Spray Solution Conditioning John M Doyle, M S (60 minutes)

- Conditions of water used for spraying fertilizers, pesticides, etc. can have a dramatic impact on performance
- Parameters of spray solution to be measured methods of measurement
  - pH
  - Hardness
- Methods of evaluating impact and performance of spry solution correctional/optimization materials
  - Drave's wetting
  - Contact angle
  - Denoy ring
- Materials used to correct sub-optimal spray solution condition
  - Adjuvants
    - Wetting agents / surfactants
    - Silicon based material
    - Pinenes / latex based stickers
  - Spray Solution modifiers
    - Water softeners
    - Acidifiers / buffers
- Spray droplet dynamics and associated issues
  - Spray droplet bounce / splash
  - Spray droplet atomization /evaporation and drift
  - Materials used to address splash and drift
    - Naturally occurring polymers
    - o Non-ionic colloidal polymers
    - Polyvinyl polymers