

## عنوان مقاله:

The host-pathogen interaction between barley and casual agent of spot blotch (*Bipolaris sorokiniana*) disease: a review

## محل انتشار:

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## خلاصه مقاله:

Understanding of the host-pathogen interaction is key to uncovering the defence mechanisms for being used in breeding programs and integrated disease management. Spot blotch is one of the most common foliar diseases of barley worldwide. *Bipolaris sorokiniana* (Sacc.) Shoemaker is the causal agent of spot blotch and can cause other destructive diseases of barley such as common root rot, seedling blight and black point or smudge. Adequate knowledge about epidemiology and pathogenicity of the pathogen can provide great assistance to inhibit the outbreak of spot blotch. In this review, first the distribution and host range of the pathogen has been reviewed. Then, disease symptoms and yield loss caused by spot blotch in barley are reviewed. Subsequently, virulence diversity and other pathogenic aspects of *B. Sorokiniana* such as epidemiology, primary and secondary infections, survival and effect of environmental conditions on epidemic of the disease are described in detail. Later, different aspects of interaction between barley and *B. Sorokiniana* such as host response and genetics of resistance has been discussed. The importance of molecular markers for studying population structure of the pathogen and genetics of resistance in barley genotypes are also covered. Finally, different disease control measures have been presented and discussed.

## کلمات کلیدی:

spot blotch, Genetic diversity, host resistance, integrated disease management

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