

# Weed Management Trials in Specialty Crops

High –Value Crops Project

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# Onion Weed Control Trial

- Conducted field trial evaluating A16003 PRE and early POST.
- 4 cvs: Calibra, Delgado, Hamilton, Sedona
- Stand counts were significantly reduced by any treatment with A16003
- Greatest yield was with application of Satellite HydroCap fb Goaltender and bromoxynil and/or handweeded for all cultivars

# Adjuvants to Hasten Potato Desiccation

- Compared visible ratings with nvgi readings and Canopeo app for leaf and stem necrosis.
- NDVI and %canopy cover statistics were identical to visible ratings.
- By 8 DAT, Diquat with all adjuvants except Noble, AG8050, and AG17054 provided > 80% leaf necrosis.
- Diquat + Activate Plus resulted in 93% leaf necrosis by 8 DAT.



# Canopeo issues



1.80%  
Canopy  
Cover



6.75%  
Canopy  
Cover





# RapidSCAN CS-45 issues



0.5322  
Reading



0.7914  
Reading





# Simulated drift trial on Potato

- Matthew Brooke MS research
- Glyphosate + dicamba drift trials on 3 chippers
  - Simulated drift at tuber initiation growth stage
  - Glyphosate 0.2, 0.04, lb/A (5, 1 oz/A)
  - Dicamba 0.09, 0.02 lb/A (2.8, 0.6 oz/A)
  - Atlantic, Lamoka, Dakota Pearl
  - Two locations near Oakes, ND

# Tubers harvested

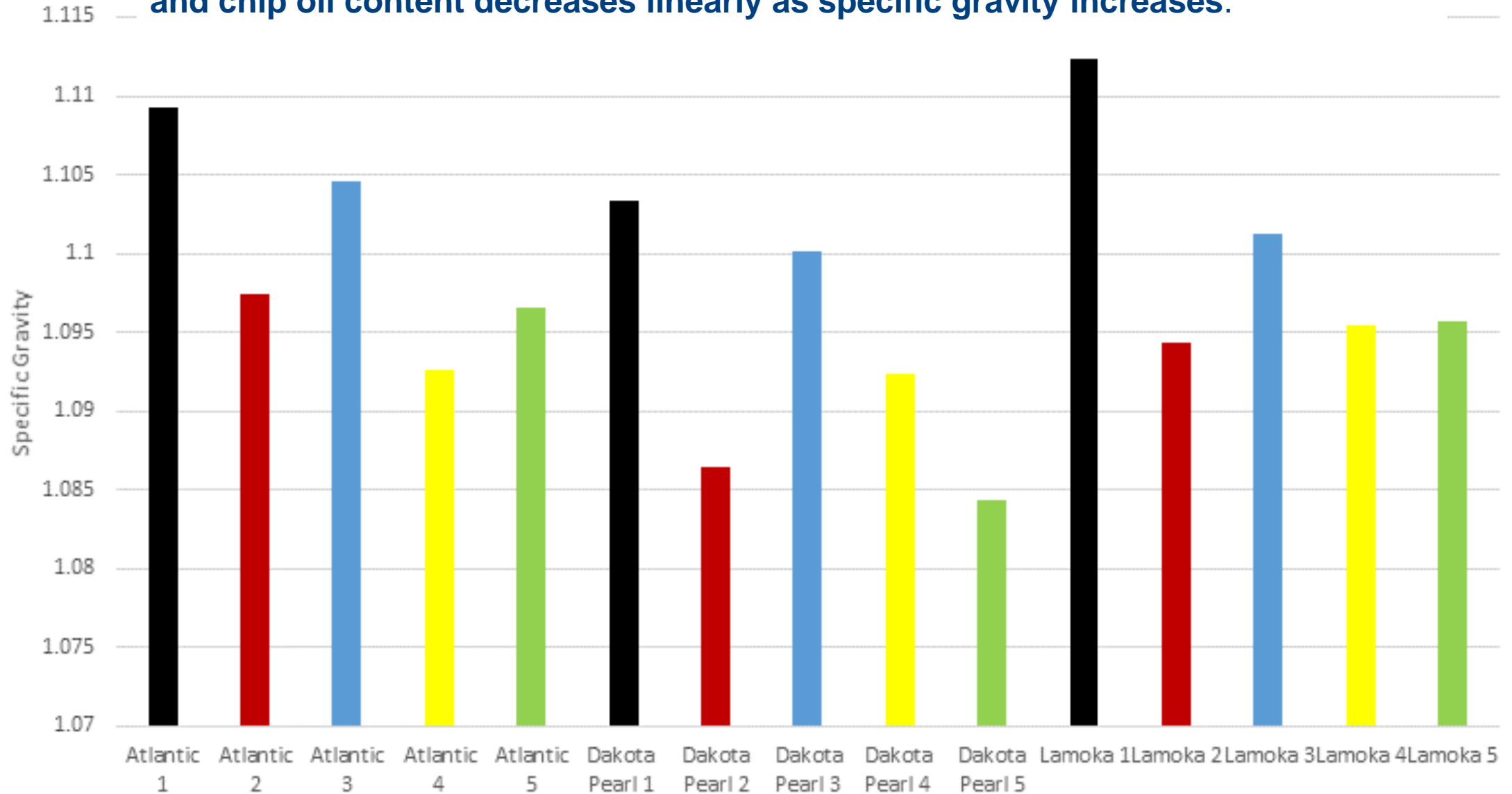




# Specific Gravity

1=untreated, 2=high D+G, 3=low D+G  
4=high Dicamba, 5=high Glyphosate

Lower specific gravity potatoes are more costly to process. Chip yield increases and chip oil content decreases linearly as specific gravity increases.



