

Cover letter

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Prof. Farid Mena, PhD

Founder & Editor in Chief

International Journals

Manuscript Scientific Services,

INDIA

I am pleased to submit an original research article entitled “**Survey of Septoria tritici blotch of wheat and identification of the causative agent, *Zymoseptoria triticii* in the major wheat growing areas of Ethiopia**” for consideration of publication in your highly esteemed journal, **Advancements of Biotechnology and Bioprocess Research**. We would like to confirm that it has not been published or submitted simultaneously for publication elsewhere.

Septoria tritici blotch (STB) caused by the fungus *Zymoseptoria tritici* is one of the major wheat devastating disease globally. It poses significant (30- 60 %) wheat yield loss globally. Currently, STB becomes the major wheat production limiting factor in Ethiopia. To adopt controlling practices or to design best management strategies, knowledge of the disease distribution and precise identification of the causative pathogen is of paramount importance. However, there is a dearth of information on the incidence and severity of the disease in major wheat growing areas of Ethiopia. Moreover, isolation and detection of the pathogen is greatly missing. Furthermore, the application of modern molecular tools in plant pathogen detection in Ethiopia is lacking.

In the present study, we have successfully assessed the disease geographical distribution and severity in the major wheat growing areas of the country (central high lands and southwestern Ethiopia), where more than 75 % of wheat production of the country is located. We have confirmed that Septoria tritici blotch is becoming the major threat for wheat production in Ethiopia. Moreover, we have isolated the causative agent, *Z. tritici* from field collected STB symptomatic wheat leaf samples and also detected the pathogen using microscopic assay and PCR based assay using *septoria tritici* specific diagnostic markers.

As Ethiopia is one of the international wheat screening centers for Septoria disease, information on the disease distribution is so helpful for local and international wheat breeders and pathologists to select appropriate hot spot areas for germplasm resistance evaluations. Hence, the study has global significance. Moreover, in any pathological studies, isolation and precise identification of the causative pathogen are prerequisite for conducting further investigation on the pathogen, the host and their interactions. Thus, the isolated and accurately detected spores can be used for the pathogen virulence and genetic diversity analysis, seedling and adult plant resistance evaluation and also host-pathogen interaction studies which are important in developing and implementing best disease management strategies to control the disease. Furthermore, the PCR based technique can also be adopted by other developing countries and researchers to detect the same pathogen or others plant diseases. Generally, the present study not only enriches missing information in Ethiopia but also provides new insights into the of *Z. tritici* in Africa where the agro-climatic conditions and the wheat cropping systems are different from other parts of the world. This all make the manuscript good fit to be considered for publication in the journal of Advancements of Biotechnology and Bioprocess Research.

Thank you very much for your consideration.

Yours Sincerely,



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