FAST SCREENING METHODOLOGY FOR THE ASSESSMENT OF CASSAVA RESISTANCE TO THE PASSALORA DISEASE COMPLEX

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Among the several pathogens of cassava (*Manihot esculenta* Crantz), the *Passalora* spp. complex is by far the most frequent worldwide. Three different diseases make up this complex: blight leaf spot (BILS) caused by *P. vicosase*, brown leaf spot (BLS) caused by *P. henningsii* and white leaf spot (WLS) caused by *P. manihotis*. Under favorable conditions these disease can cause losses up to 25% in the cassava production. Different strategies can be used to reduce losses, but resistant cultivars are the most effective. However, fast and reliable methodologies are necessary to select genotypes with resistances to different pathogens. The objective of this work was to propose a new methodology to screen for resistance to BILS, BLS and WLS, based on a single score of the maximum disease rate (MaDR) presented. 244 cassava genotypes (commercial varieties and hybrids), were evaluated for the resistance to the *Passalora* spp. disease complex, with natural infection on field conditions. Disease severity for BILS and BLS was accessed with an arbitrary scale from 0 – 5 ('0': no symptoms and '6': complete defoliation). In the case of WLS the plants were evaluated with disease rate ranging 0 to 5, being '0" to no symptoms and score '5' to complete defoliation. Differences in resistance to all disease were found, including the presence of hybrids with multiple disease resistance (e.g. EC201124159 and EC20113412) and genotypes susceptible to all three diseases. Evaluations based on the MaDR supports the screening for resistance of a broad amount of genotypes, in a short time.