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 nVdI 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
Specific Gravity

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