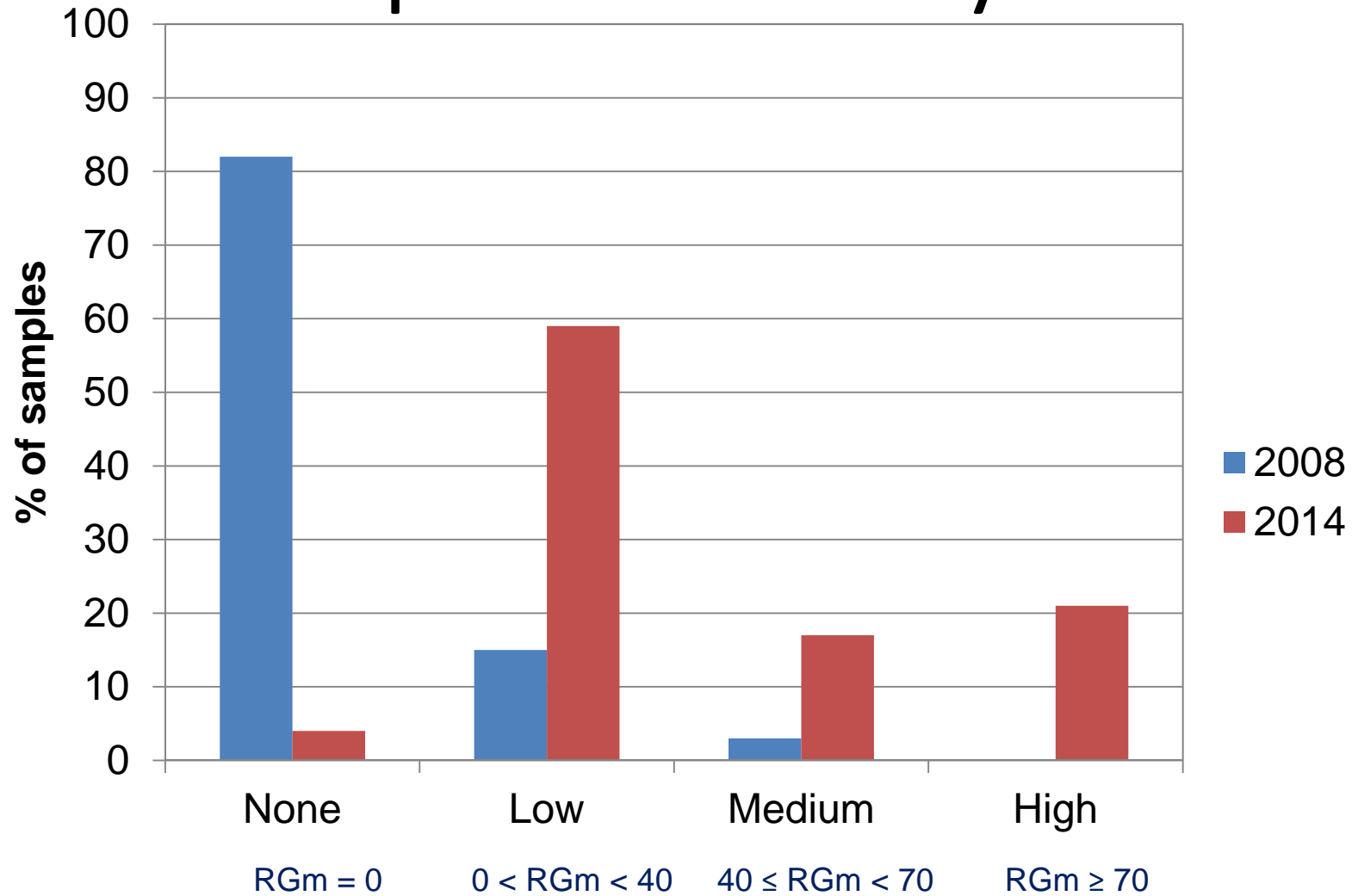


Systemic products (DMIs and strobilurins)

- DMIs with long documented insensitivity.
- Avoid stand alone use.
- Limit the number of applications.
- Use in combination with other modes of action.



