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Research Area: GIE

Project Title: Evaluation of diploid wheat relatives and intergeneric hybrids for Fusarium head blight resistance.

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PROJECT 1 ABSTRACT

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Because the best known sources of resistance to Fusarium Head Blight are characterized as partial rather than complete, it is logical to try to accumulate resistance alleles from an array of cultivated wheats and their relatives to perhaps move levels of resistance towards immunity. The goal of this research is to find potentially novel sources of Fusarium Head Blight resistance in selected A and D genome diploid wheat relatives and in winter-type accessions of the Sando intergeneric hybrid germplasm collection. Approximately 300 accessions of *Triticum monococcum* sp. *monococcum* (A^MA^M), *T. monococcum* sp. *aegilopoides* (A^MA^M), *Aegilops tauschii* (DD) and intergeneric hybrids between *Triticum aestivum* and *Lophopyrum elongatum* will be evaluated for Type II resistance in greenhouse evaluations in 2003-04. The diploid accessions will be selected primarily from regions in Turkey and Iran where Fusarium Head Blight is recorded as being a constraint to wheat production. Data will be shared with other researchers by posting results on the USWBSI web page. This proposed objective is related to the USWBSI goal of developing, as quickly as possible, control measures that minimize the threat of Fusarium Head Blight (scab) to the producers, processors and consumers of wheat.