

# ORGANIC DISEASE CONTROL IN HIGH TUNNELS



**Paul and Sandy Arnold, Pleasant Valley Farm**

One week  
looks great...

Next week  
starts to look  
funny!

Many diseases  
creep in slowly  
**MONITOR**



**DISEASES**

- Resistant Varieties
- Seed Born
- Black roots
- Yellow quickly



FUSARIUM OXYSPORUM SPINACIA

- Black roots



FUSARIUM OXYSPORUM SPINACIA

# Fusarium

- Root Shield
- RSSI
- Actinovate

Work with the  
companies!!



DISEASES

# Fusarium

- 4 oz per 50 Gal per 2500 square feet
  - Just after germination or transplant
- 6-8 weeks later as needed



DISEASES

# Fusarium

- TOTAL REVERSAL OF DISEASE!
- WILL RETURN AFTER 4 WEEKS



DISEASES

- Venting critical-  
no moisture!
- Fans help
- Keep row cover  
dry
- Actinovate
- Regalia
- Cease
- LOTS OF TRIALS!



Downy Mildew in  
Lettuce and Greens

# DISEASES



- **Double Nickel by Certis-Biofungicide**
- **Rotations**
- **Healthy soils**
- **Nutrient Dense??**



**DOWNY & POWDERY MILDEWS**

**NEW PRODUCTS**

- Venting most important!
- Temperature fluctuations
- +/- 20 degrees
- HAF fans helpful-6 per tunnel



Cladosporium leaf spot

# DISEASES

Control diseases before they start



DRENCH ALL GH TRAYS BEFORE  
TRANSPLANTING OUT



VENTS OPEN 24/7 TO  
MONITOR & SCOUT TWICE A WEEK++  
PREVENTATIVE SPRAY/DRENCH AT START

Zion  
National  
Park

**KEEP IN TOUCH FOR  
WHAT WORKS &  
WHAT DOESN'T!  
NETWORKING IS  
GREAT!**