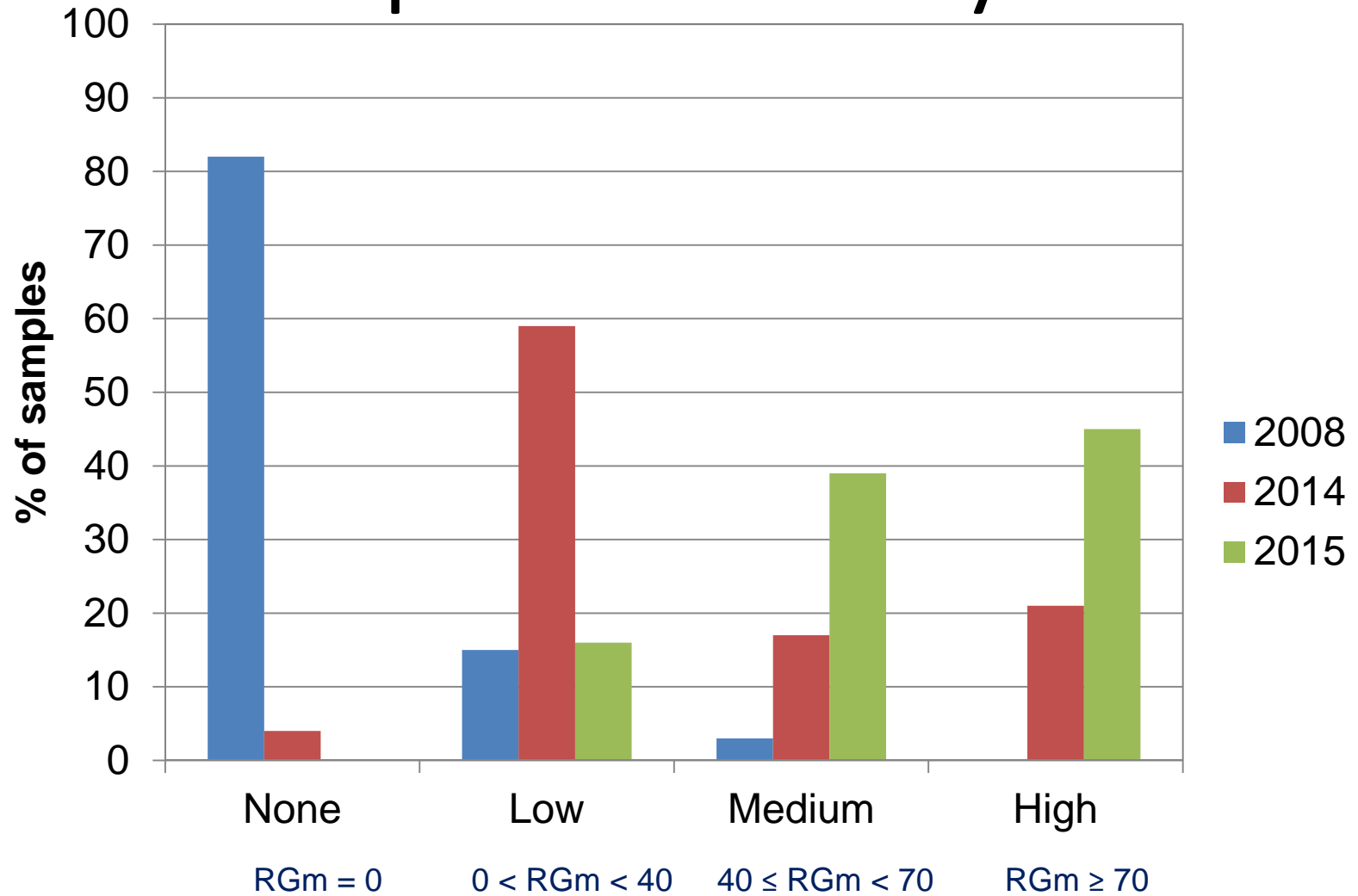
thiophanate methyl



Insensitivity class

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thiophanate methyl



thiophanate methyl

- Always tank mix.
- Always use full rate.
- Only use 1x or 2x per year.
- Do not use every year.



