

2002 PROTOCOL FOR EVALUATION OF FUNGICIDES APPLIED AT PLANTING FOR CONTROL OF POWDERY SCAB ON POTATO

- Researchers:** Richard Zink, Robert Davidson, and Andrew Houser, Colorado State University
- Location:** Mitchell Farms, Monte Vista, CO
- Cultivar:** Cherry Red, whole seed
- Objective:** To evaluate the efficacy of various fungicide treatments in preventing powdery scab on potato.
- Treatments:**
1. Control, no treatment
 2. Omega @ 3 pt./A, In-furrow
 3. Omega @ 6 pt./A, In-furrow
 4. Evolve on seed
 5. Quadris @ 4 pt./A, In-furrow
 6. Quadris @ 8 pt./A, In-furrow
 7. Quadris @ 12 pt./A, In-furrow
 8. Blocker @ 5 gal./A, In-furrow
 9. Evolve on seed + Omega @ 3 pt./A, In-furrow
 10. Omega @ 3 pt./A, In-furrow + Quadris @ 8pt./A, In-furrow
 11. Evolve on seed + Omega @ 3 pt./A, In-furrow + Quadris @ 8pt./A, In-furrow
 12. Zinc EDTA @ 13.23 lb.ai./A, In-furrow
 13. Planting date May 17
 14. Planting date May 24
 15. Planting date May 31
 16. Planting date June 7
- Application:** In-furrow treatments were applied using an R & D CO₂ charged backpack sprayer at 35 PSI, with one XR 8002VS nozzle, at 10 gallons/acre. On-seed treatments were applied directly to whole seed and planted within twenty-four hours.
- Planted:** May 9, 2002
- Plot Design:** Randomized
- Plot Size:** 1 - 20 foot row per treatment per replication
- Plant Spacing:** 12 inches
- Row Spacing:** 34 inches
- Replications:** Three
- Irrigation:** Center pivot sprinkler, rate based on ET
- Fertilizer:** 60N-140P-0K-43S preplant, 95N-15S topdress
- Herbicide:** Eptam 7E, 4.5 pt./A + Sencor DF, 0.25 lb./A
- Insecticide:** Asana XL, 8 oz./A
- Fungicide:** Dithane DF, 1.5 lb./A + Quadris, 6.2 oz./A
- Vine Killer:** Reglone on August 16, 2002
- Harvested:** September 17, 2002

DATA

- Disease:** Mean percent of the number of tubers showing one or more powdery scab lesions at harvest multiplied by the severity of the lesions, where 1 = not severe and 5 = very severe.