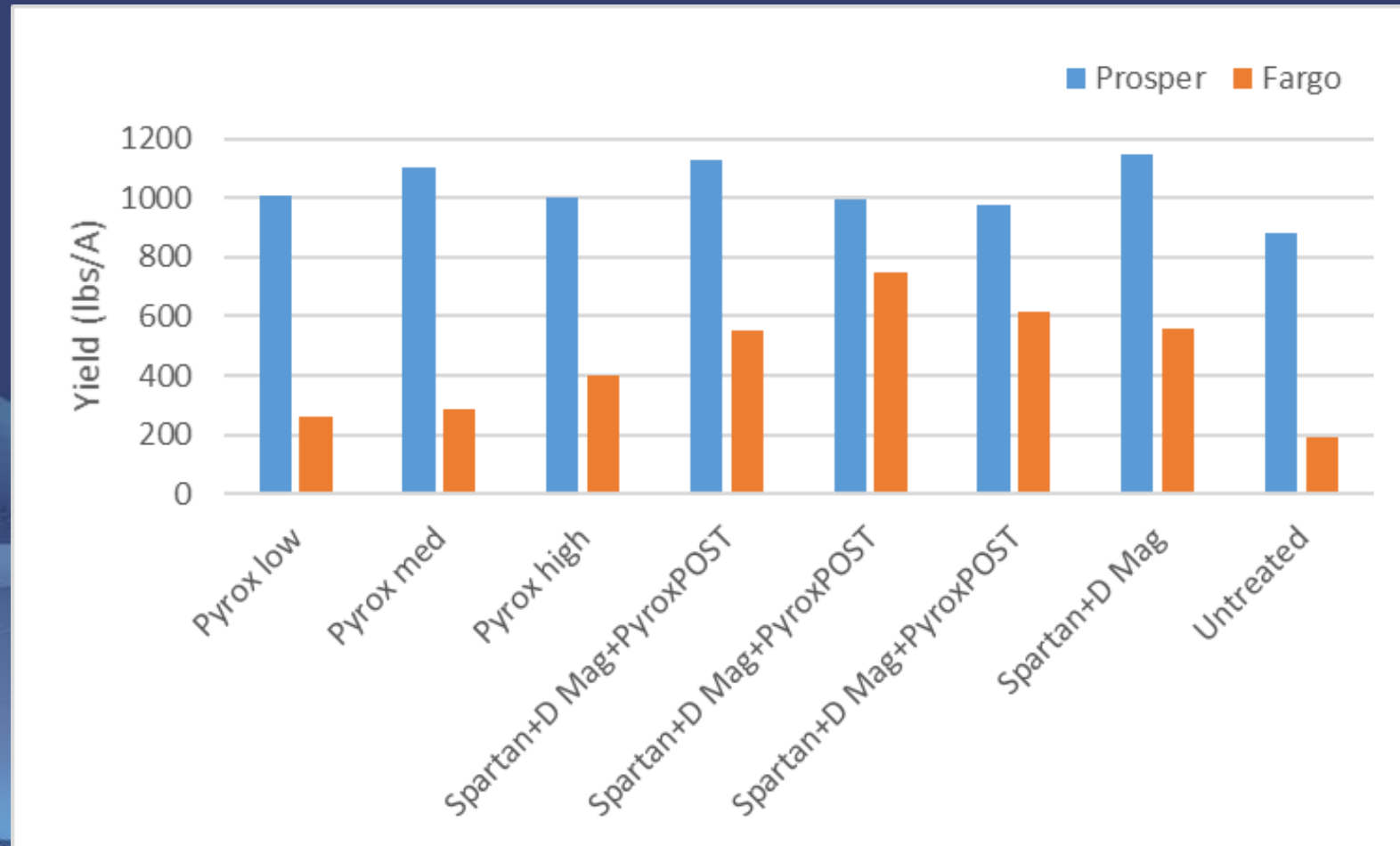


# Pyroxasulfone trial

- Conducted field trials comparing pyrox. alone (PRE) and in combination with labeled herbicides (EPOST) on:
  - Faba bean
  - Prosper and Fargo locations
  - Trial done in collaboration with Dr. Burton Johnson.

# Faba Bean Yields

- Prosper: fewer weeds  
COLQ, RRPW, GRFOX  
control by all trts 70 dat.
- Fargo: more weeds and  
heavier soil  
RRPW, GRFOX control  
33 dat only by combo  
trts.
- VEMA control 33 dat  
only by S+D+P high.





# Other Ongoing Trials

- Sandea Adjuvant Trial w/ Pumpkin
- Evaluating organic weed control methods to a standard herbicide treatment in blackberries.
- Evaluating organic weed control methods to a standard herbicide treatment in hops.
- Evaluating organic weed control methods to a standard herbicide treatment in apples.
- Evaluating organic weed control methods to a standard herbicide treatment in winegrapes



Questions