New Names/Products

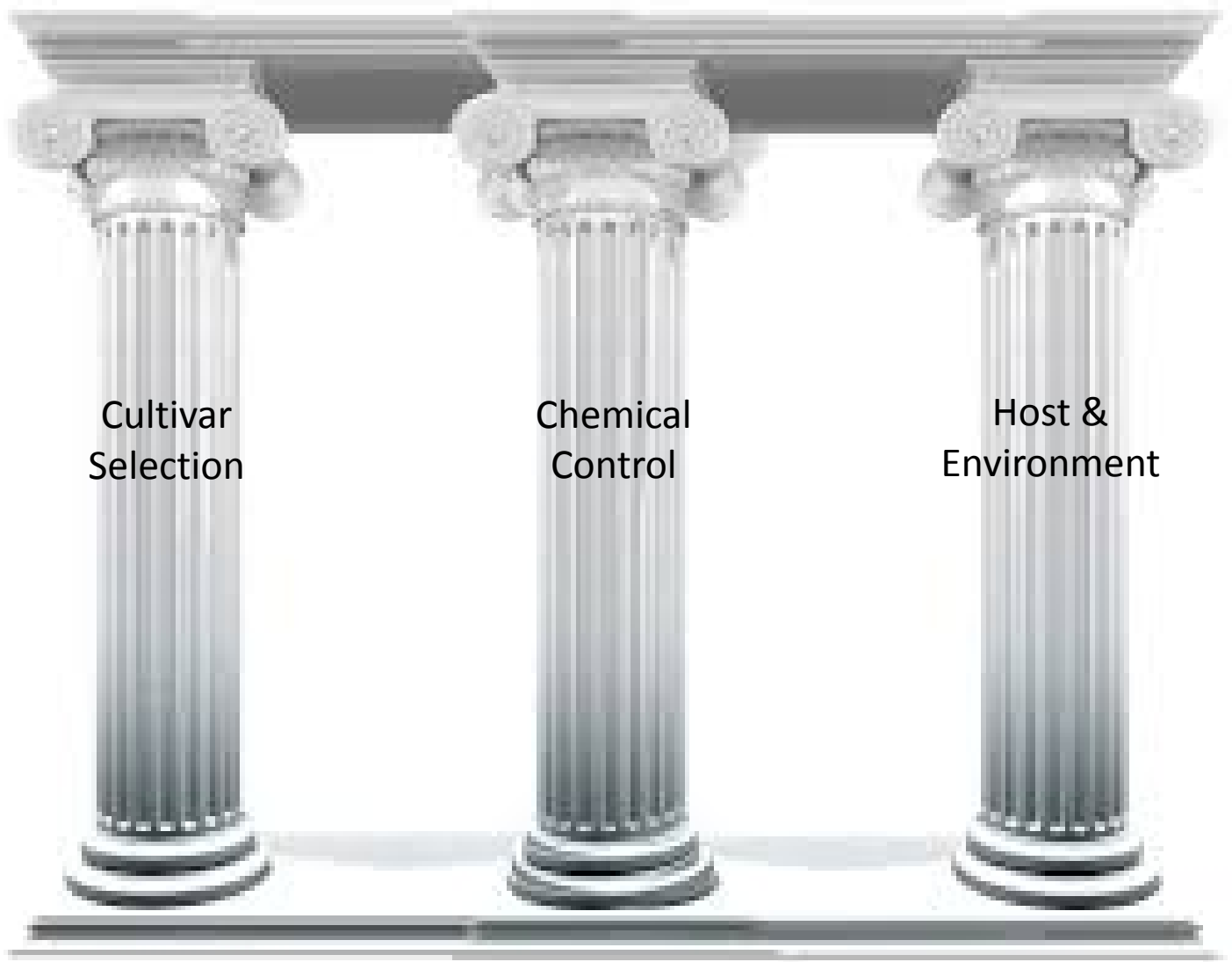
- Azaka
 - *Azoxystrobin – active ingredient in Abound*
- Minerva Duo
 - *tetraconazole + triphenyltin hydroxide*
- Viathon
 - *phosphorous acid + tebuconazole*



New Names/Products

- Ziram 67 DF
 - active ingredient = ziram
 - Protectant
- FRAC Group M3
- Labeled for scab & anthracnose
- 6 – 8 lbs. per acre
- multi-site alternative in cases where resistance to other protectants is an issue





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Cultivar
Selection

Chemical
Control

Host &
Environment

Fertility and tree health
Site selection
Pruning
Thinning
Surrounding vegetation
Mowing



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Questions?



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