

5.7 RISK ANALYSIS OF CLIMATE CHANGE ON BLACK SIGATOKA IN BANANA IN BRAZIL. R. Ghini, E. Hamada, R.R.V. Gonçalves, L. Gasparotto and J.C.R. Pereira. *Embrapa Environmental*, CP69, 13820000, Jaguariúna-SP, Brazil. Email: raquel@cpnma.embrapa.br

Knowing the probable impacts of global climate change on the occurrence of plant diseases is of great importance for the agricultural sector, since it allows elaborating control strategies. This study aimed to evaluate the potential impacts of climate changes on black Sigatoka disease of banana in Brazil, elaborating distribution maps of the disease based on climatological normal data from 1961-1990 and on future climate. Future scenarios focused on the decades of the 2020's, 2050's, and 2080's (scenarios A2 and B2) were obtained from five General Circulation Models available from the Data Distribution Centre of the Intergovernmental Panel on Climate Change. It was assumed that development of the disease was favoured by mean temperatures between 20°C and 30°C, and relative humidity above of 70%. The maps showed a reduction of the area favourable to the disease in the country, except in the south-east and south, which would become more favourable due to higher humid period. Such reduction would be gradual for the decades of 2020, 2050 and 2080 and higher for scenario A2 than for B2, even though extensive ar-