



ISBN 978-85-66836-16-5

EVALUATION OF THE INCIDENCE AND SEVERITY OF YELLOW-SIGATOKA (*Mycosphaerella musicola*, Leach) IN BANANA VARIETIES OF THE ÁGUA LIMPA FARM, DISTRITO FEDERAL/ Avaliação da incidência e severidade de sigatoka-amarelo (*Mycosphaerella musicola*, Leach) em variedades de banana da Fazenda Água Limpa, Distrito Federal

J.G. OLIVEIRA FILHO<sup>1</sup>, T.P. ALVES<sup>3</sup>, H.A.S.FALCÃO<sup>2</sup>, M.C. PIRES<sup>3</sup>, J.R. PEIXOTO<sup>3</sup>

<sup>1</sup>Federal Institute of Education, Science and Technology Goiano, Campus Rio Verde,

<sup>2</sup>Federal Institute of Education, Science and Technology Brasília, Campus Planaltina

<sup>3</sup>University of Brasília - UnB - Faculty of Agronomy - Federal District E-mail: josemar.gooliver@gmail.com

Banana (*Musa* spp.) is one of the most consumed fruits in the world. Despite the large number of varieties, there are few agronomic potential for commercial cultivation, including high productivity, small size, short production cycle, fruit production with good sensorial characteristics and tolerance to pests and diseases. Therefore, the objective of this study was to evaluate the incidence and severity of Yellow Sigatoka in banana varieties cultivated at Fazenda Água Limpa, Federal District, under different levels of irrigation and phosphorus fertilization. Four banana cultivars (Grand Naine, Prata Anã, BRS Tropical and BRS Conquista) were evaluated in the experiment. The experiments were conducted in a randomized block design with four replications, in a subdivided plot arrangement, with five irrigation volumes (V2, V4, V8, V12, and V16) and the five subplots of phosphorus fertilization (0, 52.94, 105.88, 158.82 and 211.76 g/pit), totaling 25 treatments and 100 plots. The incidence was evaluated by the percentage of symptomatic leaves and the severity was based on the estimation of necrotic leaf area in all leaves of the plant. It was observed that among the four evaluated varieties, the BRS Tropical variety was the most resistant and Grand Naine the most susceptible to Yellow Sigatoka. It was also observed that irrigation depth significantly influenced disease incidence and severity, with the volumes (V4 and V12) being those with the lowest rates. It was also observed that levels of phosphorus fertilization did not influence the incidence and severity of the disease. It should be noted that the four evaluated varieties present suitability for planting in the Federal District, with good conditions of adaptability and resistance.

**Key words:** Disease, *Musa* spp, Cerrado, Irrigation, Nutrition.