

0203-GA-059 Coordination of a Uniform Regional Scab Nursery for Spring Wheat Parents.

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PROJECT ABSTRACT

(1 Page Limit)

Over the past several years, extensive efforts have been directed at identifying wheat germplasm with resistance to scab that can be used as parents for the development of new commercially acceptable cultivars with enhanced scab resistance. One major challenge that exists in identifying such germplasm is that both environmental conditions and genotype x environment interactions confound scab resistance ratings. The existence of these interactions places a premium on multi-site evaluations as a means of obtaining more accurate information on the relative scab resistance of germplasm being evaluated. For several years, a Uniform Regional Nursery to screen spring wheat parents for scab resistance has sought to address this issue by assessing scab resistance in wheat germplasm at several locations throughout the midwestern United States and Southern Canada. Each year, the coordinator oversees the organization of the nursery, and at the end of the season, analyzes data associated with scab resistance gathered at each nursery location and produces a report that is distributed to participants and other interested parties. By providing scientists an opportunity to evaluate the nursery entries at their own locations and to compare these results to those obtained at other locations, this nursery has proven to be valuable for identifying new scab resistant germplasm and its subsequent exchange among participants for use in breeding programs. Thus the nursery is an important source of information to help guide cooperative research efforts aimed at developing scab-resistant wheat varieties. This proposal seeks funding for support of the coordination of this important nursery for FY 2002.