

Distribution of *Mycosphaerella* spp. diseases on banana in Côte d'Ivoire

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ABSTRACT

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Introduction and objective: Bananas and plantains are attacked by several fungi belonging to the genus Mycosphaerella. The most virulent M. fijiensis, was observed in east of Côte d'Ivoire in 1985. It moved westward into bananas cultivation areas. giving the impression of a replacement of yellow Sigatoka but their distribution is not stable. The objective of this study was to actualize *Mycosphaerella* diseases distribution in Côte d'Ivoire. Methodology and Results: Field visits and observations of Sigatoka damage ratings were conducted from August to October 2006. The Horn 1 cultivar was selected for evaluating the BLSD effect. Yellow and black Sigatoka diseases were identified throughout the forest zone of Côte d'Ivoire, from Aboisso (East) near the Ghana border to San Pedro (West) and running into Liberia. The 2 diseases coexist on the banana with the prevalence of black Sigatoka. For a banana variety susceptible to the two diseases, symptoms of the BLSD were very visible because of a faster development. Therefore, the Proceedings of the 3rd International e-Conference on Agricultural BioSciences 2010 Page: 24 – 25; Abstract ID: IeCAB010-315a

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yellow leaf spot has been identified on leaves of the cultivar Figue Sucrée which is partially resistant to BLSD. The severity of the disease decreased from the East (Aboisso) to West (San Pedro). In Aboisso, the infection index was 38%, as compared to only 30% for the rest of the country. These observations were made in parallel with the duration of the disease in the area and the use of fungicides in industrial banana plantations.

Key words Banana, Plantain, *Mycosphaerella*, Côte d'Ivoire