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Evaluation of cassava interspecific hybrids for disease resistance

Interspecific hybrids from crosses between elite cassava varieties and wild relatives of *M. tristis*, *M. flabellifolia* and *M. peruviana* were assessed for disease resistance in different regions of Brazil. Seedlings of several families planted in Sao Miguel das Matas (SMM), Tancredo Neves (TN), Cruz das Almas (CA) in the Bahia State, and in Petrolina (PT), Pernambuco State were evaluated for disease resistance from 6 to 12 months after planting. In Bahia the incidence of anthracnose, brown leaf spot (BLS), rust, diffuse leaf spot and white leaf spot was registered. In Petrolina only sporadic lesions of BLS were found. Anthracnose, BLS and rust, in this order, were the most severe diseases in Bahia. Genotypes susceptible to anthracnose showed intense die-back and high level of defoliation. Similarly, in genotypes highly susceptible to BLS complete defoliation was observed. Respect rust, although some genotypes reached the highest class of the scale, disease intensity was lower, when compared to anthracnose and BLS, respectively. Regardless of the evaluation sites in Bahia, high variation in the resistance levels inter- and intra-families was observed. Most of the genotypes with high levels of resistance to anthracnose and BLS were found in progenies involving *M. tristis*. For rust, however, higher numbers of resistant hybrids had *M. flabellifolia* as parent. In crosses involving *M. peruviana*, only resistance to rust was recorded. The resistant hybrids identified are promising genotypes, not only for the introgression of resistance traits into elite varieties, but also to understanding the genetic basis of resistance to diseases.