

## Annual Bluegrass Seedhead Suppression Timing for the PNW

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### Objectives:

1. Use air and soil temperatures collected via dataloggers in order to develop a growing degree-day model (GDD) for annual bluegrass seedhead formation.
2. Use GDD to determine the timing of growth regulator applications for maximum efficacy to provide healthier annual bluegrass greens with a surface that will putt more true for golfers.

**Start Date:** March 5, 2008

**End Date:** Winter 2010

**Total Funding:** \$35,647

Heavy annual blue-grass seedheads are a serious problem on golf greens by reducing putting quality and smoothness especially in the spring. Timing of growth regulator applications for suppression of these seedheads has not been perfected to date. Work has been done evaluating growth regulators efficacy in several parts of the country. In 1985, Dr. Bruce Branham (Branham and Collins, 1986), conducted studies using mefluidide (Embank) at different rates and timings. Applications were based on accumulated growing degree-days using the formula:

$$\frac{\text{Max T} + \text{Min T}}{2} - \text{base} =$$

GDD where: Max T = highest temp recorded on that day and Min T = lowest temp recorded on that day. Base T = temp at which plant species begins to grow (10 C or 50F for annual bluegrass) GDD = growing degree days for that day.

Using this model, they found that applications were most successful between 25 and 50 GDD. This is particularly difficult to determine for western WA, as we do not go totally dormant, which means this model will not work west of the Cascades.

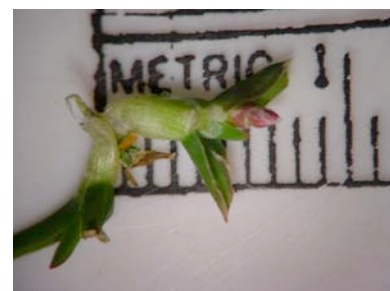
### Benefits of a Proxy/

Primo tank mix are the safening of the Primo on the annual bluegrass and the alleviation of the apple green color with Proxy on bent-grass. There is a synergism between the two products for seedhead suppression.

### Summary Points:

Current timing for first application of Proxy in Puyallup is March 10 with an application of Proxy/Primo 21 days later.

Poa seedheads developed first at TPC at Snoqualmie Ridge, then a week later at Puyallup and 2 weeks later than that at Sahalee G&CC.



Annual bluegrass seedhead on  
3/27/08 at the Goss Farm.