

Reaction of Some Kenyan Wheat Cultivars to Head Blight after Inoculation with *Fusarium graminearum*

J.W. Muthomi, J.K. Ndung'u, G.N. Chemining'wa and J.M. Wagacha
Department of Plant Science and Crop Protection, University of Nairobi,
P.O. Box 30197, Nairobi, Kenya

Abstract: Eight cultivars of wheat that are commonly grown in Nakuru and Nyandarua districts of Kenya were tested for their susceptibility to *Fusarium* head blight (scab) under green house conditions. The cultivars were inoculated with mixed inoculum derived from three pathogenic isolates of *Fusarium graminearum* that had previously been isolated from wheat. Head blight severity was assessed using a 1-9 scale based on proportion of spikelets bleached and the area under disease progress curve was derived from the disease severity data. At harvest, kernel weight reduction as compared to the untreated controls was determined. All the 8 wheat cultivars were found to be susceptible but they differed in the level of susceptibility. Disease severity among the cultivars varied from 5-59% while the area under disease progress curve varied from 93-994. Cultivars 'mbuni' and 'chiriku' were the most susceptible, with a grain weight reduction of up to 74%. The results indicate that most of the varieties grown in Nakuru and Nyandarua districts are susceptible to *Fusarium* head blight. The study indicated that Njoro Bw1 and Njoro Bw2 are the most promising. The resistance trait in these varieties could be useful in *Fusarium* head blight management.

Key words: *Fusarium* head blight, wheat, susceptibility