

First phylotype analysis of *Ralstonia solanacearum* causing Eggplant bacterial wilt in the Republic of Guinea

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1 ABSTRACT

Eggplant is one of the important cash crops in Guinea and it is cultivated in all the agro-ecological zones of the country with the areas and production are constantly growing. However, this crop is affected by bacterial wilt disease caused by bacteria of the *Ralstonia solanacearum* species complex (RSSC). in these production areas. In August 2018, a total of 81 strains were collected from stems of withered eggplant plant in the nine prefectures of the three administrative regions of Guinea. These strains were extracted and put on FTA™ cards at the Foulayah laboratory in Guinea. for their molecular characterization the FTA cards were transported to the World vegetable center laboratory in Taiwan where all the 81 strains were confirmed as *R. solanacearum*. single 280 bp fragment resulted in all the isolates following polymerase chain reaction (PCR) amplification using the *R. solanacearum* specific universal primer pair 759/760. A phylotype specific multiplex PCR revealed that 55 of the 81 strains could be assigned to phylotypes. 85, 5% of this batch consisted of phylotype I; 3, 6% of phylotype II; 10, 9% of phylotype III. The objective of this study is to open the way to developing better eggplant BW management strategies for Guinea, including screening for eggplant lines resistant to phylotype I and phylotype III either together or separately for subsequent hybridization.