

# **Fusarium Head Blight Type II Resistance of a Spring Wheat Population Derived from a Hungarian Winter Wheat. (C01-mergoum171311-Poster)**

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## **Abstract:**

Fusarium head blight (FHB) of wheat, caused mainly by *Fusarium graminearum* Schwabe, has plagued farmers in the spring wheat region for nearly a decade. To date, resistance to FHB in adapted spring wheat cultivars has come mostly from Chinese sources such as Sumai3 and its derivatives. Other sources of resistance need to be explored. In 1996 we made crosses between an adapted but susceptible spring wheat (Grandin) and a Hungarian winter wheat line with FHB resistance not derived from Chinese sources. The population derived from this cross was advanced by single seed descent to F6, selecting only for spring habit. We grew 182 lines from this population in the greenhouse in two randomized replicates. At anthesis, ten spikes per replicate were inoculated by single spikelet inoculation and then given 3 days of intermittent overhead mist treatment. At 3.5 weeks post-anthesis, FHB symptom development on each spike was scored on a 0-100% severity scale. FHB scores of the 182 lines ranged from 8% to 85%. FHB severity of 14 of the lines were as resistant or better than the resistant check ND2710 (a Sumai-3 derivative). Lines derived from other resistance sources may be as resistant to FHB as those from Chinese germplasm and can serve to diversify the germplasm base for FHB resistance.

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