Study of Correlation Between Some Morphological and Physiological Characters of Wheat and Fusarium Head Blight Infection

Fusarium Head Blight (FHB) (Smith, 1884) is a significant disease that affects wheat crops, leading to yield loss and quality decline. Understanding the correlation between FHB and other morphological and physiological characters of wheat can provide insights into disease management strategies.

The study investigated the relationship between disease index and disease incidence, which are two important parameters for assessing FHB severity. Disease index is the severity of the disease on a scale, while disease incidence refers to the proportion of plants infected.

It was found that there is a significant correlation between FHB severity and certain morphological and physiological characters of wheat. These characters may include leaf length, stem diameter, and chlorophyll content. The correlation coefficients were calculated to quantify the strength of the relationship.

The study's findings can be used to develop breeding programs that focus on selecting wheat varieties with traits that are less susceptible to FHB. This is crucial for improving wheat production in regions where FHB is prevalent.

It is also important to note that the study highlights the need for further research to understand the genetic basis of these morphological and physiological traits, which could lead to the development of more robust wheat varieties.