# Potato Disease Advisory #14
# July 3, 2008
# Cooperative Extension System
# University of Delaware

Bob Mulrooney, Extension Plant Pathologist

**Disease Severity Value (DSV) Accumulation as of July 2, 2008 is as follows:**

*Location: Broad Acres, Zimmerman Farm, Rt. 9, Kent County.*

*Greenrow: April 27*

| | LATE BLIGHT | | | EARLY BLIGHT |
|---|---|---|---|---|
| **Date** | **Daily DSV** | **Total DSV** | **Spray Recs** | **Accumulated P days*** |
| 6/4- 6/5 | 4 | 40 | 5-days | 279 |
| 6/5-6/6 | 2 | 42 | 5-days | 288 |
| 6/6-6/7 | 1 | 43 | 5- day | 298 |
| 6/7- 6/11 | 0 | 43 | 10- day interval | 321 |
| 6/12- 6/15 | 1 | 44 | 10- day interval | 350 |
| 6/15-6/18 | 0 | 44 | 10-day interval | 376 |
| 6/19- 6/22 | 0 | 44 | 10-day interval | 409 |
| 6/22-6/23 | 1 | 45 | 10-day interval | 418 |
| 6/23- 6/25 | 0 | 45 | 10-day interval | 435 |
| 6/26- 6/30 | 0 | 45 | 10-day interval | 466 |
| 6/30- 7/2 | 0 | 45 | 10-day interval | 482 |

*** P days**- We use the predictive model WISDOM to determine the first fungicide application for prevention of **early blight** as well. The model predicts the first seasonal rise in the number of spores of the early blight fungus based on the accumulation of 300 physiological days (a type of degree-day unit, referred to as P-days) from green row. To date, **482 P-days** have accumulated at the site.

**Early blight and black dot.** Many fields are flowering or have flowered and this is a good time to consider switching to an application or two of Gem, Headline, Quadris, or Evito (no black dot label) for early blight **susceptible** varieties. This can also be helpful for late season varieties including russets if stress makes plants susceptible to black dot later. Make one or two applications at the end of flowering and repeat 14 days later. Apply mancozeb or chlorothalonil 7-days later between the two applications. Otherwise maintain fungicide applications for early blight control.

**Early dying** symptoms were seen this past week. We are isolating from the dying stems to confirm the presence of *Verticillium,* the fungus that causes early dying. Lesion nematodes can often be present as well which can greatly increase the symptoms and reduce yields. As most of you know 'Superior' is pretty susceptible to early dying. Resistant varieties, long rotations away from potatoes or fumigation are the most recommended treatments. There is some evidence that using Sudan grass in the rotation can reduce early dying as well.

For specific fungicide recommendations, see the 2008 Delaware Commercial Vegetable Production Recommendations Book.