

Potato Progress

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Checklist for Management of Potato Seed Piece Decay and Early Season Late Blight

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The late blight information line is now operating. Number is 1-800-984-7400. Updates are also available on the web site, **http://www.wsu.edu:8080/~djohnsn**/; click on "Current late blight forecast and management recommendations." Late blight forecasts for the Columbia Basin Forecasting model will be available in mid-may.

Seed piece decay is a main concern during and just after planting. Management practices employed early in the season can reduce later effects from late blight. The following practices are recommended to protect seed pieces from decay and for early season late blight management.

1. Use high quality, disease free seed.

2. Protect seed from direct sunlight or heating under tarps in sunlight

3. Pre-warm seed to 45-50° F before handling.

4. Use good sanitation practices during cutting and handling seed. Clean holding areas and disinfest equipment between seed lots.

5. Provide good ventilation to piles.

6. Avoid bruising seed; wounds are avenues for infection by several pathogens. Maintain sharp cutting knives.

7. Reduce spread of late blight during cutting and handling by treating seed with a mancozeb based product such as Tops MZ, Maxim MZ, or Evolve.

8. Plant seed within 24 hours of cutting.

9. Plant seed into warm soil. Soil temperature should be 55° F and increasing. Relatively warm soil temperatures will also help reduce the effects of powdery scab on roots.

10. Do not wet seed before or during cutting

11. Do not plant within 80 ft. of the pivot center, especially if tubers are intended for storage.

12. Plant and culture the crop to reduce the number of daughter tubers exposed on or near the soil surface. Tubers on or near the soil surface are vulnerable to late blight infection. Planting depth, hilling, drag off, and cultivar are main factors governing tuber depth. Review recent research by Mark Pavek and Dr. Robert Thornton

13. Design fields to avoid sprinkler overlaps; avoid planting in fields with deep depressions. Such areas favor late blight.

14. Restrict the number of water applications, where possible, until the crop has fully emerged.

Washington Potato Seed Lot Trial

Commercial potato seed samples for planting at the 2003 Washington Seed Lot Trial are welcomed from the potato industry. Two to three hundred whole (single drop) seed is an acceptable sample size. This seed should not be treated with insecticide or fungicide. Seed tubers need to be uniformly small (not larger than 4 oz) because no seed cutting is done and a cup-type planter is used. Samples may be delivered to the WSU Othello Research Unit, south on Booker Road from State Highway 26 about five miles east of Othello. Alternatively, sample pickup can be arranged by calling your WSU Extension Office at 509.545.3511 or 509.754.2011. A sample randomly taken that represents the entire seed lot received is most desirable. Sampling the first (or last) 300 seed from the truck is not likely to provide a representative sample of the lot. Sample tags may be obtained by calling your extension office or the Potato Commission at 509.765.8845.

In the North Basin, two seed "drop-offs" have been established. One is at the Bob Holloway storage (east end of the western-most storage) just north of Road 3 NW and east of Dodson Road. The second is at CW Potato Services, south of I-90 about six miles east of Moses Lake (just east of the Moses Lake Simplot Soilbuilders). Samples need to be at these locations by 2:00 pm the day before each planting date to be included.

The planned planting dates for 2003 are:

1st (Early)	March 27
2nd	April 10
3rd	April 24
4th (Late)	May 8

These seed lots will be evaluated for visible symptoms of known <u>seedborne</u> diseases with the results available at the WSU Potato Field Day scheduled for Friday, June 27. This project is sponsored by the Washington State Potato Commission, the Washington State Potato Foundation and Washington State University.