Plant diseases are of considerable concern as they cause destruction to respective host plants. The host-parasite interactions during disease development play a significant role on metabolism. A leaf blight disease due to Curvularia verruciformis Agarwal and John on lemongrass is observed under the climatic conditions of Assam and it causes a considerable loss to the crop, as well as to its essential oil—a secondary metabolic product. On the other hand, the oil of lemongrass is an export oriented product apart from utilisation of bulk quantity in the country itself. Considering the importance of lemongrass oil in both national and international market and the severity of crop loss due to above fungal disease, the present study is undertaken to determine some aspects of physiology and the role of certain host-metabolites during diseased conditions, so far as the yield and quality of lemongrass oil is concerned.

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D. P. L, Jorhat - 785006

Assam, India