

METHODOLOGY TO DETERMINE THE NUMBER OF INFECTION POINTS OF *Gibberella zeae* IN WHEAT SPIKES

Lima MIPM

Embrapa Trigo, Passo Fundo, RS, Brazil

maria-imaculada.lima@embrapa.br

Fusarium head blight (FHB) caused by *Gibberella zeae* (*Fusarium graminearum*) affects wheat spikes and grains. The evaluation of FHB in spikes is generally performed by incidence and severity. The objective of this work is to describe a methodology to determine the number of infection points of *G. zeae* in wheat spikes in experiments at field conditions. To access the number of infection points in each spike it has to be considered that wheat spikelets are arranged opposite ways and alternately to each other, on the rachis, being the odd ones at one side of the spikes and the even ones at the other side. After identifying the spike with one affected spikelet, the number of spikelets is counted, starting from the base of the spike to find the numeric position of affected spikelets. This should be repeated each two or three days, until soft dough grain stage, repeating the FHB assessment in the spike to identify new spikelets with symptoms, observing the numerical position location. The first point of pathogen infection is determined by the lowest number, which identifies a spikelet with symptoms. The second one is considered when the next FHB spikelet occurred interleaved at least one soundly spikelet in one side and the other points and so on. This methodology was applied in 90 wheat spikes and was identified up to three distinct points of infection.

Keywords: Fusarium head blight; evaluation; scab