
Plant Pathology Seminar Series

Climate Change: What Does the Future Hold for Corn Diseases in Sub-Saharan Africa?

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In sub-Saharan Africa (SSA), agriculture plays a major social and economic role, providing employment for over 60% of the population and about 23% of the region's Gross Domestic Product (GDP)¹. A wide range of staple crops is grown, which includes fruits, oil crops, tuber/root crops, and cereal grains. The five major cereals—corn, millet, rice, sorghum, and wheat—account for nearly 50% of the total crop acreage in SSA². Of these, corn (or maize) is the most widely cultivated, accounting for 40% of the region's cereal production, which is used mainly for human consumption³. However, low average grain yields are still pervasive in farmers' fields. The main production challenges include low soil fertility, weather-related hazards, overreliance on low-input and rain-fed farming, as well as pests and disease pressures^{4,5}. Two economically important foliar diseases, namely gray leaf spot (GLS)⁶ and maize streak disease (MSD)⁷, are particularly widespread in the region. In this seminar, I examine how climate change^{8,9} could reshape the status of these diseases in SSA.



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References

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4:10 pm | August 31st, 2020 | Plant Pathology 515, Fall 2020

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