

**Research Topic:**  
**Impact of Chemical and Biological Fungicides for Preventative Control of Anthracnose on an Annual Bluegrass Green (2007), B. B. Clarke, Rutgers University**

Abstract: Anthracnose (*Colletotrichum graminicola*) has become a major disease problem on golf course putting greens. An integrated approach is often the most effective management strategy for lessening the severity and incidence of this disease, including the utilization of appropriate cultural practices and a rotational fungicide program. Low mowing heights, low N or unbalanced fertility, mechanical injury, or any adverse environmental condition which increases plant stress will increase the risk for disease development. This research topic was initiated to determine the effect of highly efficient foliar fertilizers that contain *potassium phosphite* applied in combination with low label fungicide rates on anthracnose incidence and severity on an annual bluegrass (*Poa annua*) putting green. PK Plus<sup>TM</sup> [3-7-18 + micronutrients + *potassium phosphite* ( $K_2PO_3$ )] applied in combination with Daconil Ultrex (1.8 oz/M) provided the best anthracnose suppression and was significantly better than the control on each rating date. This combination treatment was consistently better than each Daconil Ultrex (1.8 oz) and PK Plus (6 oz) applied alone, illustrating the positive interaction between Grigg Brothers foliar fertilizers and Daconil Ultrex (Figure 1.). Based on these results, utilizing PK Plus regularly (7-14 days) during periods conducive to disease development and as one component to an integrated approach to anthracnose management should lessen the severity and incidence of disease development.

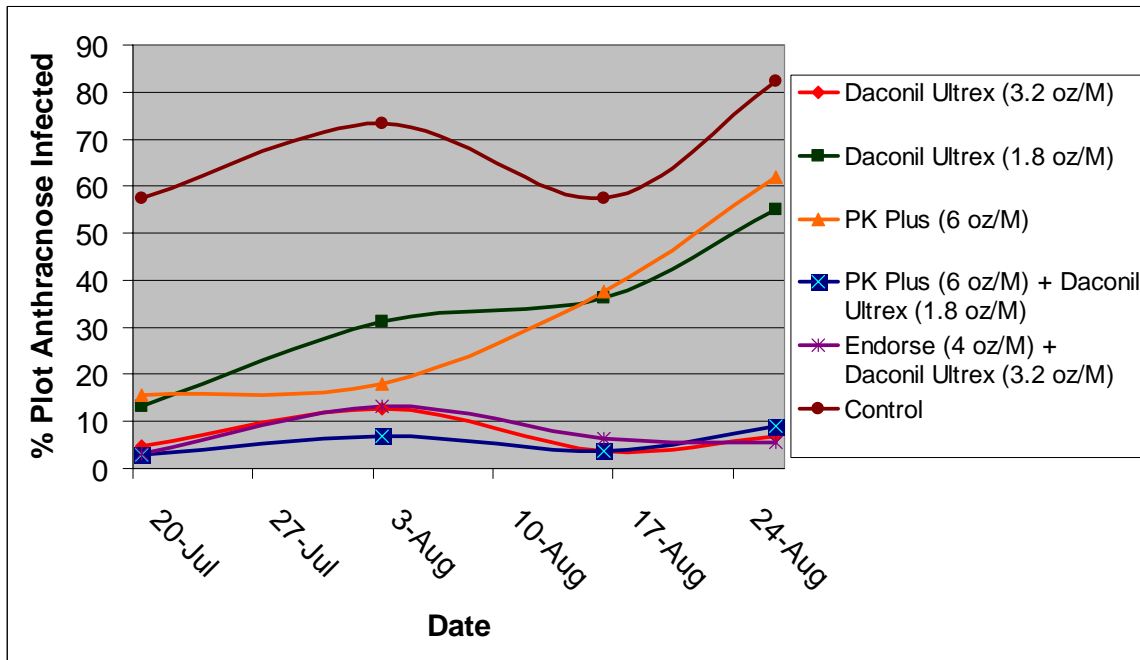


Figure 1. Turf area infested by anthracnose (%) as effected by fungicides, foliar fertilizer containing potassium phosphite, and combination of a foliar fertilizer and a low label fungicide rate.